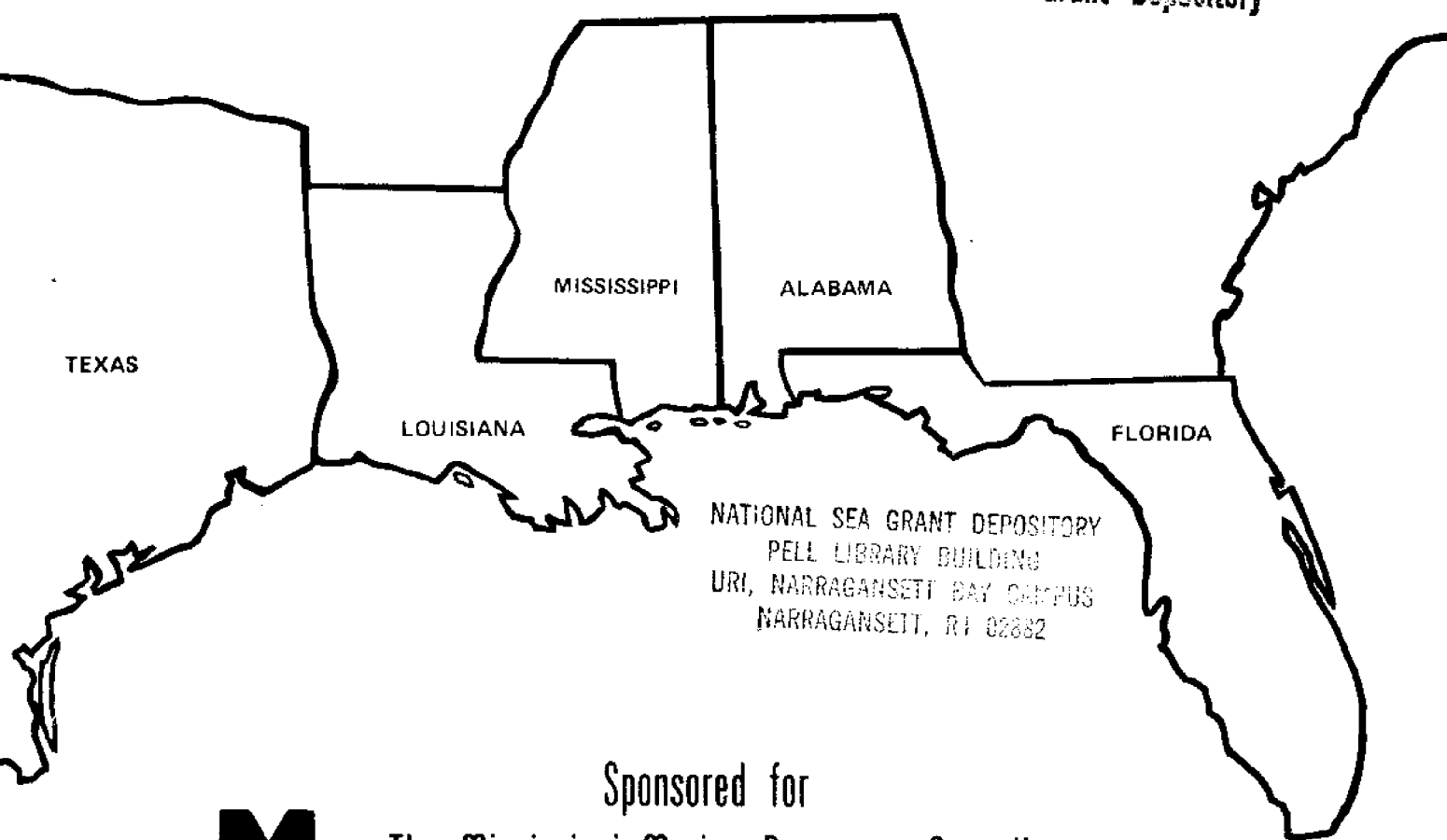
PROCEEDINGS FROM THE GULF STATES CONFERENCE ON COASTAL ZONE MANAGEMENT

September 18 and 19, 1974
Biloxi, Mississippi



Sponsored for
The Mississippi Marine Resources Council

by

The Mississippi-Alabama Sea Grant Consortium

MASGP-74-043

The objectives of this Gulf States Conference on Coastal Zone Management were to provide a basis for these five states to exchange information, engender cooperation and coordination and identify interstate problems which might require additional emphasis to facilitate coherency in regional coastal zone management. As a result of this conference, we have all taken the first step in this direction.

This conference was sponsored by the Mississippi-Alabama Sea Grant Consortium under contractual arrangements with the Mississippi Marine Resources Council. The Council is supported by the State of Mississippi and by a coastal zone management program development grant from the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, Department of Commerce, as authorized by Section 305 of the Coastal Zone Management Act of 1972. The Mississippi-Alabama Sea Grant Consortium is supported by the State of Mississippi and by the Office of Sea Grant, National Oceanic and Atmospheric Administration, Department of Commerce.

The Council and the Consortium would like to express their appreciation to all of those representing Alabama, Florida, Louisiana, Mississippi and Texas and those others, who participated to make this conference a worthwhile tool in the development of each state's coastal zone management program.

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CONFERENCE AGENDA

September 18 and 19, 1974
Biloxi, Mississippi

Wednesday, September 18, 1974

8:30 a.m. Conference Registration

Morning Session
9:00 a.m. - 12:00 m.

9:00 a.m. Welcoming Address: Donald J. Cuevas, Vice Chairman, Mississippi Marine Resources Council

9:10 a.m. Panel Discussion: "Boundaries of the Coastal Zone"
Moderator: James W. Zirkle, J.D., LLM, Associate Professor of Law, University of Mississippi Law School
Panel:
- Alabama - Sidney D. Upham, Ph.D., Executive Director, Alabama Marine Environmental Sciences Consortium; Acting Chairman, Alabama Coastal Area Board
- Florida - Louis Burney, Planning Coordinator, Florida Coastal Coordinating Council
- Louisiana - Paul Templet, Ph.D., Center for Wetlands Resources, Louisiana State University
- Mississippi - Bruce W. Mattox, Ph.D., Director, Mississippi-Alabama Sea Grant Consortium
- Texas - Robert S. Kier, Research Scientist, Bureau of Economic Geology, University of Texas at Austin

10:45 a.m. Panel Discussion: "Designating and Inventorying Areas of Particular Concern in Coastal Zone Management"
Moderator: Robert W. Wales, Ph.D., Assistant Professor of Geography, University of Southern Mississippi
Panel:
- Alabama - Barry A. Vittor, Ph.D., Assistant Professor of Marine Science, University of Alabama
- Florida - Louis Burney, Planning Coordinator, Florida Coastal Coordinating Council

Louisiana - Jack van Lopik, Ph. D., Director, Office of Sea Grant Development, Louisiana State University
Mississippi - Robert L. Robinson, Ph. D., Director, Mississippi Agricultural and Industrial Board
Texas - Robert S. Kier, Research Scientist, Bureau of Economic Geology, University of Texas at Austin

12:00 m. Luncheon
Master of Ceremonies: Jerry J. Bodin, Member, Mississippi Marine Resources Council
Luncheon Speaker: The Honorable William F. Winter, Lieutenant Governor, State of Mississippi

Afternoon Session
2:00 p. m. - 5:30 p. m.

2:00 p. m. Panel Discussion: "Politics and Regional Coastal Zone Management (How to Stop Talking and Start Achieving)"
Moderator: Donald J. Cuevas, Vice Chairman, Mississippi Marine Resources Council
Special Address: "What the State Could and Should Do to Make Themselves Heard in National Coastal and Ocean Policy Study." Bob Lane, National Oceans Policy Study of the United States Senate
Panel:
Alabama - The Honorable Lionel W. Noonan, State Senator, State of Alabama
Florida - The Honorable Warren S. Henderson, State Senator, State of Florida
Louisiana - The Honorable Jesse Knowles, State Senator, State of Louisiana
Mississippi - The Honorable Gerald Blessey, State Representative, State of Mississippi
Texas - Joe C. Moseley, Director, Texas Coastal and Marine Council

4:00 p. m. Panel Discussion: "Permissible Land and Water Uses and Priority of Uses in the Coastal Zone"
Moderator: David Etzold, D. B. A., Senior Research Associate and Professor of Management, Bureau of Business Research, University of Southern Mississippi
Panel:
Alabama - The Honorable Douglas I. Johnstone, State Representative Elect, Alabama House of Representatives
Florida - Terry Lewis, Agency Coordinator, Florida Coastal Coordinating Council

Louisiana - Lyle St. Amant, Ph. D., Assistant Director, Louisiana Wildlife and Fisheries Commission
Mississippi - Larry E. Goldman, Marine Programs Biologist, Mississippi Marine Resources Council
Texas - Ron Jones, Director, Coastal Zone Management Program, Texas General Land Office

6:30 p. m. Social Hour and Media Briefing

7:30 p. m. Dinner
Master of Ceremonies: The Honorable William C. Rhodes, State Senator, State of Mississippi; Member, Mississippi Marine Resources Council
Dinner Speaker: The Honorable Aaron R. Schwartz, State Senator, Texas State Senate; Chairman, Coastal States Organization

Thursday, September 19, 1974

Morning Session
9:00 a. m. - 12:00 m.

9:00 a. m. Panel Discussion: "The Organizational Structure Proposed to Implement the Management Program"
Moderator: Robert T. van Aller, Ph. D., Dean of the Graduate School, University of Southern Mississippi
Panel:
Alabama - James R. Cooper, Legal Research Aid, Alabama Attorney General's Office
Florida - Terry Lewis, Agency Coordinator, Florida Coastal Coordinating Council
Louisiana - Patrick W. Ryan, Director, Louisiana State Planning Office
Mississippi - Jerry C. McCall, Ph. D., Executive Vice Chancellor, University of Mississippi; Member, Mississippi Marine Resources Council
Texas - Joe C. Moseley, Director, Texas Coastal and Marine Council

10:45 a.m. Panel Discussion: "Public Participation in Coastal Zone Management"

Moderator: J. Chester McKee, Jr., Vice President for Research and Dean of the Graduate School, Mississippi State University

Panel:

Alabama - William E. Powell, Ph.D., Leader and Advisory Specialist, Alabama Sea Grant Advisory Services

Florida - Bruce Johnson, Staff Director, Florida Coastal Coordinating Council

Louisiana - Marc J. Hershman, Research Director, Coastal Resources Law, Louisiana State University

Mississippi - Raymond Butterfield, General Manager, WLOX Radio-TV Station

Texas - Ron Jones, Director, Coastal Zone Management Program, Texas General Land Office

12:00 m. Luncheon

Master of Ceremonies: Charles Lyles, Director, Mississippi Marine Conservation Commission

Luncheon Speaker: Colonel Drake Wilson, District Engineer, Mobile District, U.S. Army Corps of Engineers

Adjournment: J. E. Thomas, Executive Director, Mississippi Marine Resources Council

WELCOMING ADDRESS

Donald J. Cuevas
Vice Chairman, Mississippi Marine Resources Council

As Vice Chairman of the Mississippi Marine Resources Council, the umbrella agency created by the Legislature to develop and manage Mississippi's marine resources, it is my pleasure to personally welcome each of you to this Gulf States Conference on Coastal Zone Management.

It is my responsibility, as well as pleasure, to set the tone of this conference. I should project leading ideas and issues, arouse enthusiasm, generate unity among other noble undertakings, but you, the participants, are the ones that will make our conference a success by your input.

Fortunately for you, I was assigned the shortest time slot on the program. Since I do go first, I do not have to follow great speakers, such as Senator Babe Schwartz at our Governor's Conference last July.

When I read the agenda last evening and realized I had the privilege of welcoming everyone, I became concerned that I would adequately keynote this conference. However, in reading your program you already know that the finest talents are representing your state's viewpoints.

The topics for discussion have obviously been selected to identify timely interest and concerns of all those present. Incidentally, I hope

that the topics for panel discussion will actually become developments, rather than just discussions. Add your presence and participation, and we should have all the ingredients necessary for a successful conference.

When a Gulf States Conference was first proposed, I talked with Dave Wallace and Bob Knecht of NOAA. This occurred before funding for coastal zone management was available, and I was trying to sell them on the idea of developing a "Gulf of Mexico" unit of states. This unit would have a separate identity with funding and management in keeping with Atlantic and Pacific Ocean activities.

The Gulf is a small area by comparison to the oceans, so it is much more manageable. Input can be monitored and results read out quickly. It is unique and deserving of special attention. Priorities, as well as pressures, of a different order exist. Of special concern to us here on the Gulf Coast are hurricanes, the Gulf Stream, less weather extremes, sharing our shore waters with international neighbors and, unlike any other body of water, the mighty Mississippi River.

I would like to see this conference offer the leadership and be the origin of a Gulf States Consortium for Coastal Zone Management. Organized regionally, or possibly internationally, a Gulf of Mexico consortium of states and nations abutting the Gulf could address coastal zone management on a unified basis.

Again, I welcome each of you and officially convene this Gulf States Conference on Coastal Zone Management, sponsored for the Mississippi Marine Resources Council by the Mississippi-Alabama Sea Grant Consortium.

PANEL DISCUSSION:

BOUNDARIES OF THE COASTAL ZONE

Moderator:

James W. Zirkle, J.D., LLM
Associate Professor of Law
University of Mississippi Law School

Panel Members:

Alabama
Sidney D. Upham, Ph. D.
Executive Director, Alabama Marine Environmental Sciences Consortium; Acting Chairman, Alabama Coastal Area Board

Florida
Louis Burney
Planning Coordinator, Florida Coastal Coordinating Council

Louisiana
Paul Templet, Ph. D.
Center for Wetlands Resources, Louisiana State University

Mississippi
Bruce W. Mattox, Ph. D.
Director, Mississippi-Alabama Sea Grant Consortium; Member, Mississippi Marine Resources Council

Texas
Robert S. Kier
Research Scientist, Bureau of Economic Geology, University of Texas at Austin

INTRODUCTION BY PANEL MODERATOR

James W. Zirkle, J. D., LLM
Associate Professor of Law,
University of Mississippi Law School

This part of the program deals with the boundary of the coastal zone. This threshold question is of tremendous significance in any attempt to manage a coastal zone area. The idea of identifying a coastal zone can appear, at first glance, to be a simple task. However, the truth is soon discovered.

I would suggest that the difficulties of defining a regulated coastal zone are not only questions of primary importance, but also are among the most difficult tasks a decision maker must face in implementing a coastal zone management program.

In arriving at a definition of the coastal zone, we should keep two objectives firmly in mind. First, the definition of the zone must be comprehensive. One must take into account all of the competing claims which are being made both within the principal areas and within adjacent areas which have an impact. For example, a substantial impact on the coastal zone may be caused by some activity which takes place well up the Mississippi River. Many activities have a profound affect on the coastal area. The siting of an industrial complex in an inland area may also have a great impact on the coastal area. I should like to emphasize here that

we are dealing not only with the usefulness of natural resources, but also with the economic and demographic stability of the area.

In addition to being comprehensive, the definition of the coastal zone must also be functional. By this I mean that defining a narrow strip of land along the shoreline where a state has the authority to regulate uses is not, without more planning, going to be very effective in managing the coastal zone. In order to make intelligent decisions regarding the regulation of activities within the coastal zone, the activities of adjacent areas must be taken into account.

All of this requires an area management scheme. At the very least, the state must devise a regulatory agency with broad planning and implementing responsibilities. While local interests should have a considerable degree of control over the regulation of local resources, they cannot be given complete control. The big concept here is area management in the broadest sense. This would include cooperative efforts by adjoining states, possibly requiring inter-state compacts. The legal problems are complex and the policy decisions difficult. But the paucity of time only excelerates the problems.

ALABAMA

Sidney D. Upham, Ph. D.
Executive Director, Alabama Marine Environmental
Sciences Consortium; Acting Chairman,
Alabama Coastal Area Board

When we come up against the rather formidable task of defining the coastal zone, we first must come to grips with semantics and definitions, or there is no way that we can possibly devise an effective boundary for the coastal zone. And, parenthetically speaking, after being intensely associated with the marine and coastal area for the past five years or more, I think that we are going to have a rough time of it in the defining process until the public is made aware of what is going on, aware of the necessity for defining the coastal zone. We can gather at meetings such as this and possibly come up with a good definition, agreed to among ourselves. But when a fishing camp operator or real estate developer finds that our definition of his coastal zone is going to place unpopular restrictions on his land, they are going to scream like smashed cats. If they can form a coalition, our definition of the coastal zone will not be worth the paper on which it is written. In this, I have touched on a most vital aspect: public participation. We simply must get the public involved, because any program with such broad ramifications must have the support of the people, or it simply will not work.

And now let us get back to defining the coastal zone. I believe that in establishing a boundary for the coastal zone we are defining an area in which we want to protect something. But what do we want to protect? We must

answer this question before we can go one step forward. If we want to protect the wetlands, we simply put our boundary at a point landward of the coastal marshes. However, such an action would satisfy few people, so then we could move the line further landward and widen the protected area. Again, this simplistic approach would be unsatisfactory. We have so many interests competing for their own bit of the coast, that it is going to be practically impossible to satisfy everyone. Therefore, I suggest the following plan. Let us have two coastal zones and delineate the activities that will be permitted in each. I believe this compromise will give us a better handle on the entire problem and will simplify the approach.

For example, the coastal marshes could be kept intact to help preserve the fishing industry. Encroachment into this area should be absolutely limited. The secondary zone would be that land lying at a higher elevation and not subject to the ebb and flow of the tides. This area could be designated as suitable for residential development, and the portion further inland could be designated as suitable for industry siting.

I realize that this proposed plan is almost too simple in that it divides the coastal zone into neat little packages. We know, practically, that we cannot do this. The coastal zone is almost too complex for definition, but what I have proposed is a start, I believe, in the right direction. Simply stated, it is a compromise, for with all of the divergent interests present in the coastal zone, compromise is the only solution. A compromise produces a manageable coalition; individual interests striving for supremacy can produce chaos.

FLORIDA

Louis Burney
Planning Coordinator, Florida Coastal Coordinating Council

There are certainly several basic considerations which must be taken into account in establishing or defining the landward and seaward extent of the coastal zone. First of all, federal legislation states that this boundary must encompass most, if not all, of the shoreland area, the uses of which have a direct and significant impact on coastal waters. This, of course, varies with both the biophysical and socio-economic character of the state's coastal area.

Secondly, there is the provision in the federal guidelines (Section 920.11) for the state to adopt a planning area boundary, which is larger than the area ultimately selected for direct management. This is intended to allow state programming and regulation to take into account developmental, political and administrative realities. Also taken into effect will be biophysical processes that may be external to the restricted zone eventually selected for control.

In most cases, the seaward boundary of the coastal zone should be relatively easy to determine. It should include all of the area which is under the state's jurisdiction. However, the coral reefs in Florida is an example of where this boundary would not extend far enough.

In considering an inland boundary for the coastal zone, we have four basic options. First of all, we could use a purely biophysical definition.

For example, the boundary could be a certain elevation, freshwater/saltwater interface, vegetation line or hurricane flood zone. Secondly, the boundary could be determined by a particular political boundary, such as a county line or special district boundary. Another option would be to use an arbitrary distance inland, such as one thousand yards, one mile or twenty miles. Finally, a combination of biophysical/socio-economic factors might be used to determine the landward extent of the coastal zone.

There are certain advantages and disadvantages associated with each of these four options. A purely biophysical definition of the coastal zone will adequately address the biophysical process, but will usually require new, detailed surveys to establish the boundary on the ground. Also, a purely biophysical definition does not consider the socio-economic aspects, since no such data has normally been gathered for such areas.

Political boundaries usually have socio-economic data available, but these boundaries do not presently relate directly to biophysical parameters. For instance, boundaries of Florida's counties are generally defined according to township, range and section lines. If possible, using political boundaries to determine the extent of the coastal zone would probably be the most orderly way to go.

Establishing the inland extent of the coastal zone by using an arbitrary distance inland would probably not prove very favorable.

These areas would be too large in some cases and too narrow in others.

A combination of biophysical/socio-economic considerations would probably be the most flexible means of defining a coastal zone. This allows the use of previously gathered socio-economic data, as well as encompassing biophysical parameters. Of course, this means is particularly useful for defining the planning area.

In Florida we elected to utilize the boundaries of selected census enumeration districts, which most nearly match and encompass the biophysical parameters, in determining our coastal zone. These boundaries, rather than being nebulous, are well defined. Also, this method allows for the use of a considerable body of existing computerized data in building block form. This, in turn, allows determination of distributional (spatial) factors, such as where mobile homes are located, septic tank use, population concentrations, substandard housing, vacation residences, and many other factors. The main disadvantage of using this method is that the boundary is subject to some change with each new census. However, this is not critical if the interior planning recognizes the coastal zone planning effort and is designed to be compatible with it.

There certainly could be potential conflicts between state programs in adjacent states, if these states have different coastal zone boundaries. This would be particularly true if one of these states is pro-development

and the other is pro-conservation. However, the rational, objective development of a coastal zone management program should aid in preventing such conflicts, but interstate agreements could become necessary.

Of great significance from Florida's standpoint are non-coastal zone activities in Georgia and Alabama, such as the Apalachicola River being used for cargo transport and the subsequent need for modification of the river system to allow for this use. The coastal zones of Alabama and Georgia should not present any real problems to Florida, because of a lack of development pressures in these two areas. There are marshes and swamps in Georgia, and the Perdido River part of Alabama is rather isolated. However, activities in Mobile Bay could cause some problems in Florida.

Multiple coastal zone boundaries allow for understanding of external influences for planning, but may cut across or split existing political jurisdictions. Also, in my opinion, a grey area, that cannot be adequately addressed solely from the state perspective, exists in the question of the national interest involved in determining a state's coastal zone. Of course, this would involve national defense, regional economics and other such factors which would require input from the federal level.

LOUISIANA

Paul Templet, Ph. D.
Center for Wetlands Resources, Louisiana State University

In establishing the landward and seaward extent of a state's coastal zone, there are several points which must be considered. Actually, I feel that we should be most concerned with the landward limits, because the seaward boundary should probably extend to the edge of the state's territorial waters.

Of great importance are certain biophysical parameters which should be taken into account. The most obvious of these is the salinity contour, or the extent to which saltwater penetrates riverine systems. This saltwater penetration will more or less make itself visible through the vegetation line that divides the species of flora that can exist in either the saltwater or freshwater environment. Another determining factor is the extent of tidal activity and, in particular, storm tides. Geomorphological and physical delineation, such as the Pleistocene Terrace uplands and the deltaic lowlands, are generally sharp and clear, as are the types of soil. Coastal prairies, coastal marshes and the extent of alluvial soils all have their defining characteristics, as do the species of animals supported by each of the geomorphological areas. Other defining factors must be taken into consideration. There are the jurisdiction of selected federal agencies, such as the Corps of Engineers and the U.S. Coast Guard.

After we have plotted all of the biophysical parameters on maps and overlays, then we are in a position to compare alternative boundaries to the coastal zone. I believe that it is obvious that we should, if at all possible, pick a boundary that coincides with a physical feature--a highway, stream, level, edge of a lake, alluvial valley, edge of a flood plain, parish (county) line or the Intercoastal Waterway. If we do not take the precaution to use some existing boundary, or at least select a boundary system that makes sense in the legal and practical aspects, we may be forced into a situation where an individual's land may be divided into coastal and noncoastal land. If this happens, we will have a hard time convincing people that we know what we are doing.

The last point I would like to make is that the process of boundary definition will probably be a question that will be resolved by the political processes and not by a scientific process. This, of course, does not mean that scientists cannot present information for consideration that may lead to the definition of the coastal zone, but the boundary itself will be politically decided. I do not think that the scientific and technical aspects of coastal zone definition are going to be nearly as difficult to resolve as the political and social aspects.

The scientists and the technicians are generally detached from most of the pressing questions that arise from any political change. These people supply the answers to questions, or they provide information so that the planners and decision makers can make rational choices.

But the political and social spheres are where the real problems can lie. The people wield the power, and that places them squarely in the political arena. Social and economic aspects are vitally important in the functioning of society. The definition of the coastal zone will have a profound effect on all of these factors, and it will be no easy job to make a viable definition that will suit all the needs of the people and the region as a whole.

MISSISSIPPI

Bruce W. Mattox, Ph. D.
Director, Mississippi-Alabama Sea Grant Consortium;
Member, Mississippi Marine Resources Council

Any time we attempt to undertake a task, the first step should always be to consult an authority on the meaning of what we are to do. Therefore, after checking with Webster, along with some rearrangement on my part, I believe a definition of defining would include each of the following points:

1. A word or phrase expressing the essential nature of a person or thing.
2. Clarity.
3. An act of determining, such as a proclamation.
4. A statement of the meaning of a word or word group or a symbol or sign.
5. The action or the power of making definite or clear.

To express the "essential nature" of the coastal zone requires public participation, as well as scientific and technical participation, including economic and social factors. Political workability must be rationalized with "essential nature" prior to any proclamation or statement of

the boundary of the coastal zone. Political action will be required to provide the power to make the chosen boundary definite and enforceable.

Public participation in Mississippi has already begun with our own Governor's Conference on Coastal Zone Management, which was sponsored for the Mississippi Marine Resources Council by the Mississippi-Alabama Sea Grant Consortium. The input by the participants of this conference was of significant proportions and was published in detail in the proceedings of the conference.

The scientific and technical aspects of the program are progressing within the Mississippi Marine Resources Council staff and through outside work with other agencies, such as data collecting, synthesis and state and federal agency coordination.

The economic and social factors are, perhaps, the weakest link at this time. However, they are considered in existing management of the wetlands, for example, the highest and best public use. Spillover costs between uses, as well as economic tradeoffs, will be important in determining social consequences of selecting a particular boundary. Orderly economic growth will be of necessary consideration.

Political realities will require a synthesis of the interests of the public, the natural capabilities of the area, economic interests and social impacts, if the definition of the boundaries of the coastal zone and coastal zone management are to become any more than a planning

exercise. This is, making them into useful tools for managing coastal and marine resources to improve the quality of our lives.

TEXAS

Robert S. Kier
Research Scientist, Bureau of Economic Geology,
University of Texas at Austin

The first requirement in delineating coastal zone boundaries is to conduct an adequate resource inventory. We also need to know the existing and potential land use patterns. The relationship between the two will, to a large extent, determine the natural capabilities of the land and water and their ability to support man's use and activities within the coastal zone. Examination of this critical balance between what is and what could be also will provide a measure of insight into the role that technology and engineering can play in enhancing these areas to make them even more useful and productive.

The resource inventory should be as comprehensive and as quantitative as possible, and we should insure that the boundaries of the coastal zone encompass at least a portion of the land surrounding the basins, marshes and estuaries. Prime consideration of natural resources is mandatory when we compare land use patterns. Coastal resources could well be the factors that ultimately define the coastal zone due to their natural distribution throughout the geographical area.

The coastal zone is not a finite entity. So many changing things must be considered when we attempt to define the actual physical parameters of the coastal zone. Some of these are the topography of the surrounding area, freshwater flows, tidal flow and the flora and fauna of the area.

One suggestion has been made that the coastal zone should include all of the coastal plains up to the fall line or to the first dam in the watershed. This is not my suggestion, but it is a pretty good one. If this suggestion were put into action, places like St. Louis and Milwaukee would be in the coastal zone. And to take it one step further, the boundary must be selected with due consideration given not only to the surface environment, but also to the subsurface environment as well. This is necessary, because of the need for an adequate freshwater supply and deep waste disposal.

With all of the above suggestions, it is still difficult to arrive at an adequate boundary of the coastal zone. We can come up with all kinds of boundaries, depending on what we want to manage. But this could end up as a bureaucratic nightmare.

If we look on the concept of multiple boundaries, there are several apparent advantages. The first is that we do not manage those things that do not need to be managed. By the same token, we manage all of those things that do need to be managed. But the weakness of this concept

is that, while it would solve a number of our problems, it would open the door for the worst kind of these bureaucratic nightmares.

One important aspect of defining the coastal zone is the political factor. The boundary must be a political boundary before management can be effective. Jurisdiction must be defined so that management can become a reality, for without firm and enforceable boundaries, management is not possible.

Our attempt to define the coastal zone will require a truly Herculean effort. It will involve us in practically all of man's basic activities from the political to the economic and sociological. We well may have to sit down and define just what aspect of the coastal zone it is we want to manage, before we attempt the complex and perplexing task of defining something as elusive as the coastal zone.

PANEL DISCUSSION:

DESIGNATING AND INVENTORYING AREAS OF PARTICULAR CONCERN IN COASTAL ZONE MANAGEMENT

Moderator:

Robert W. Wales, Ph. D.
Assistant Professor of Geography,
University of Southern Mississippi

Panel Members:

Alabama
Barry A. Vittor, Ph. D.
Assistant Professor of Marine Science,
University of Alabama

Florida
Louis Burney
Planning Coordinator, Florida Coastal
Coordinating Council

Louisiana
Jack van Lopik, Ph. D.
Director, Office of Sea Grant Development,
Louisiana State University

Mississippi
Robert L. Robinson, Ph. D.
Director, Mississippi Agricultural
and Industrial Board

Texas
Robert S. Kier
Research Scientist, Bureau of Economic Geology,
University of Texas at Austin

INTRODUCTION BY PANEL MODERATOR

Robert W. Wales, Ph. D.
Assistant Professor of Geography,
University of Southern Mississippi

Before introducing the panelists I would like to comment briefly upon our topic, since not all of you may be familiar with the requirement as it relates to the provisions of the Coastal Zone Management Act of 1972. Section 305 (b) (3) of the Act requires that each state exhibit evidence that it has made an inventory and designated areas of particular concern within the coastal zone. The basic purpose for this is to show that each participating state has expressed concern for these areas, and has or is developing implementation policies or actions of management; the policies or actions are to be included in the management program which is submitted for approval.

Since each state's perception of what constitutes an area of particular concern is likely to vary, no specific criteria have been established upon which a state must abide in designating such areas. It has been suggested (15 CFR 920.13), however, that at a minimum, states should at least consider the following factors: (1)Areas of unique, scarce, fragile or vulnerable natural habitat, physical feature, historical significance, cultural value and scenic importance; (2) 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; (3) areas

of substantial recreational value and/or opportunity; (4) areas where developments and facilities are dependent upon the utilization of, or access to, coastal waters; (5) areas of unique geologic or topographic significance to industrial or commercial development; (6) areas of urban concentration where shoreline utilization and water uses are highly competitive; (7) areas of significant hazard if developed, due to storms, slides, floods, erosion, settlement, etc.; and (8) areas needed to protect, maintain or replenish coastal lands or resources, such areas including coastal flood plains, aquifer recharge areas, sand dunes, coral and oyster reefs, beaches, offshore sand deposits and mangrove stands.

ALABAMA

Barry A. Vittor, Ph. D.
Assistant Professor of Marine Science,
University of Alabama, Dauphin Island Sea Lab

The coastal zone represents a significant transportation fringe, since it lies between open water navigation and onshore users and producers. As a result, the major pressures for use and/or modification of the coastal zone come from channel dredging and maintenance and construction of industrial plants, which rely on relatively inexpensive water commerce.

In Alabama, these pressures are juxtaposed against the tremendous fisheries potential represented by coastal and delta wetlands. Consequently,

management of this geographical fringe area will be focused on achieving a balance between these two major uses.

The real question here is whether a balance is justified, or whether the coastal zone should be left in its natural state to avoid jeopardizing natural resources which we cannot replace. Industrial sites can be moved to more upland sites (and, in fact, this is already happening in Alabama), but access channels and pipelines must cross the coastal zone. The value of wetlands used for such access must be quantified ecologically in order to complement the obvious economic attributes assigned to the areas used for industrial purposes.

Other values of the coastal zone, which must be included in use classification of the area, are aesthetic values, sport fishing, hunting and other recreation. Any construction, for example residential, bordering the coastal zone may affect these coastal resources via siltation, changes in drainage and other things.

Uniformity in legal delineation of the coastal zone between states is necessary for sound management of this area. If the coastal zone is more liberally defined in one state, industrial and other uses will become concentrated there, possibly placing excessive strain on sensitive ecosystems. We do not know exactly how the coastal resources of one state contribute to or limit the resources of adjacent Gulf states. Consequently, overly liberalized use of some areas may cause damage

or strain elsewhere. For example, if Florida prohibits or severely restricts pipeline landfalls there, pressure will mount on Alabama's adjacent coastal zone. Alabama will be faced with defining permissible uses of its coastal zone the same as Florida or voluntarily accepting the kind of development and ecological impacts considered unacceptable by that state.

Certain uses of contiguous states' coastal areas will affect neighboring states; use classification of such areas must take into account the permissible uses defined by both states. For example, pipeline corridors between Alabama and Mississippi may lie along the line separating them; oil storage facilities, refineries and other petroleum related developments that locate at the terminus of such pipelines will affect the coastal resources of both states.

Similarly, upstream activities in one state may have effects which cross state lines with the stream, ultimately affecting coastal resources of the neighboring state in the estuaries. Heavy metal and pesticide residues introduced into a river system will be transported downstream and eventually accumulate in the sediments of our estuaries. Biological concentration of such pollutants in species of commercial or ecological importance will have a significant detrimental impact on fishery resources.

In Alabama, as in other coastal states, marsh areas vary from negibly to badly damaged. Wetlands subject to continuing and irreparable damage probably can be classified more liberally than areas of major

ecological value, unless a deliberate program of resource repair is developed.

It may also be feasible, ecologically, to permit a trade-off between coastal land use (development or complete modification) and coastal land creation, as in the case of spoil island, marsh creation recommended in association with new channel construction in Mobile Bay. Studies now being conducted under contract with the Waterways Experiment Station will identify the feasibility of marsh creation under different circumstances.

Separate use criteria will, undoubtedly, be desirable for areas of recreational/tourist value as opposed to areas of natural biotic productivity. Certainly, the kinds of uses will vary with the type of coast land involved, as in the case of Gulf Shores versus Bayou La Batre, in Alabama.

Coastal swamps present a unique problem. They are apparently undesirable from a human standpoint, yet their ecological value is poorly understood.

As mentioned earlier, pipeline corridor development related to oil exploration offshore will present several instances of coastal zone problems which will cross state lines. These include potential pollution emissions which cannot be restricted to one state or the other, as in the case of water borne or air borne materials.

Administration and protection of contiguous coastal zones must be based upon joint state commissions and uniformly applied management criteria. A strong basis for such cooperation is developing between

Alabama and Mississippi via the two-state Sea Grant Program, Ameraport and Tenn-Tom projects. Water pollution conferences concerning Perdido Bay, between Alabama and Florida, have illustrated the interstate consequences of point-source pollutant discharges.

FLORIDA

Louis Burney
Planning Coordinator, Florida Coastal Coordinating Council

The relationship between areas of concern and establishing permissible uses in these areas are very closely related. Obviously, we cannot define permissible uses until we define our concern. The concerns in one area may be very different from the concerns in another area. The nature of some of these concerns may be ecological, economic, social, aesthetic, historical among many other things.

Florida, in the first phase of its coastal zone management program, has approached this problem by identifying biophysical concerns. This has been done by classifying the coastal zone landscape into three broad areas--preservation, conservation and development. Such classification for planning purposes was done after consideration of the following points:

1. Ecological significance of the area.
2. Soil suitability.
3. Water quality standards which were already established for adjacent waters.
4. Susceptibility to flooding from hurricane storm surge, as well as runoff.

5. Presence of any unique environmental factors that may warrant protection.
6. Archaeological and historical significance of the area.
7. Present use.
8. Geologic factors.

This classification allows for the easy identification of the areas of bio-physical concern and provides a basis for determining permissible land and water uses within such areas.

Interstate considerations in defining areas of particular concern within a state's coastal zone are quite important. Any potentially polluting activity or modification of the coastal water regime by an adjacent state would come into play in managing ecological areas of particular concern. Out-of-state, upstream activities are of tremendous importance in Florida's case. An example of this in Florida is the Appalachicola River and Bay system. This area will, undoubtedly, be on our list, because of its shellfish production and sensitive nature. Any modification of the river system or polluting activity in that portion of the drainage basin in Georgia or Alabama could have adverse effects on the ecological stability of the Bay. Economic development activities in Georgia and Alabama could severely damage the economy of the Appalachicola area.

Also, polluting activities on the Florida side of the Perdido River at Pensacola have adversely affected Alabama's interest in Perdido Bay. However, forceful correction action is now being taken by Florida.

Interstate agreements between principals in such cases as this would certainly provide fertile ground for thought. Perhaps, the Coastal States Organization or some future organization of the Gulf states could be used as a forum.

In my opinion, there would surely have to be different types of criteria applied to various areas of concern. For instance, in one area the main concern may be water quality, while in another instance, it may be one of public safety or public expense. In still another, the primary concern may be the preservation of a particular type of feature, such as coral reefs, historical sites, unique vegetation or any number of other features. The criteria applied would have to fit the concern.

Operational procedures might also range from primarily local action in one case to primarily state action in another. For instance, a local vegetation ordinance might suffice in the case of an endangered, unique vegetation, while protection of coral reefs would require mostly state and federal action.

Areas of particular concern between states on boundary line problems of administration and protection would occur mostly where the states share an estuarine system. In such cases, it would be beneficial to cooperate on needed research concerning the area and, possibly, work out agreements for future management actions. Administration problems would be apt to arise in areas where the states had differing economic bases and conflicting goals. A good example of this would be one state

making the development of tourism its prime objective, and the other state making industrial and port expansion its prime objective within the same area.

A particular problem which may arise, and one we should certainly guard against, is that of a lack of communication. This is a severe problem, at times, between states and even within a state. However, the establishment of a close liaison between the coastal zone management programs of adjoining states would certainly help to alleviate this problem.

LOUISIANA

Jack R. van Lopik, Ph. D.
Director, Louisiana Sea Grant Program;
Director, LSU Center for Wetlands Resources

The definition and selection of areas of particular concern must be accomplished in concert with the development of coastal zone boundaries and permissible-use criteria. During the data collection and analysis phases of the work, it should be recognized that three distinct activities or objectives are involved. These are: (1) inventory and monitoring of land use and various aspects of environmental quality, (2) assessment of land suitability and capacity, and (3) establishment of guidelines or methodologies for actual coastal zone program decision making, operations and enforcement. Inventory and monitoring of environmental quality and land use is needed to identify areas being subjected to high stress or development pressure; however, valid assessment of the capacity of areas to absorb stress without permanent damage is requiredif reasonable decisions are to be made regarding permissible-use and multiple-use questions. As the establishment of guidelines for coastal zone management demands the support of a majority of the citizenry, it must also be realized that "reasonable" criteria and decisions may not be acceptable. The three above mentioned objectives can be approached concurrently, but an effective synthesis must be achieved if a practical coastal zone program, incorporating selected areas of particular concern, is to emerge.

With these concepts in mind, it seems advisable to initially develop two lists of possible areas of particular concern. One list would identify possible areas on the basis of the intuitive or perceived criteria employed by a wide range of coastal zone publics and special interest groups. This survey should solicit the views of sports fishermen, commercial fishermen, developers, mineral producers, environmentalists, hunters, public officials and other groups concerned with coastal zone activities. While a detailed categorization of areas of particular concern should not be incorporated in the survey, a simple grouping may be useful. An example of this grouping could be (a) preservation - prohibition of all development, (b) protection - some compatible use allowed, and (c) rehabilitation/research - restricted for manipulative research and restoration activities. The second list would include similar categories, but would be based on the best available scientific knowledge concerning relationships among hydrodynamic-biological-chemical-geological systems and areas of archaeological-historical-cultural interest. If the two lists correlate well, the development of suitable selection criteria for areas of particular concern can be readily developed. If the lists do not exhibit a high degree of correlation, significant public education programs and considerable discussion with leaders of select groups may be required prior to the establishment of final selection criteria for areas of particular concern.

Operational procedures for utilizing areas of particular concern will differ depending upon area type. An area established for the preservation

of unique ecological or aesthetic features or conditions requires different use procedures than one established for manipulative research or compatible-use purpose. The status of local planning operations and existing state park/refuge regulations will influence or control the establishment of utilization procedures.

Because of the overriding need to focus on local or intrastate issues in defining and utilizing areas of particular concern, interstate considerations should not become serious issues until late in program development. Here again, the intrastate viewpoint must be accurately defined through consensual discussion prior to any interstate cooperation in establishing criteria for area selection or utilization. This also applies to common areas of particular concern with flank state boundaries. Here there is certainly a great need to establish similar disincentives and penalties for illegal utilization of the areas, but each state's position and views should be clearly defined prior to initiation of cooperative efforts.

Study of man-environmental relationships is reaching a stage where this knowledge can be advantageously employed in making management decisions. Governmental agencies are realizing that environmental quality cannot be assured by the establishment and enforcement of air, water and solid waste standards and procedures. The pattern and type of land development must also be influenced or regulated if a predetermined level of quality is to be achieved. In many instances the problems are highly localized, but the widespread population movement to the coastal

zones and ubiquitous problems relating to the urban-rural interface and location of major developments are indicative of national and regional needs. As we move toward treating land as a resource, rather than a commodity, it is imperative that careful evaluation be given the actual and perceived rights of landowners. No program will function effectively without the support of the people and the spawning of unenforceable legislation will not achieve needed change. Furthermore, while our present concern focuses on the direction and location of growth, consideration of the nature and quality of growth must assume increasing importance in the future.

MISSISSIPPI

Robert L. Robinson, Ph. D.
Director, Mississippi Agricultural
and Industrial Board

Land use planning is a coming thing. It is simply a matter of whether we do it for ourselves, which I strongly prefer, or whether the Federal Government does it for us.

In protecting all lands we have to be very reasonable. If we take some sort of intelligent approach, we can literally have our cake and eat it too. That is, we can protect this valued resource and continue to develop our state and nation economically. It is very easy for a person who earns forty, fifty or sixty thousand dollars a year to say that we do not need any

additional economic growth. But what about the poor guy who is earning four, five or six thousand dollars a year, trying to feed and educate two or three children? He needs a better job opportunity.

I have advocated for quite some time that we take a balanced approach to economic development. We should keep our lands most suited to agriculture in agricultural production. The world is having a very difficult time feeding its population. This fact makes agriculture a good business currently, and it will remain good business in the future. As another aspect of this balanced approach, we must take advantage of our tourism potential. We have a great deal of nature, history, open lands, and our state is very liveable. These are basic ingredients which we should develop. This development will require some private and public sector investments During and after development we must have adequate promotion. Contrary to what some will tell you, the tourism dollar is a good dollar. People come to Mississippi to spend their money, and then leave. This money turns over several times in our economy.

A third aspect of this balanced approach is, of course, industry. I firmly believe that with our many advantages we can literally have all the industry we want. But, we are extremely foolish if we do not do some planning. As a method of planning, I have been advocating regional industrial parks. Full service, regional industrial parks will enable us to attract a better quality industry, thereby providing higher quality jobs for our people.

This will enable us to circumvent the many socio-economic and environmental problems which are brought about by intensive accumulation of industry and people in a given geographic location. Our state has an historical living pattern broken down by trade areas. Our people think very little of driving twenty to thirty miles to and from work, living on a few acres and growing a substantial portion of their food. This, in my judgement, is a good living pattern, and, perhaps, trade areas would be a good basis for industrial park development. People do have a tendency to be dominated by economics and move toward job areas.

In summary, we can benefit from mistakes which have been made by others in our nation. They did not plan and act in accordance with a reasonable plan. I am firmly convinced that we can continue to improve the liveability of our state, reverse any degradation which has set in and, at the same time, improve our scale of living. All we have to do is resolve, plan and act.

TEXAS

Robert S. Kier
Research Scientist, Bureau of Economic Geology,
University of Texas at Austin

The questions of identifying the coastal zone that will be subject to management and of designating areas within the coastal zone that are of particular or critical concern are, obviously, subject to considerable debate. Regardless of the conclusions, any management plan will require an adequate inventory of land, water and natural resources--kinds, characteristics (physical, chemical and biological), and importantly, the capability to support specific kinds and degrees of use consistent with requisite resource use and equally requisite environmental quality.

Mapping is, and will be, a fundamental means of this inventory. Mapping delineates the different kinds of environments that exist, their distribution and their interrelationships. The types of maps that ultimately must be produced are many and varied. These range from basic geological and soil maps to special purpose or thematic maps depicting aspects of the environment or man's use of the land that are pertinent to particular problems.

In 1968 the Bureau of Economic Geology at the University of Texas at Austin initiated a comprehensive program of land and environmental resource analysis. The thrust of this program to date has been to inventory the land and water resources of the State, to present this inventory

on cartographically--scribed and colored--separated maps of precision and to augment map data with descriptive and analytical text. The four maps of the Galveston-Houston area (Environments and Biologic Assemblages, Current Land Use, Active Processes and Natural Hazards, and Man-made Features and Water Systems), distributed here as a courtesy of the Texas Coastal and Marine Council, are examples of some of the special purpose maps produced as a part of the Environmental Geologic Atlas of the Texas Coastal Zone.

Among the uses to which these and similar maps have been put, has been derivation of maps showing historical flooding levels of Hurricanes Carla and Beulah as part of the Texas Hurricane Awareness Program. Examples of these maps, not all of which show the Houston-Galveston area, are included here.

These kinds of maps also have served as basic data in multi-disciplinary study at the University of Texas at Austin, Establishment of Operational Guidelines for Texas Coastal Zone Management. This study, funded by NSF-RANN and the Office of the Governor of Texas, has included derivation of maps of the Coastal Bend Region showing the distribution of land and water resources with similar natural capability to support man's use.

LUNCHEON ADDRESS INTRODUCTION

Jerry J. Bodin
Member, Mississippi Marine Resources Council

At this time I would like to introduce to you our speaker for this afternoon, the Honorable William F. Winter, Lieutenant Governor of the State of Mississippi.

Mr. Winter was born in Grenada, Mississippi, on February 21, 1923. He was graduated from Grenada High School as valedictorian and received his Bachelor of Arts degree from the University of Mississippi. Upon graduation from the University of Mississippi Law School, he was named the Outstanding Law Graduate in 1949.

During World War II and the Korean Conflict, he served in the Infantry Division of the Mississippi National Guard. He was elected to the Mississippi House of Representatives while a law student in 1947, and was reelected to a second term without opposition in 1951. He served as Legislative Assistant to U.S. Senator John Stennis in 1950-5[illegible]. From 1956-64 he was State Tax Collector, and served as State Treasurer from 1964-68. Our speaker was a candidate for the Governor of Mississippi in 1967.

Mr. Winter was elected Lieutenant Governor in the First Primary in 1971. A past President of the Mississippi Historical Society, he serves as President of the Board of Trustees, State Bureau of Archives and History. He is married to the former Elise Varner of

Senatobia, Mississippi, and they have three daughters, Anne, Elise, and Eleanor.

I would like to present to you the Honorable William F. Winter, the Lieutenant Governor of the State of Mississippi.

LUNCHEON ADDRESS

The Honorable William F. Winter
Lieutenant Governor, State of Mississippi

As I speak to you today about the purposes of the conference and about the efforts that have gone into the management of our coastal areas here in the Gulf South, I would like to point out that I am from North Mississippi, some 250 or 300 miles from where we are gathered today. By some it might be considered inappropriate for me, with my background as a "landlubber", to come here to the Gulf Coast to talk about coastal zone management. The point is, though, that the coast no longer belongs, if it ever did, to just those who have the opportunity of living on or near it. The coast belongs to all of us.

For that matter, the ability of this whole country to meet its economic and leadership obligations is very directly related to the manner in which we use that most vital natural resource that we have, which is our location on the great oceans of the world. History has taught us that almost every war has been fought over the matter of access to these oceans. The whole history of the development of this continent and of this country is wrapped up in the exploration of the coastal areas, the great rivers and the large inland lakes. The names of Joliet, Marquette, LaSalle, DeSoto, Bienville, Iberville and others are all identified with the significant historical events of the 16th, 17th

and 18th centuries, which led to the colonization and development of this great area where we are right now. We are in the middle of the Gulf crescent, a few miles east of the mouth of the Mississippi River, with our ports, bays, harbors, which provide an access to the commerce of the world.

What has happened, without our being conscious of it, is that the utilization of this area has changed drastically in our lifetime. Within the relatively short time since World War II, we have seen this Gulf Coast move from an area of quaint fishing villages and retirement retreats to a highly developed resort, industrial and military complex.

When I first visited Gulfport in the 1930's, the Port of Gulfport was limping along with the shipping of a little lumber from the immediate area. Biloxi had almost no activity other than its oyster and shrimp industry. During World War II we saw the establishment of a tremendous amount of military activity here. Keesler Air Force Base came to Biloxi, and the great Ingalls Shipyard moved into Pascagoula. These same types of activity were occurring all along the Gulf Coast from Texas to Florida. This has all happened in the past thirty years in our own generation. We are now beginning to reap the whirlwind of that kind of activity. Some of it has been good, and some of it has been bad, of course.

The mission we now have is to begin to make some of the hard, tough decisions that we have deferred out of a lack of interest, lack

of understanding or lack of priority for the past twenty-five or thirty years. We are just now beginning to realize what is happening to us in this coastal region. We here on the Gulf Coast are coming to realize the same thing is happening to us here that has already happened on the Middle Atlantic and New England Seaboard. It has happened on the Florida East Coast and on the Southern California Coast, where, without adequate planning and preparation, some of our finest coastal areas have been blighted in terms of their ability to serve the total needs of their regions.

If you drive up the Atlantic Coast, from the Tidewater of Virginia through the Massachusetts Coast, you can see what damage has been wrought to that area by the neglect of planning and the deferment of the establishment of priorities. They are now having to undo at a fantastic expense a great many of the things that have been done.

The point I make here is that, even though it is getting late, we still have time in this Gulf Coast area to avoid the mistakes that many of the other regions in this country have made. If we run past too many yellow lights, a generation of people living in this area in the future are going to look back and say to us, "Why didn't those people back there make the decisions and carry out the actions that would preserve for us the kind of coastal region that we have a right to live in and enjoy?"

I hope you will not misunderstand me. I am not implying by these remarks that we need to end industrial development. I do say that we

need to do a better job of planning industrial development along our coastal regions than we have in recent years. The one thing that I hope will be a result of this conference is that we establish a basis of meaningful cooperation among the states involved in this planning process. The effects cannot stop at the state lines. What we do in Mississippi in coastal development, or what we do not do, will affect Mobile, Pensacola, New Orleans and the other areas adjacent to us. What you do along the great industrial area along the Texas Coast and the kind of development you have on the Florida Coast are going to affect us all.

One cannot travel along this coast without being impressed by the massiveness of the migration into the area. This is continuing at a pace that even the economic slowdown that we are seeing in this country today is not impeding at any substantial extent. This area and the Pacific Northwest Coast are the last relatively underdeveloped stretches of coastline remaining in the United States. Unless we plan effectively, we are going to see it swallowed up in the next few years. The job that we have to do is to establish some priorities that will provide economic progress and help to keep our coast a good place to live. All of us here has the same economic stake in the proper industrial development of the coastal areas. I do insist that we cannot let this take place on a basis that will eliminate or impair the opportunity for the total enjoyment of these areas by all of the people of our region.

There is much we can look for in the coastal area in terms of recreational facilities. For example, the Gulf Islands National Seashore, Padre Island off the Texas Coast and many other areas are available for recreation and need to be set aside by us for people in the future. We must establish here a program of development that will enable us to preserve these unspoiled areas along our coasts.

I would point out that we have one of the great resources that the whole world is looking for right now. That, of course, is a source of energy. I am hopeful that we can arrive at a program which will insure the maximum development of our oil and gas resources and yet establish procedures which will see to it that oil and gas is produced without destroying, or significantly impairing, the recreational uses of the area. This simply is a matter of good, intelligent planning.

The living opportunities of the people in the area must be the paramount consideration. The quality of life of many people living in coastal areas has been lowered in recent years as a result of overdevelopment. We are beginning to see this here in Mississippi, as the capacity of the communities along the coast to provide basic services has been outstripped by the movement of people into the area.

I am trying to emphasize what you already know much better than I, and that is this multi-faceted problem that is going to have to be solved on the basis of many disciplines without the special interests assuming

a dominant position. There is room for the total development of this most vital resource that we have, this space on the great oceans of the world, that will help provide for all of us a standard of living our people have a right to expect. However, it is going to take the two things that I hope will come out of this conference. First, it will take the establishment of an adequate understanding of what the priorities are and a willingness to make some hardnosed decisions to enforce the carrying out of those priorities. Secondly, we must have an understanding to do this together. Mississippi cannot do this alone, nor can any of the other Gulf states. We have to do this with the understanding that we have a responsibility to the people of the coastal area, and more than that, to the people of this country and the people of the world.

I cannot think of a more challenging, vital, interesting, rewarding, or productive process than that in which we are participating today. We are striving to insure that goals are realized and that this Gulf Coastal region of America is developed on the basis of its maximum potential for use by the greatest possible number of human beings living today and in the years ahead.

PANEL DISCUSSION:

POLITICS AND REGIONAL COASTAL ZONE MANAGEMENT

(HOW TO STOP TALKING AND START ACHIEVING)

Moderator:

Donald J. Cuevas
Vice Chairman, Mississippi Marine Resources Council

Special Address:

"What the States Could and Should Do to Make Themselves Heard in National Coastal and Ocean Policy Development"

Bob Lane
National Oceans Policy Study of the United States Senate

Panel Members:

Alabama
The Honorable Lionel W. Noonan
State Senator, State of Alabama

Florida
The Honorable Warren S. Henderson
State Senator, State of Florida

Louisiana
The Honorable Jesse Knowles
State Senator, State of Louisiana

Mississippi
The Honorable Gerald Blessey
State Representative, State of Mississippi

Texas
Joe C. Moseley
Director, Texas Coastal and Marine Council

SPECIAL ADDRESS:

What the States Could and Should Do to Make Themselves Heard in National Coastal and Ocean Policy Development

Bob Lane
National Oceans Policy Study of the United States Senate

Of interest to all of us here at the Gulf States Conference on Coastal Zone Management is the Deep Water Port Act of 1974, which should come before the U. S. Senate within the next two weeks. This bill has already been passed by the House. It provides for the regulation, construction and licensing of deep water ports. We feel fortunate that the efforts of the National Oceans Policy Study and the Coastal States Organization, which are directed toward a strong state veto of deep water ports, have been included in this bill. There is very little time, of course, for any additional changes in this bill, because it looks as though it will be an act by the end of this year. This is a bill to watch, and it may be a law very soon.

There are several proposals that are now before the Congress you should know about, which will, very definitely, affect the coastal states. The first of these is the Energy Supply Act. This Act amends the Outer Continental Shelf Plans Act of 1954. It establishes certain policies regarding the development of oil and gas reserves on the Outer Continental Shelf and requires that the Department of the Interior develop a leasing program.

It establishes a coastal states fund of $300 million on a matching basis. This fund will be used to assist coastal states in alleviating landside, secondary impacts of Outer Continental Shelf development. This bill is on the floor of the Senate today, but the House has not yet begun to develop their version of the bill. There is plenty of time for the coastal states, and especially the Gulf states, to provide an input into this legislation.

Another bill of special interest to the coastal states is the land use bill. Most of you have heard of this by its formal title, the National Land Use Policy and Planning Assistance Act. This bill died in the House about three months ago, but was passed by the Senate. Of course, this does not mean that the issue is dead. In fact, it is still very much alive and will be back with us again next year. The main thing to remember about this piece of legislation is that it does have an impact on the Coastal Zone Management Act, since it has some provisions relating to the administration of coastal zone management programs at the state level. Next year you would want to make sure that these provisions are not compromised in any way.

There are several amendments which will be considered next year. One idea is to have an energy facility siting component of the Coastal Zone Management Act for the coastal states. This is something that you would surely want to take a look at, and we are definitely interested in having your views on it. This will be one of the first orders of business next year.

Another amendment that has strong support is for regional and interstate planning grants under the Coastal Zone Management Act. This amendment has not yet been proposed, but is in the talking stage. I suggest that you take a look at that.

A two hundred mile fishery zone extension bill is being discussed by the Committee on Commerce. We were waiting to see what action would be taken at the Law of the Sea Conference in Caracas. Very little of course, resulted from that conference. Now the question is, should the Congress go ahead and enact a bill which would extend our fishery zone out to two hundred miles? This important piece of legislation, very possibly, will come to the floor before Congress adjourns. There is a similar bill in the House, which will have a great impact on the economic situation in the coastal zone. SenatorHollings, for whom I work, and Senator Magnuson, Chairman of the Committee on Commerce, both support this legislation. Given the fact that this legislation exists and that it is moving through the Congress, what can you, the Gulf states, do to make sure that this legislation reflects your interests?

There is generally a lot of criticism of the Federal Government after it passes some legislation not favored by some states. Very seldom do these states announce their position forcefully enough at the time the bill is before the Congress so that changes can be made to alleviate their concern. I have several suggestions that I would like to make as to how you might let your concerns be known to the Congress.

First, you should have someone in Washington, D. C., to cover the waterfront. Many of the states have started the practice of having a field office, someone in the District of Columbia to watch over legislative actions of the Federal Government that affect their state. Support the Coastal States Organization. They have done a great job so far in monitoring legislation and annunciating the position of the coastal states on particular pieces of legislation.

Be informed. Get the reports, read and examine them closely. If you have problems with them, propose alternatives and make sure that they are introduced. I am sure that you already do this in many cases, but it is essential that you be informed about legislation that is before Congress. Take the initiative. Anticipate when the issues will be coming up and make sure that your views are known before the hearings and before the bill is proposed to Congress.

Establish a consensus among states. The New England states have recognized that they have common interests regarding coastal zone management. They are beginning to focus on a more regional approach. I suggest that this would not be a bad idea for the Gulf states, since their interests, as the Lieutenant Governor so eloquently point out, are so similar.

Finally, be realistic about the national interest regarding a piece of legislation. Whereas it may be in the national interest for states to exercise a veto in deep water port construction, it may be so concerning Continental Shelf development. Make sure that your position is not so provincial as to be impossible for the Federal Government to accept.

ALABAMA

The Honorable Lionel W. Noonan
State Senator, Alabama State Senate

Let me begin with thanking you for the opportunity to speak before you for a few minutes today and participate on this panel. The reason for my particular interest in coastal zone management actually goes back to early discussions with Governor Wallace of Alabama and Governor Waller of Mississippi. These discussions were concerned with our request and desire for an offshore, deep water port facility off the common coast of Mississippi and Alabama. In the $2\frac{1}{2}$ years since 1971 we have become closely associated with the States of Texas, Louisiana and Mississippi.

It is interesting to relate a few of the happenings in our quest for obtaining a license for an offshore, deep water port facility. We realized that our own state was lacking in certain areas. First, it was necessary to set up a commission for securing this license. In the summer of 1973, our legislature established a commission for an offshore, deep water port facility, and our Governor was authorized to enter into a reciprocal agreement with the State of Mississippi concerning this facility. Fortunately, the U. S. Senate Bill Number 1741, which will be introduced this year, provides that it will not be necessary for the States of Mississippi and Alabama to obtain individual legislation regarding this state agreement.

Of great importance to us regarding the National Coastal Zone Management Act was our own Alabama Coastal Area Act. I believe Mississippi's counterpart to this Act is their Wetlands Act. We set out to pass this legislation and were very successful. In fact, there was only one dissenting vote from the two legislative bodies.

We subsequently passed two additional bills that provided for eminent domain for pipeline provisions. This, in brief is a little of the background of our actions in Alabama.

Our Coastal Area Board, established last summer, consists of seven members. We realized that it was most important that we obtain the direct assistance of the coastal counties in Alabama, Baldwin and Mobile Counties. For this reason, we designated the selection of a County Commissioner from each of these two counties to this Board. Since the City of Mobile was the closest and largest city, a Board member from this city was to be appointed. The other four members of the Board consist of the Director of the Alabama Marine Environmental Sciences Consortium, the Director of the State Department of Conservation and Natural Resources, the Director of the Alabama Geological Survey and the Director of the Alabama Development Office. We felt that it was necessary to establish this type of Board so that we could get a total effort at the state, county and city level.

We are hopeful that within the next two years the structure of this commission will be changed so that it will be oriented primarily toward

the citizens of the two coastal counties. These people are the closest, of course, to the problems that will be involved. They will also be most directly affected by the issuance of any permits by the Coastal Area Board.

One of our foremost thoughts in dealing with coastal zone management concerns an offshore, deep water port facility. It is essential that we have an inventory of the region that would be affected by this facility, as well as an inventory of the entire region. For this reason, we have undertaken an onshore environmental assessment. This includes, of course, socio-economic assessments, legal studies, offshore environmental assessments and offshore international legal questions. We are also conducting some geological tests and surveys through four counties in the coastal area. Hydrological, mineralogical and quantitative analyses of these four counties affected by the Coastal Area Board are being done. In conducting these studies we are concerned with the next twenty-five or more years and not with the next five years. Everything that is done within the next few years of planning will determine the image, capabilities, productiveness and quality of life in the coastal area and inland for generations to come.

Our obtaining an offshore, deep water port facility license will affect at least twenty-one other states. We are trading information with Texas and Louisiana. We have made contacts with the Governors of Georgia, Florida, South Carolina and Tennessee, because we feel this

involves all of these states.

All of the states, as well as local communities, should give serious attention to the question of land use, because coastal zone management means nothing more than this. It is often disguised in different terms, but it is still land use. It is my own personal feeling that land use legislation can be adopted only if the public is aware of its advantages and disadvantages. Land use must be administered at the local level so that conflicts with the different political forms and philosophies of government can be eliminated.

Essentially, I would like to say the Coastal Area Board cannot be viewed through a narrow vision. Their influence in Alabama extends far beyond the coastal counties. The standards that are applied from the standpoint of freshwater and saltwater encroachment will determine the extent of the direct control exercised by the Coastal Area Board over land use in the southern part of Alabama.

FLORIDA

The Honorable Warren S. Henderson
State Senator, Florida State Senate

First of all, I would like to outline Florida's position on certain topics of discussion. On offshore ports, there is little or no state policy relating to this aspect of coastal zone management. There was no mention of this topic in the final growth policy resolution adopted by the 1974

session of the State Legislature. The Coastal Coordinating Council staff position regarding such developments is that they are preferable to the traditional channel deepening techniques foraccommodating of large ships. Well planned, offshore ports could aid considerably in overcoming adverse environmental aspects of port operations and permit taking advantage of economics of the scale offered by even larger ships.

Offshore dumping is a topic of particular concern because of possible adverse effects such activities may have on our valuable marine resources and tourist oriented economy. The recent controversy regarding the approval by the Environmental Protection Agency for the dumping of anti-freeze wastes 230 miles south of Pensacola, Florida. The dumping of these wastes from a Dupont plant in Belle, West Virginia, was approved without Florida's knowledge. This emphasizes the fact that such activities must be made known to the state prior to the fact so that proper review can be conducted. The Coastal States Organization, of which Florida is a member, is working through Congress to establish safeguards against such happenings in the future.

There is little or no official state policy regarding offshore petroleum extraction per se, although oil drilling within state jurisdiction is regulated by the Trustees of the Internal Improvement Trust Fund, the Department of Pollution Control and the Bureau of Geology of the Department of Conservation. Previously, the staff of the Florida Coastal Coordinating Council attempted to hold a conference on the topic with proposed

participation by representatives of the major oil companies, officials of other states that have already experienced the problem, appropriate state agency personnel and representatives of the Legislature and Cabinet. This effort was made prior to and in anticipation of federal leasing of offshore tracts. Apparent lack of interest by key people in Florida Government resulted in the cancellation of this conference. Such a conference is needed to gain an understanding of the problems and opportunities associated with offshore oil exploration. Such an understanding is necessary before a rational State policy can be developed.

The primary problems associated with offshore oil development relate to the onshore impact of locating pipelines, refineries, transfer facilities, support industries and the social impacts associated with the rapid influx of an oil oriented population into the communities in the vicinity of the activity. The plans for oil associated facilities must be coordinated at an early stage with state programs, if severe conflicts are to be avoided. There is a definite need for federal monies for costs to the state caused by the impact of oil related development.

There is a significant body of State policy regarding fishing regulations. The associated laws and rules are administered by the Division of Marine Resources of the Department of Natural Resources and are enforced primarily by the Florida Marine Patrol.

Florida is an acknowledged leader in offshore fishing regulations by being probably the only state to have a Marine Patrol. The major

policy of expanding the offshore jurisdiction to two hundred miles would be the tremendous cost of increasing the Marine Patrol to enforce regulations and laws in the expanded area. I would certainly think a saltwater fishing license would be called for here. Other problems associated with fisheries regulation include that of jurisdiction over certain areas such as the great shrimping grounds of Florida bays and the coastal areas of the Everglades National Park.

The siting of energy facilities is an area that has recently been acted on by the Florida Legislature. Chapter 403.5 of the Florida Statutes sets forth the necessary actions that must be taken in the location of power plants. Basically, this law provides that each electric utility must develop a ten-year site plan, estimating power generation needs and the general location of proposed plants. The plans are subject to review by the Division of State Planning. Note the absence of local government control, which has been preempted by the State. Actual location of the facility must then be certified by the Department of Pollution Control. This is a very valuable tool in Florida, but its full potential cannot be realized without the state taking a more aggressive role in developing a comprehensive coastal zone management plan which will allow adequate development of some plans by the industry.

Florida is in a comparatively good position for developing a sound coastal zone management program. Many of the tools are at hand, if properly utilized. Among these tools are: (1) State control of most

submerged lands and water column use results in permits and/or leases for such activities as bulkheading, dredge and fill, marinas, aquaculture, or living and non-living resource extraction; (2) beach development control designed to prevent construction practices, even on private property, which might induce or accelerate erosion of Florida's beaches; (3) state establishment of water quality standards, which is beginning to have very wide-ranging repercussions on coastal development for any activity that may degrade the surface water quality subject to regulation; (4) state establishment of special use areas, including the Aquatic Preserve System, State Wilderness System, Parks and Wildlife Refuges; (5) enforcement arms available through the Department of Natural Resources' Marine Patrol, the Department of Pollution Control, Trustees of the Internal Improvement Trust Fund and the Game and Freshwater Fish Commission; (6) significant state coastal research capabilities in the Department of Natural Resources, the Department of Pollution Control and in the Division of Health; (7) authority to designate areas of critical state concern and propose regulations if necessary; and (8) state level review of developments of regional impact.

The key problems associated with realizing maximum efficiency of these tools are that these noble efforts have been too narrow in scope, uncoordinated and generally reflect the limited interests of the individual agencies concerned. These tools, for the most part, reflect reactions to

problems that already exist and, hence, are oriented toward restrictive action rather than looking ahead and trying to optimize and avoid predictable problems before they occur.

The enabling legislation of the Coastal Coordinating Council was developed in anticipation of Federal Coastal Zone Management Legislation and has tracked the federal effort very closely. The Council effort has had a positive effect on coastal zone management efforts in several other states, with Florida until recently being considered a leader in this new field. The primary reason for the change in conditions relates to governmental red tape at the State level which is hamstringing the State program and preventing the Council from utilizing Federal Coastal Zone Management funds that have already been granted.

The Council is striving to develop a plan that would: (1) Be formulated in an objective and impartial manner, utilizing well defined techniques and criteria; (2) attempt to strike a balance between development and preservation interests; (3) be as compatible with local and regional planning efforts as possible; (4) provide maximum retention of land and water use options for the future; (5) make maximum use of existing governmental research and management capabilities; (6) allow for the wisest possible use of the coastal zone; and (7) protect the long-term interests of the State by maintaining and enhancing the quality of life in the coastal zone.

LOUISIANA

The Honorable Jesse Knowles
State Senator, Louisiana State Senate

Recently, a directive came from the Corps of Engineers stating that recent changes in legislation and regulations had extended the Corps' regulatory responsibility to certain wetlands, regardless of ownership. These wetlands include areas of marshes subject to the inundation by high tide in tidal areas. It goes on to say that the federal laws will be enforced, and asks persons who become aware of unauthorized work in these areas to notify the Permits and Statistics Branch of the Office of Investigations.

In my duty as a State Senator I appeared on television and told these people to be careful. Do not build any hunting camps or fishing camps in any of these areas without first getting permission from the Corps of Engineers. My constituency is a special breed of people, so I began to get feedback. These people had never had to ask anyone about building a fishing camp on acres they owned. It was unheard of to them in the United States. I explained I was merely relating this information so they would not get into trouble for any violations.

Next, I was asked what I planned to do about this? As Vice Chairman of the Natural Resources Committee, I introduced a concurrent resolution whereby we requested the Louisiana Congressional Delegation to initiate steps necessary to clarify the precise limits within which the several

administrative agencies of the Federal Government may act in permitting, regulating and supervising private land use. I maintained that it was the responsibility of the elected officials of Congress to terminate this onslaught of indirect federal land use regulations. These had been the result of the judicial and administrative whim of nonelected officials by enacting specific guidelines and restraints within which these agencies must be required to operate and by clearly defining specific areas of activity where permits may be required.

This passed with ample discussion, and received the attention of the news media. What good will it do? I do not know what good it will do, but I can say this. There are a lot of people in the Gulf lands of Louisiana who are concerned about what is going on and are concerned about their rights which are being taken away. They all understand the problem, and that it is necessary to protect these lands.

There was a bill introduced in the last session of our State Legislature which provided that a group be established for the management of the coastal area of Louisiana. This would be accomplished under the direction of an elected body of the State.

I appreciate the remarks about the land use bill by Mr. Lane earlier in this discussion. This radical measure would give the Federal Government control of land use planning, and I would consider the supporters of that piece of legislation to be rather liberal. It is a dangerous piece of legislation

and I am glad it was defeated. It says, as you know, that land use is going to do the same thing to us that is being done to us in the wetlands. All of you hill people are going to get some of this treatment. It says that after January 1, these regulations are going to be enacted through the Environmental Protection Agency instead of the regular route of legislation. After this date the administrators of the EPA plan to approve or reject any significant construction project. Note the language from the regulations, "No owner or operator of an indirect source subject to this paragraph shall commence construction or modification of such source after December 31, 1974, without first obtaining approval from the Administrator of the Environmental Protection Agency." The fact is that land use control was not specified as one of the functions of the EPA when Congress established that agency back in 1970.

One point I would like to leave with you today is the fact that I am not faulting the Corps of Engineers. I personally think this group of Army and civilian people have done a great job for this nation through the years. However, they have now been put into a certain position by judicial decrees which have put them on the firing line in implementing these directives. I was rather amused by a letter I received from my Congressman written by a colonel in the Corps. I had complained to my Congressman about a matter involving the Corps. The colonel wrote that the Corps was not exercising this authority, and the authority I'm speaking of here is the authority of building duck blinds in the wetlands,

in an arbitrary manner. He further stated that based on the legislation and regulations under which the Corps' regulatory program operates, they were required to issue permits in these wetlands for any alterations.

Ladies and gentlemen, I know many of you feel the only answer to saving the ecology of this great nation is by regimenting the people. I regret that I have to disagree with you. I have a great fear of regimentation. I have this fear because I lived in the Soviet Union as a prisoner, and I know what regimentation means. For the sake of this great nation, never let it happen to us. Let us work together as a group to solve our problems. Do not let the unelected officials of this nation, those who report to one man, make decisions which affect so many of us. Do not be caught in the trap of a socialistic trend to get a job done. We must function through our elected officials as guaranteed in our Constitution and in the Bill of Rights.

MISSISSIPPI

The Honorable Gerald Blessey
State Representative, Mississippi House of Representatives

On the Mississippi Coast we have just about every kind of problem one could imagine in a coastal zone, but there is a lot of potential as well. We have tourists, seafood industries, governmental installations, large and small industries and several ports. Still, we do have some wetlands

left. In anticipation of federal intervention, our Legislature passed the Wetlands Protection Act in 1973, which, in execution, will be much milder and more understandable to our citizens than the Federal Government would be.

I think there is a dilemma in all of our coastal zone problems. The states are not acting fast enough to keep up with the problems. The Federal Government, with its time worthy manner, tends to step in with a large, bureaucratic involvement, which usually makes matters worse. If they do not do it, and we do not do it, then the result will be what the scientists tell us it will be in a few years anyway--total disaster. I say it is a dilemma because, unlike some theories about the Federal Government, I fear there is more of a lack of understanding both on the state and federal level, than there is an intentional grab for power. The only reason I can think of for this is the same reason we are having this conference, and that is a general public knowledge, understanding and acceptance of the need for a certain amount of self regulation.

Because of the peculiar biological and geographical nature of water, a certain amount of multi-state activity must be implemented into the coastal zone. The idea would not be to have the Federal Government step in as the multi-state coordinator, but for it to recognize that the states are going to have to do this job with some regional uniformity of regulation and with regional cooperation. I really believe that unless the

states do this together, it is not going to work anyway. I do not think the Corps of Engineers, Environmental Protection Agency or any National Government agency will be able to regiment compliance with tons of rules and regulations that multiple uses of the coastal zone are requiring.

I am proud, as I am sure Senator Noonan is, of the cooperation between Mississippi and Alabama. In the superport area we had a joint venture. We both appropriated money for the same attempt to get a superport along the margin of our borders. We recognized that with proper environmental control, it would be beneficial to both of us. We also have a joint venture with the Sea Grant Program, which is sponsoring this conference. That Consortium again puts together the best of our university research capabilities in the two states, so that we have multiplied our capacity there. The real motive for this, other than the small state budgets we both have, is that we have a common ecological and geographical zone. Because of this, we have common problems. We feel that we can help ourselves and each other better by cooperation, rather than competition.

This is the kind of thing we need to do in ocean dumping laws, pollution control laws and petroleum policy. I would hope that someone in Congress will eventually see that there is a tremendous onshore impact on any offshore development. As there is more and more offshore development, we need to realize that revenues are produced for the Federal Government and should be shared with the states. This should be seen as

a regional problem, and the revenues should be regionally shared. In Mississippi we have not made many attempts beyond the superport and the Sea Grant Consortium to bring about this kind of regional cooperation, but I think there is a growing sense of consciousness for this need.

In Mississippi petroleum policy is regulated by the State Oil and Gas Board. This is one of those oldtime, industry oriented, regulatory bodies, which sometimes loses sight of the public interest. I do think this is changing, even on that Board. Because of our short coastline, we may think we have so much less to lose. The fact is we have so little, that we cannot afford to waste any of this priceless resource.

Mississippi was one of the first states to apply for a Coastal Zone Management Planning Grant under the 1972 Act. The Mississippi Marine Resources Council, formed in the late 1960's, is the agency charged with developing and implementing a coastal zone management plan. This Council is composed of representatives from certain State agencies, certain elected officials, representatives from the university system, as well as representatives from the public at large. Several other agencies all have ex officio positions on the Council.

There could be many problems if we extend this two hundred mile limit, that I am sure your Congressional delegation is considering. This is a crucial issue, which we believe will pass in Congress. Whatever sort of shared jurisdiction over these problems we develop should be oriented

toward letting the states implement them. The reason I suggest this is because, particularly in the seafood industry, there are common interests, problems and resources. This is somewhat true in the mineral and petroleum industry and in commerce. I would think it would be in the interest to have more interstate cooperation.

Mississippi, with a fairly short coastline, has a big stake in the future of coastal zone management. It has a great interest in and concern for the coastal zone and the quality of life there. I think we have learned that in the implementation of the Wetlands Act. We are concerned with the rights of all private parties and citizens to enjoy the lifestyle that we here on the Gulf Coast in Mississippi, and our neighbors in Louisiana, Alabama, Florida and Texas, have enjoyed for many years.

Sacrifice may be a strong word right now. If we have public understanding, acceptance and knowledge, then that sacrifice would be seen as a new arrangement, rather than regimentation. This nation was founded on the consent of the governed, and if we focus first on obtaining the consent of the governed, the good common sense of the American people will solve our problem of avoiding governmental regimentation.

TEXAS

Joe C. Moseley
Director, Texas Coastal and Marine Council

I believe a question we have to ask ourselves is, where are the states headed? The first thing I would like to suggest is that they are all headed in different directions. Last year the Legislature of New Hampshire invited me to talk to them about deep water ports and refineries. Several of us from Texas joined the Lieutenant Governor of New Jersey to talk to the New Hampshire Legislature about what was involved in deep water ports. This was in February and they were having a terrible blizzard. However, I can assure you that our reception was so warm that we really did not need any winter clothes. These people were really concerned.

As I said before, I do think the states are all heading in different directions. Right here at home, if the Gulf states do not put their heads together, saddle up some of their Congressional delegation and decide on a few things, then some other regions are going to decide these issues for us and we are going to be left right out in the cold. I am very pleased with the attendance here today. We do have some elected officials with us.

One issue of vital concern is that of a deep water port facility. In October, 1972, there was a meeting at the Corps of Engineers' office at Vicksburg. Each state was making noises that it was going to have to be

first , and had no thoughts concerning the interests of the other states. This was in 1972. However, this has changed tremendously and has grown into a very cooperative arrangement among the states.

There is something going on right now being funded under PL 925-83. This is the Coastal Zone Management Act. However, I am still trying to get my hands on a copy of some of the reports that are being done on this and a definition of the national interest. I think the definition of what is not national interest may be left to the states, if anything is left out of this report. Considering who is writing it and who is editing it, I have a few concerns. However, I do think those of us in the coastal area are very lucky in having capable people like Bob Knecht head up this coastal zone management program. He says that we can rest assured that the input from local governments is of prime concern. What about this definition of the national interest? This is one of the things that the Coastal States Organization is going to address. Maybe the Gulf states would want to address this issue independently.

What are some of Texas' concerns? Well, deep water ports and refinery sitings are of definite interest. Offshore power plants is a subject that I have mentioned here to several people today. Offshore power plants appear to be a reality. All of you who have been following the Atomic Energy Commission regarding environmental impact statements and related material on the proposal off the New Jersey Coast

recognize it is just a matter of time before we have an offshore power plant in the Gulf of Mexico.

Our state may be incapable of coping with some of these problems from an institutional sense. Texas is the only state that does not have a coastal regulatory commission.

What are some other problem areas in Texas? We do have problems associated with the Intracoastal Waterway and with land use. The Federal Disaster Systems Act of 1974 applies the flood plain concept to everything that warrants federal rehabilitation. If an area gets wiped out by a disaster and you accept federal funds to rebuild, then you have to rebuild so that the same type of disaster will not hit you again. Another issue of concern in Texas is that of power plant siting.

During the early 1950's there was an attempt to set up a national hurricane center. Three bills died in Congress without any affect. In a period of three years the New England States were hit by several major hurricanes. Since this problem of hurricanes was forcefully brought before many U.S. Senators' attention, a hurricane center was quickly established.

I believe interstate cooperation must be accomplished at two levels--the technical level and the political level. You have to have the facts before you can have proper regulation. As the legislative members here return to their various states, I believe it would be in order for them to push for the passage of some resolutions, such as a resolution calling

for Outer Continental Shelf revenue sharing.

There is a Coastal States Organization. Senator Schwartz was recently elected Chairman of this Organization. I believe he is the first politicial, elected official, ever to represent any of the states on this body. This Organization is trying to develop a series of position statements. Two of the position statements that the Coastal States Organization has already developed are concerned with offshore revenue sharing and deep water ports. There are, of course, many more other subjects on which we are now working.

PANEL DISCUSSION:

PERMISSIBLE LAND AND WATER USES AND

PRIORITY OF USES IN THE COASTAL ZONE

Moderator:

David Etzold, D. B. A.
Senior Research Associate and Professor of Management,
Bureau of Business Research, University of Southern Mississippi

Panel Members:

Alabama
Douglas I. Johnstone
State Representative Elect, Alabama House of Representatives

Florida
Terry Lewis
Agency Coordinator, Florida Coastal Coordinating Council

Louisiana
Lyle St. Amant, Ph. D.
Assistant Director, Louisiana Wildlife and Fisheries Commission

Mississippi
Larry E. Goldman
Marine Programs Biologist, Mississippi Marine Resources Council

Texas
Ron Jones
Director, Coastal Zone Management Program,
Texas General Land Office

ALABAMA

Douglas I. Johnstone
State Representative Elect, Alabama House of Representatives

When we address the problem of permissible land and water use in the coastal zone, much less attempt to assign priorities for use, we are undertaking a formidable task. This is so because almost all of man's activities are involved to one extent or another. Hunting, fishing--both sport and commercial--recreational boating and all manner of water sports account for the recreational aspect. Waste discharge and flushing, oil drilling and the possibility of spills, navigation, docking for loading and unloading cargo, mooring and material supply, such as sand and oyster shells, comprise the industrial aspects. Land development, (residential, commercial and tourism) and water supply make up the actual demands on the land, and to some extent, the coastal marshes. All of these activities act to the detriment of the aesthetics of the coastal zone in general.

Of course, some of these activities are far more damaging than others. Sewage and industrial waste discharges are always a serious matter in the coastal zone, for they are not only harmful to the coastal ecology, but they are also potentially dangerous. Therein lies a dilemma. An expanding population must have adequate waste disposal, and an expanding industrial economy must have adequate areas in which to dispose of waste

products. The coastal ecology can absorb only so much of these waste products before the critical state is reached and the ecology collapses.

Land development is under fire in many areas along our coasts. Conversion of coastal lands to residential and commercial use renders these areas ecologically unproductive, and we often suffer from an altered water table and saltwater intrusion. Converting this land to productive real estate certainly puts it on the tax roles, but we must weigh very carefully the ultimate results. Without potable water the land is useless, and in years hence we may have a barren and unproductive coastal area because of thoughtless exploitation.

The current energy shortage has caused a great concern for offshore drilling Known reserves of huge magnitudes lie off our shores. After our technology and our corporate and governmental consciences have developed enough to reduce the danger of oil spills to a minimum, we will want to tap these vast repositories of energy. We should, however, recognize the enormous social need for aesthetic and ecological integrity, as a legitimate rival to the demand for energy.

What, then, is the way out of these pressing problems and dilemmas that face us? As I see it, we can almost have our cake and eat it too. If we can send men to the moon not only once, but several times, we can certainly solve these problems. To be sure, it will require a lot of

work and planning, probably more than we have ever done before. But the fat is in the fire now, and we are going to have to do it.

We are going to have to use all the scientific and demographic data that we can on the ultimate effects of each of the possible uses. We are going to have to see what each activity is going to do to the coastal zone by itself and in context with all the other activities going on there.

We are going to have to know the possible economic effects of each of these activities. We have to know just how far we can change the environment and yet maintain a viable balance between the economy and the ecological integrity of the coastal zone.

We have to determine the value to be placed on the noncommercial uses of the coastal zone. These may be identified as recreational or as aesthetic enjoyment. From the standpoint of the health and general well-being of the public at large, these uses are vitally important. They are indispensible, not just nice while they may last.

But as I said before, we have the science and technology to give us alternatives. What we need from the scientists, technicians and engineers is information so we can make rational decisions. We can preserve and restore our environment, and, at the same time, increase the goods and services produced and enjoyed by man. It is a matter of getting started early enough and planning comprehensively enough. This is the role of coastal zone management.

FLORIDA

Terry Lewis
Agency Coordinator, Florida Coastal Coordinating Council

While preparing some notes for this presentation, the first thing that occurred to me was that in Florida we have two distinct segments of the populace. One of these is screaming that all uses should be permissible and the other is screaming that nothing should be allowed in the coastal zone. These are the two elements that seem to be attracting the most attention. If we accept either of these premises, then the topic becomes academic. I do not think that is what coastal zone management is all about. However, trying to find a way to satisfy the industrial, commercial and residential needs that exhibit themselves in the coastal zone, while maintaining a decent environment, is what we are all about.

I should like to take the items of concern slightly out of order here and begin with an analysis of the capabilities and limitations of the resources. Most of the work we have done in the Coastal Coordinating Council over the past four years has been in inventorying the natural resources through the State on a regional basis. You are probably aware of the McCord technique of placing one area of sensitivity on top of another until you get the areas that are truly

environmentally delicate. This is what we have done along with mapping, as we pointed out earlier today.

We try to set objective standards for these quality considerations. In some instances this is relatively easy to do. Our Department of Pollution Control has very definite water quality standards. These were based on fairly exact chemical and biological parameters. These can be monitored, and the effects on the marine life can be closely determined. By delineating what is important environmentally, we can begin to get a handle on what uses might be possible in a given area.

We have inventoried the coastal zone of the State of Florida this way and have arrived at three broad categories of environment within the State. Preservation areas are those that stand out the brightest. These include things such as drinking water sources, shellfish areas, coastal marshes, dunes and mangrove beaches. We feel the integrity of these areas should be insured to the maximum extent. Portions of our landscape, such as hurricane flood zones, can be used, but with some intelligence and recognition of the inherent problems. There are also those areas that are perfectly suited for development, based on quantifiable standards.

Making recommendations from this point and defining permissible uses revolves around one central beam. That theme is the need for water with any water related activity. Needless to say, water related activities need a water access. The lands that fall within our defined conservation and development zones are recommended for these areas. On the other

hand, things such as residential areas and industry or commerce that is not water related, should be located away from the water's edge. We feel that this is very important.

Our policy in determining the recommendations we make is a result of two factions--environmental policy and governmental policy. There are certain Federal Acts which we include. This type of information, which is institutionalized legislation, is included in our policy at the State level.

The Trustees of the Internal Improvement Trust Fund require permits for activities on any sovereign land. This includes land below the mean, high water mark and anything above mean, high water that the State owns. The Department of Pollution Control certifies activities in all the waters in the State or anything that may have an impact on them. The Division of State Planning, under the Environmental Land and Water Management Act, is empowered to designate areas of critical concern, if they deem necessary.

Florida is the place, the home of the new city. Those of you who know Florida, know that we do not have any new cities or towns. We have these incredible land sale schemes and bedroom communities that are mostly Jim Walter homes stacked wall-to-wall over three counties. One of our jobs is to try to decide policy on developments of this type which have a regional impact.

The State of Florida has a good many laws already that allow us to regulate a good many things on a piecemeal basis. The Coastal Coordinating Council is an advisory body. Being an advisory agency and being responsible for developing a coastal zone management plan in Florida is a bit like being a wise and trusted eunuch at a sexual orgy. You are limited to the power of suggestion. However, we have been able to work it our fairly well.

A remaining topic to discuss here is establishing, precluding or prioritizing certain uses of regional and national interest. It appears that the way Florida views these activities is they are of national interest or concern, so they should probably be allowed, but with a few exceptions. When these things of national interest or of an overriding national concern come into Florida, our approach is to control, analyze the proposed facility and hopefully, help locate the activity in a site that can tolerate it.

LOUISIANA

Lyle St. Amant, Ph. D.
Assistant Director, Louisiana Wildlife and Fisheries Commission

Probably, one of the biggest problems in understanding coastal zone management is that we do a lot of talking, but we do not listen or we do not understand what other people are saying. I think it might be well for us to stop for a moment and try to analyze some of this.

First, we are too prone to just say "coastal zone" and use it as an over-all, encompassing area for the whole United States. This gets us into our first peck of trouble. Coastal zones are not alike. They even vary in different states, and they certainly vary within regions. It might be wise to break these zones into two categories--stable or unstable areas. Stable zones are the beach type areas. On the other hand, unstable areas are usually associated with delta formations, large coastal marshes or even the everglades like in Florida. These types are so different that those who are going to manage them find that they cannot even speak to each other. The type of data you collect and the type of data analyses you do in order to manage these systems might put you in a completely different category of expertise. I think this is one of our problems.

We stand here and reiterate the things we ought to do, one man saying one thing and another man saying something else. Still, we do not really define what we are talking about. I did not intend to touch on this,

but let me make a point. Senator Knowles raised the question earlier. Some of you may have thought he over reacted to the recent Corps' notice. However, you must realize the Louisiana coastline represents seven million acres. Our coastline is thirty miles deep. With a coastal area of this enormous size, you can see the situation we are facing if nothing can be done without a permit. You can see how ridiculous this might become if we do not straighten out this thing at the beginning. Who is going to run what? What are you talking about when you speak of the coastal zone? This does not mean than an area like Louisiana is different from Florida and does not have to be managed. It does mean that it must be managed in a different way. You have to use different parameters to set your guideline.

After establishing coastal types, the next thing we must do is establish a data base from which to work in that particular area. This could become very complicated in some of the coastal areas. In an area that is fairly stable, the ecosystem dynamics are not going to change very much. We have to deal mainly with urban planning and the ability to plan for people, the movement of people and the industry demanded by those people. This involves mostly deciding how to use the available land and water. The interface between land and water is relatively stable.

The unstable areas, however, must be viewed differently. Many of the unstable areas are not really marginal areas. When people move

into them, they have to do something unusual to survive there. Moreover, the value of many unstable areas is usually not exhibited in land prices. This land and water is used by animals and other living things which people desire. The problems are compounded in these areas because they contain considerable amounts of depletable resources which are very valuable. We must determine what resources are there and which ones we want to protect to receive the best long-term return on the investment.

To begin with, we must separate the renewable from the depletable resources and uses in an area. If we are to continue to produce living resources, then we must do our best to keep them in their natural state. In dealing with depletable resources, we are not really concerned about the environment, unless we are trying to protect the environment from the resource standpoint. Instead, the trend is to exploit the resource, get all the money out of it which is possible, then get out of there. There is a clash right here between the two uses. This does not mean that we cannot have one and not the other, but it does mean we must regulate the exploitation in the light of the ecosystem dynamics in which we are dealing.

There are other resources that fall into the categories of tourism, recreation, navigation and related matters. These, theoretically, can use an area without changing it, provided problems caused by too many people do not develop.

I have been associated with an unstable area for a long time and have watched it change over the years. I can tell you it is very difficult to maintain a large area in the manner it originally was. After forty years of oil production and other types of industrialization, we still have among the highest fish production one can get from such an area on any coast. There have been some changes, however. There must be tradeoffs, but we must decide what we are trying to protect.

If enough information is available in advance, then competent people could devise regulations and means to manage a system. Still, this system could offer a considerable amount of multiple uses. Unfortunately, many of these systems cannot be analyzed because there is no data base. It may take a long time to develop a data base. Something must be done about gathering pertinent data as we go along. This is the area where decision making is going to be tough. In some way, we must develop the information on which to make these decisions, and we must do it in such a manner that the decisions will, at least, be acceptable.

In considering the capabilities and limitations of the resources that can accept various uses, we return to the biological and ecological problems in an unstable situation. With any change, some ecosystem is going to be altered.

I must agree with the gentleman from Florida, who said that if you except either of the two extremes, you might as well go home and forget all about coastal zone management. One group wants to stop the

world and make everyone get off because the animals, trees and plants could not then be damaged. On the other hand, another group, given the opportunity, would pour cement over the entire earth and "develop" it. Obviously, neither of these two extremes is the answer. However, we must make some hard, fast decisions and important tradeoffs, based on intelligent and technical reasoning. This is the task of all of us here.

MISSISSIPPI

Larry E. Goldman
Marine Programs Biologist,
Mississippi Marine Resources Council

I would like to advance a few considerations I have regarding the coastal manager's concerns in determining permissible land and water uses. In determining uses having a direct and significant impact on coastal waters, the following points may be addressed: (1) survey all present, past and anticipated future uses and determine secondary uses that ensue from primary uses, (2) a finite quantitative definition of particular use impacts should be made in order to delineate the state's coastal zone, and (3) possible criteria to use in defining a direct and significant impact may be a particular use's impact on the water quality of coastal areas and how it measures up to the adopted water quality standards.

Considering the capabilities and limitation of resources to accept uses involves many wide ranging activities, including: (1) a thorough inventory of resources (natural and man-made) of the coastal area should form the base of this requirement, and such an inventory should be updated on a periodic basis through state research projects, (2) capability of each resource may be analyzed on different levels of intensity for particular uses in order to accommodate future use considerations, (3) a resource quality level could be made and monitored into the future in order to assess the impacts of certain uses, and (4) a continuing environmental impact analysis of resource uses upon the natural environment may be defined in terms of resource quality maintenance levels derived from such an impact analysis.

Establishing and justifying use priorities will require extremely detailed information and policy statements. Several different activities should be brought into this, such as: (1) four general items should probably be considered in establishing use priorities including: permissible uses defined elsewhere, basic inventory data on natural and man-oriented factors, policy statements on particular elements of the coastal area derived from public participation activities and a set of needs determined from national, statewide, regional and local contacts; (2) priorities should probably be firm in nature, viewed in a long-term situation, although not to the degree of being above change due to legitimate, documented

shifts in the attitudes, goals or objectives of the public; and (3) highest priorities should form the basis for establishing an over-all listing, rather than lowest priorities in order to put forth a positive approach to guidelines.

Uses of regional or national concern could be unintentionally overlooked, precluded or afforded low priority in a state's plan if special precautions and procedures are not taken into account and made a part of a state's coastal planning effort. Uses of a larger than local nature should be identified in the ancillary activities of defining permissible uses and determining needs associated with the coastal areas. Interstate and regional coordination should be afforded prior to and during the prioritizing process, not after the deed is done. Changing intrastate, interstate, regional and national needs and priorities must be accommodated in establishing use priorities, but long-term goals should provide a basis for analysis. Uses of a two-state or more impact might be prioritized among the affected states in a mutually agreeable format involving full opportunity for input by the affected general public.

TEXAS

Ron Jones

Director, Coastal Zone Management Program,
Texas General Land Office

There are certainly some things that we need to recognize in developing a plan for coastal zone management. The fact that this is a new program

and we are dealing with a public policy area makes this one of the more important issues of the century. I doubt very seriously that we are equipped with all the tools we need to deal with this problem. When beginning a new program such as this, everyone is looking for the expert, someone who has all the answers as to how to go about coastal management planning. You notice I omitted the word zone. I think it is a terrible word to include here, because it is an emotional issue. Coastal zone management is probably the most emotional issue in which I have ever been involved. It is emotional, I think, because of the conflicts between staunch environmentalists and staunch developers. Nevertheless, the point I want to make is that it is a very complicated and emotional issue, and one which, as yet, has no experts to guide us.

We must understand there are certain criteria which exist for permissible and priority land and water uses. This has been in existence for a long time. Right now our land and water resources are being allocated. We do have some sort of management system available, but there is some question as to how good or bad that system is. This management system is, basically, the market system supplemented by a fragmented, regulatory process by state and local entities.

There are two basic concepts associated with the market mechanism. These are the reasons, to a large degree, why we are here today talking about coastal zone management. One of these concepts is externalities. What one person does with his land affects the people who own the land

next to his. The other concept is a common problem. It might not be so detrimental to a certain coastal area to place a demand upon the resources upon a particular area. One industrial plant usually does not cause too many problems. However, if everyone placed industrial plants all along the entire coast, then we certainly would have problems of gigantic proportions.

This leads me to my next point, which is the thrust of the coastal management program. We begin to question the manner in which our land and water resources are being allocated. We say we are allocating these resources to maximize their value to society as a whole. The market mechanism, I believe, tends to place a higher priority on short-term benefits, rather than long-term benefits. After much development along the coast, as well as much experience over the years, we can begin to see the consequences and can ask ourselves if it is beneficial on a long-term basis.

When we begin determining priorities in another manner, other than with the market mechanism, we had better know what we are doing. As I have stated, this is a very complicated issue. In economic theory, one of the assumptions we make regarding the market place as an allocator of resources is that those who participate must have perfect knowledge. This is one of the weaknesses. Of course, we do not have total knowledge of everything that is going on. As soon as we have knowledge about alternatives and the cost of these alternatives, then we are getting down to the

crux of the problem. We need to know what is the natural capability of a given piece of land to sustain various uses. Another area that we need to view, regarding resource capability, is that of ground subsidence because of the taking of the ground water. Not only does this often cause areas to flood more easily, but there may be some fairly stable faults which would not remain stable if the ground water is taken.

The first step in natural capability evaluation is the acquisition of a data base, preferably, with a series of maps showing land and water resources. These maps should show variations in substrate properties, location of mineral resources, characteristics of soils, surface and ground water regimes, location and types of ongoing natural processes and other pertinent information. Each environmental factor contained in this data base can be analyzed separately regarding the natural capabilities for sustaining uses. The precision of these determinations are dependant upon the amount of data available and the scale of presentation. We are fortunate in Texas to have the Bureau of Economic Geology and other entities, which have produced these types of maps for us. These will help enormously in determining the natural capability of land and water to sustain various types of utilization. These matrices, showing use capabilities, are basic tools which should be used for assigning priorities for permissible uses.

In general, specific uses can be sustained easiest in an area where a synthesis of various environmental factors shows the fewest of their constraints. However, this synthesis of environmental factors is not a simple summation, as some factors are more important than others in determining ultimate use feasibility. Location of hazard zones is a clear example of an environmental factor that should be afforded careful consideration.

Hazard zones in Texas should include areas of faulting and places where erosion is occurring because of flooding. Other areas that should receive special attention in terms of priorities of uses are those delta regions which support ecosystems that provide a critical link in marine or terrestrial animal food cycles and environments which provide vital components of the human economy, such as areas that supply water or waste disposal means. The regime of both quality and quantity of ground water can be upset by ill advised uses of the land. The criteria for determining the criticality here is the safeguarding for public health. However, the bulk of land areas in our coastal zone probably falls within the non-hazard and non-critical category.

How do we use all this information we have derived to make decisions so that we can properly reallocate our resources ? One of the things that I think would help would be to get this information out to the people where the problem areas are. Another thing which might help would be development rights. This is being used in some states, but I do not know

how effective this would be in Texas.

It is my feeling that the people in the State of Texas, at this point in time, are not ready to accept zoning on the Gulf Coast. At least, they will not accept the old traditional zoning techniques.

DINNER INTRODUCTION

The Honorable William C. Rhodes
State Senator, State of Mississippi;
Member, Mississippi Marine Resources Council

A few months ago I had the pleasure, as some of you did, of meeting our speaker here in this same hotel. The people of Texas are very fortunate to have a man of his caliber representing them in their State Senate. I do have a lengthy biographical sketch of him going back to the time he was born. However, I do not believe it is necessary to relate to you all of that. I will not spend a lot of time up here, because the entertainment begins when I sit down. You will find this out in just a few minutes.

This man served graciously as a member of the House of Representatives over in Texas from 1954 to 1958. Since 1960 he has been a member of the Texas State Senate. In fact, he is the third ranking senator in Texas in terms of seniority. He is Chairman of the Texas Coastal and Marine Council and is Chairman of the Texas Senate Rules Committee. He is Vice Chairman of the Texas Constitutional Convention Planning Committee and is a member of the Senate Committee on Finance. He has had prior legislative service on every major committee in either or both of the Houses of the Texas Legislature. He was voted the outstanding member of the Texas 62nd Legislative Session and was also voted one of the ten best legislators of the 63rd Legislative Session by the Texas Monthly.

On top of all of this he was elected Chairman of the Coastal States Organization just this year.

It is my distinct honor, privilege and pleasure to introduce to you at this time, the Number One Senator from the State of Texas, Mr. Aaron Robert "Babe" Schwartz.

DINNER ADDRESS

The Honorable Aaron R. Schwartz
State Senator, State of Texas;
Chairman, Coastal States Organization

I am certainly pleased to be back in Mississippi, and I hope that you will let me come back again. Recently, Governor Edwards of Louisiana was given a standing ovation at a meeting, because he said that those of us in Louisiana and Texas are getting just a little tired of bearing all of the environmental concerns and impacts associated with Outer Continental Shelf offshore drilling for the benefit of our brethren in the East who are too clean to have oil wells off their coasts. We did give him this standing ovation, because we believed there was merit in that proposition.

Everyone does not think too highly of politicians. Our participation in programs such as this business of coastal zone management, where we speak of private property rights, certainly does not make us any more popular with our constituents. It is our responsibility as elected members of the various coastal state legislatures to get together and begin to decide some reasonable policies concerning our coasts. Whether we like it or not, what we do together is important to all of us.

I have a document here on the oil spill in Galveston Bay. This is one of the classic examples why states need to be doing something in

connection with private enterprise such as the oil companies, Outer Continental Shelf drilling and the landside impact of that drilling. There are now four thousand barrels of oil on the bottom of Galveston Bay, and they do not know how to find them. They have cleaned up some of it on two different occasion, but there are still those four thousand barrels that are missing. It is just going to crop up some day when the current changes. When that oil, wherever it is, comes to the surface and winds up in the marshes or on top of the red fish and trout nurseries, we are really going to have problems. The thing that I am talking about around the country is coastal zone management, what it means, what it is all about and why it is important.

Today, John Hussey, who works for Senator Hollings, called to tell you all here that those amendments, he has been sheparding in the Congress, were adopted. These are involved with the bill concerning policing of the Outer Continental Shelf. I am pleased that this provides $200 million for the coastal states, which must suffer the impact of the exploration for new oil and gas deposits off our shores.

Just as important, perhaps, is whether this $200 million will be administered by the Interior Department or the Commerce Department. The Department of Commerce administers the Coastal Zone Management Act of 1972 under the Office of Coastal Zone Management. The original bill proposed that this money go to the Interior Department, but the amendment adopted in the Senate today provides that it go to the Commerce

Department and be administered by the Office of Coastal Zone Management.

This all means that we have something to look forward to, if we can implement this same kind of amendment and if we can keep that same kind of program alive in the House of Representatives. It provides for the principle that the coastal zone management policy of the coastal states will be heard when deciding what happens when the oil comes to shore. We are going to have a voice in what happens to our shorelines. However, if this $200 million goes to the Interior Department, the Coastal Zone Management Program will not be the agency charged with the responsibility and the necessity for managing the affairs of a state regarding policing of the Outer Continental Shelf.

This is a new revenue sharing program and is a real potential for the coastal states. Nobody has signed it into law yet, but that bill with those amendments has received a majority vote today in the United States Senate. This is good for you and me, and it is good for the states in which we live. We have problems that we must solve, and we must solve them through a Coastal Zone Management Plan.

I have said the only reason we have gone this far in coastal zone management is because we have never called it a land use plan. If the land use plan had been called a coastal zone management inland land plan, it would have passed a long time ago. We are dealing with something that people care about. We are striving to protect the marshlands that provide a habitat and life cycle for the wildlife of the bays, which, in turn,

provide for the productivity of the oceans.

In a good coastal zone management plan we must stress some things which might save thousands of lives in a natural catastrophe on the Gulf Coast. It is hard to stand here, where Camille took 248 lives, and tell people they are not paying attention to hurricanes. However, they are not heeding this potential threat. In Texas we are trying to change this and make the people aware. The Texas Coastal and Marine Council has provided a Hurricane Awareness Program, which, we hope, will become a part of the Texas Coastal Zone Management Plan.

The problems of ocean dumping, which I talked about the last time I was here, are still with us and are going to remain with us. However, with a part of that $200 million we may be able to do something about ocean dumping. Perhaps we can supply some answers for the problems of waste disposal at refineries and chemical industries.

The Law of the Sea Conference that almost went down the drain in Caracas has not resolved the issue of where the rights of the coastal states extend into the oceans. You and I have a responsibility to be sure that our governors, legislators and congressional delegation are thinking about the position our states want the Federal Government to take regarding these offshore rights.

Another area of concern for all coastal states is the problems associated with an offshore port facility. How this is carried out is of the utmost importance.

What I am trying to relate to the people of the Gulf states is to let their opinions be known, so that a policy statement from their state or region can be made. As Chairman of the Coastal States Organization, I believe that we on the Gulf Coast have a responsibility to agree on some regional policies concerning certain things. We could adopt regional policies on ocean dumping, intercoastal waterways, wetlands, Outer Continental Shelf activities, revenue sharing and many other things. It is my hope that the delegates from Mississippi, Alabama, Florida, Louisiana and Texas will get together in the Coastal States Organization and do this very thing. To accomplish our goals we must work with our legislators and let our feelings be known. We also must work with our universities where the minds are.

We are not going to have coastal zone management on the $9 million provided for in the Coastal Zone Management Act of 1972. However, that $200 million that I have talked about looks mighty sweet, so let us not let it get away from us. If our congressional delegations do their job, we will be rolling in coastal zone management plans. These plans, hopefully, will provide for the continued betterment of our coastal zones. If we can accomplish this, then we will not have wasted our time.

PANEL DISCUSSION:

THE ORGANIZATIONAL STRUCTURE PROPOSED TO IMPLEMENT THE MANAGEMENT PROGRAM

Moderator:

Robert T. van Aller, Ph. D.
Dean of the Graduate School, University of Southern Mississippi

Panel Members:

Alabama
James R. Cooper
Legal Research Aid, Alabama Attorney General's Office

Florida
Terry Lewis
Agency Coordinator, Florida Coastal Coordinating Council

Louisiana
Patrick W. Ryan
Director, Louisiana State Planning Office

Mississippi
Jerry C. McCall, Ph. D.
Executive Vice Chancellor, University of Mississippi;
Member, Mississippi Marine Resources Council

Texas
Joe C. Moseley
Director, Texas Coastal and Marine Council

ALABAMA

James R. Cooper
Legal Research Aid, Alabama Attorney General's Office

The planning for a coastal zone management program in Alabama is in an embryonic state of development. Alabama's development program was just finalized this June. For the brief time I have been in the Attorney General's Office, I have participated in conferences such as this and talked with coastal zone management people. As of yet we have not even defined what our coastal zone is, much less developed a plan for implementing the program we hope to develop. This is probably true of most coastal states. If they have a plan or structure at all to implement this plan, it, perhaps, is very nebulous.

The organizational structure of any plan that we develop on the Gulf Coast should have several capabilities. The prime one, I believe, is flexibility in implementing the coastal zone management policies. Ten years ago we did not have a problem with pollution in certain areas of the coast. Ten years ago we did not have the influx of heavy industry or tourism which we now have. Ten years from now we really do not know what shaped the coast will be in. In order to meet these problems, I believe we need a structure that will not be a bureaucratic dinosaur.

I think it is necessary that the plan should be able to meet and surmount any difficulties that people run into with their coast. This would

take many different forms. Many management programs, especially in large companies, are getting into a lot of trouble because they are not flexible. The lines of communication are so stylized and rigid that the people cannot provide any input into the program. The lower action lines of the program cannot create change or cannot relay factors of change to the top layer of the management. When you are developing your programs, the idea of flexibility, keeping your lines of communication open, is of major importance.

The plan should also be able to use many different means of monitoring enforcement. Again, flexibility in this area is very important. Ten years ago we did not have the satellite systems orbiting the earth taking pictures. Ten years from now who knows what we will have flying through space, but we should take advantage of these technological changes. We should not be bound with the concept of a couple of people walking around the dock areas and beaches recording violations. The technological advantages of American industry are at our disposal, and we should use them.

I feel there should be flexibility in the location of the management offices. Any coastal zone management program should have offices on the coast. It would be ridiculous in Alabama's case to have the offices in Huntsville or Decatur. That is not where the action is. The ideal situation would be to have offices on the coast and in the State Capitol, since that is where all the other State agencies are.

Another capability of the plan should be in the area of permitting. The fact that there are so many local, state and federal agencies with overlapping permitting systems, certainly calls for more confusion. When the organizational structure is developed, some thought should be taken to streamline these permitting procedures.

Another point to consider in deciding the organizational structure to implement the plan is that of surveillance. Initially, work would be monitored through a permitting system. A follow-up on that work could be done by aerial photography and by geologists and marine biologists inspecting the area. There must be some sort of inspection of the entire coastal zone to insure that there are no unpermitted activities.

An area that will probably make or break the coastal zone management program is that of personnel. At a very minimum, you will need an administrative staff of qualified managerial people and secretaries. You also need trained technical people in the field--marine geologists, biologists and environmental people. It would be ideal to have environmentally aware people from the public to provide input to those concerned with coastal zone management. Without public support and participation, the coastal zone management program will probably fail or, at least, encounter great difficulties.

Along with the proper personnel it is basic to have an adequately funded program. State legislatures are notoriously tightfisted when it comes to giving money away. However, if you are to make a go of

coastal zone management you must have the necessary funds. With a halfhearted attempt to fund the program, you will have a halfhearted program.

Since the coastal zone management program is new, probably no one in this room can say what organizational structure is best. In that case, waiting to perfect the best possible organizational structure is a useless delay. The environment cannot wait three years before a plan is designed and an organizational structure is implemented. We need something done soon. In fact, six months ago was probably too late for some environmentally critical areas.

I suggest that the people involved in coastal zone management implement an organizational structure which is not so organizationally tight that it cannot be expanded or contracted. To get a good structure developed that you can do a lot with, enact it and then go from there. If it works out, then there are no problems. However, if it does not work out, then some changes must be made. Action is required here with a loose initial organizational structure, which you can tailor to the individual needs of the state.

FLORIDA

Terry Lewis
Agency Coordinator, Florida Coastal Coordinating Council

I will try to cover some points in a way that is organizationally rational to me, which means explaining the structure itself first and then covering some other topics. Florida is an odd state as far as the administrative entities are organized. To my knowledge, we are the only state that has, in effect, seven governors. The Governor has a Cabinet that sits equal with him on many matters, such as in the case of coastal zone management. This is a problem from the outset, since the guidelines promulgated by the Feds did not recognize the fact that Florida had a cabinet system along with its Governor. Nevertheless, I would like to talk a little about the proposal that we submitted and was accepted by the Governor and his Cabinet.

The Coastal Coordinating Council, of which I am a staff member, is actually comprised of the directors of the four principle environmental agencies in the State of Florida. These are the Department of Natural Resources; Department of Pollution Control; Trustees of the Internal Improvement Trust Fund, which holds all State owned lands in trust; and Division of State Planning, which administers the Environmental Land and Water Management Act. The Division of State Planning is a part of the Department of Administration. This Council is answerable to the

Governor and Cabinet, and we staff members are answerable to the Council.

The Comprehensive Planning Act of 1972 made provisions for Regional Planning Councils to encompass the entire state. There are eleven of these, and our coastal zone planning effort will be largely focused through n ine of these Regional Planning Councils that are located along the coast of Florida. Also in 1972, the State Water Resources Act was passed, which created five Water Management Districts. Our coastal zone planning effort will also be keyed very closely with these.

I will get into the specifics of these two acts along with the Environmental Land and Water Management Act itself, as we get down to controls and authorities that might be exerted.

At any rate, our proposal is to either place a man or provide enough funds for a man to fit into each of the nine Regional Planning Councils. This regional person would be responsible to the Council for developing his regional segment of the final coastal zone management plan at the end of the three year period, which is presently allotted. Among his duties would be coordination, cooperation and work with all the counties and cities within his particular region. He would also be responsive to and work with any existing port authorities and Water Management Districts that would fall within his region. He, along with the Regional Planning Co uncil, would cooperatively help to create a public advisory committee made of lay people from all of the various interests within the coastal zone. The list of these would include business, industry,

commercial and sport fisheries, tourism and related activities, recreation, science, conservation and other things. In a sense, it is difficult for us to work personally at the county or municipal level on a day-to-day basis with the funds that have been allotted. We are going to have to regionalize and use the existing regional structure to the maximum extent possible.

As far as a means of exerting control over land and water uses here, there are a number of things that can be looked at. Existing federal statutory authority and the controls that the Coastal Zone Management Act places on itself on federal activities in the coastal zone would, hopefully, be utilized at the regional and state levels.

Another powerful thing that has some bearing as a means of controlling some activities in the coastal zone is the Flood Disaster Protection Act, which is the proper name for the Flood Insurance Act. This Act exerts stringent controls over development in flood prone areas and in the hurricane flood zone. It is my understanding that if a county or municipality is not on the flood insurance program, developers attempting to get financing through conventional sources underwritten by the Federal Government, cannot do this.

The Department of Natural Resources does have some regulatory power for marine resources and fisheries. This is accomplished through our Marine Patrol, which is, if you will, a water-borne highway patrol.

The Trustees of the Internal Improvement Trust Fund have a permitting requirement very similar to that of the Corps of Engineers on the federal level. Any activities that are to take place on any state owned lands or any lands below mean high water have to be okayed by these Trustees. These permits have to be submitted to the Governor and Cabinet for approval. The effects of the Department of Pollution Control in certifying both point sources and non-point sources of pollution are far reaching. Since we serve an advisory service to these agencies, we feel that we can utilize them in our coastal zone management planning.

The Water Management Act, besides creating five Water Management Districts for Florida, contains provisions that have been reasonably well worked out. At the time of its inception, there were only two Water Management Districts in Florida. The Water Management Districts have powers, such as flood plain zoning, if they choose to implement them. They are also one of only two State agencies that has the power of eminent domain. This is a specified type of eminent domain, whereby they can acquire easements for flood protection and water management. The other agency that has eminent domain power is the Department of Transportation.

The Regional Planning Council, while they do not have any permitting powers, reviews certain types of activities concerning developments of regional impact. Examples of this are certain types of industries, kinds

of new ports and residential developments. These are reviewed as to their environmental affect and recommendations are made by the Regional Planning Council to the local bodies of government. This is an interesting mechanism. Many times the Planning Council will recommend denial of a certain activity, and the local government will overturn this denial. At this point, the Planning Council has the option of appealing this to the Governor and Cabinet. If the appeal is heard, there is a possibility that, at least on specified instances, the Governor and Cabinet cannot exert control over the local issues.

With the Regional Planning Councils and the Water Management Districts that we have, I am not sure that it is necessary to develop an authority to implement a coastal zone management program. Last year our staff spent most of its time in the Florida Keys working on a pilot study to try and tie down a good, sound methology for coastal zone management for the rest of the State. One of the options that we tried to put together was an authority, actually a Keys Coastal Zone Management Authority, because we felt the area was so important environmentally and aesthetically. We tried to combine federal, state, regional and local interests into an eleven man governing board that would set policy for the area. I can only tell you that it was met with categorical hatred and opposition by the people involved. This was not true of the people in the local county only, but for all up the line within the State

Government as well. Most opposed the idea of adding other authorities beyond what Florida already had.

With respect to land acquisition again, our Water Management Districts do have those eminent domain powers. Local bodies of government, incorporated cities and county commissions, normally have the right of eminent domain. We plan to involve ourselves as heavily as possible at the county and local levels through our regional coastal planner. If the need arises for acquisition of land, and we feel we cannot work through the Water Management District, then we can accomplish this through the locals.

There is one other option that the State has as far as acquiring land is concerned. In 1972 the State passed another environmental act known as the Environmental Endangered Lands Act or the Land Conservation Act. This provided for a $200 million bond issue for the acquisition of environmentally endangered lands. The Act does not carry any eminent domain powers. This means we must negotiate with the private landowner for the land we wish to purchase. We still have about $170 million of that fund available for land acquisition. Most of the areas that we have analyzed and keyed for future acquisition do lie within Florida's coastal zone.

LOUISIANA

Patrick W. Ryan
Director, Louisiana State Planning Office

I appreciate the opportunity to be here and tell you a little about how we are getting things organized in Louisiana. The coastal zone management program in Louisiana is presently deciding how to address our planning effort. We have had the benefit of several years of research and investigation by the Coastal Marine Resources Advisory Commission, spearheaded by Dr. Lyle St. Amant and Marc Hershman, as well as other interest groups. This group had reported to a Legislative Commission, describing many of the problems and providing recommendations as to how the State could proceed in coastal zone management. The report has been concluded and the Commission has referred it to the Legislature. We are now using this as a basis to organize our planning effort to really set up a management program for Louisiana.

The effort now proceeding in Louisiana is set up through the Executive Branch, which is the Governor's directive. We do not have any coastal zone management legislation at the present time, which is not holding up our progress. We do have a good, sound approach in Louisiana. It may not seem as clear as some approaches, but it is a very productive program. The reason I say this is because we do have four agencies involved in the program. The State Planning Office, which is a part of the Governor's Office, is coordinating a central effort of administering

the grant. In the evolution of the program we have developed an inter-agency management team composed of the State Planning Office, the Louisiana Wildlife and Fisheries Commission, the Louisiana Sea Grant Program and the Louisiana Coastal Commission. We have divided the work and responsibilities, and all feel that the people who live in the coastal zone should be involved in the planning process.

Louisiana has a very extensive, diversified and valuable coastal zone, which is quite different from most of the other states here. I think Louisiana has a unique opportunity and challenge. We have more to gain and more to lose in coastal zone management than most other states. In Louisiana's coastal zone there are tremendous fishery, oil and agricultural production, as well as tremendous growth pressures.

I am proud of yesterday's U.S. Senate action, when it adopted a resolution that was promoted by Louisiana. This would provide monies to the coastal states that are involved in offshore oil production to offset some of the socio-economic and environmental consequences of supporting this energy production. A key point in all coastal zone management is landside impact or secondary development.

The efforts that have gone on in Louisiana through the Coastal Marine Resources Commission and through a lot of research by the State Planning Office will be very useful in the establishment of a permitting management system for Louisiana. We have had quite a bit of interesting

input from local governments, parish governments and municipalities concerning their interest in coastal zone management, which will certainly be taken into consideration. We see a great role in responsibility that can be played by sub-state districts, as the people in Florida have mentioned. There are too many communities and parishes involved to be continually contacted in every particular problem in development. A great part that these sub-state districts can play is in being an intermediary or coordinating agency between the state and local government. We intend to utilize them very strongly.

Particularly in Louisiana, as in most southern states, we need much work in the area of land and water regulation. As Senator Knowles from Louisiana expressed yesterday, there are some real fears that we must face. It would be very difficult for a legislature to adopt a lot of policies and laws to accomplish things some planners feel should be done. However, the people may not feel that these policies and laws should be adopted. We must educate the people in the state as to the need for coastal zone management and the need for some growth monitoring.

I believe that the coastal zone management program in organizing its efforts in the planning stage and management state must affect the central core of State Government as to how it spends its money and the laws it passes. Also, as Senator Knowles said yesterday, states need to be much more active in the development of Federal policy. It affects the states, and this is true in just about every area.

I might mention another particular situation as far as the organization of coastal zone management in Louisiana is concerned. We have a unique opportunity right now in the fact that Louisiana has a new Constitution, which calls for a complete reorganization of State Government into twenty agencies. This will have a dramatic impact on the coastal zone management program. One of the major efforts in our program is the legal research concerned with particular laws and permitting authorities that exist at the local, regional, state and federal level. This is one of the most important elements, particularly, because of the constitutional situation we are in.

I believe it is very important that the State take the leadership and initiative. If we do not get it together, we are going to see more regulations coming from the Environmental Protection Agency, Corps of Engineers, Department of Agriculture and Department of the Interior. If we mean business, we are really going to have to take the ball and run with it. We are looking toward an important program, and it must be developed in Louisiana. As has been said, we have more to gain and more to lose than most other states. If we do not set up a good program, we should be ashamed for allowing the Feds to do what we should be doing. It is not going to be an easy task, since it is all going to result from many political and social decisions.

MISSISSIPPI

Jerry C. McCall, Ph. D.
Executive Vice Chancellor, University of Mississippi;
Member, Mississippi Marine Resources Council

In the beginning I would like to say that I am new to this area of coastal zone management. In fact, just last week I was appointed to the Mississippi Marine Resources Council, but I have had some interesting marine experiences. I would like to comment on some things I have heard since I have been here at this conference on the general subject of management in connection with coastal zone management. I am not certain yet whether the people at this conference, those in the State or those in the Federal Government really want to manage this subject. There is a lot of emotion concerned with this business of coastal zone management.

We already have many management and regulatory agencies in existence in Mississippi. These agencies feel they are fulfilling their functions, and I believe they are. Now, we are concerned with a kind of over-all management or coordination. Coastal zone management is a new idea, a new problem, and there is a certain amount of groping for the desired management roles. I do not believe this question has been answered.

Maybe we should, for example, review management in a business sense. It seems that big business understands the whole concept of having to control their resources, as well as develop their resources. They are

comfortable in the dual and contradictory role of doing both things at the same time. In a sense, the State or Federal Government occupies this same role. It tends to control and develop, although it develops less than it controls. Development has primarily been left to the private industry of the country. However, there have been some development projects undertaken by the Federal Government, such as the Tennessee Valley Authority project, the space program and various military endeavors.

It is my suggestion that more discussion in future meetings be given to the question of just what is desired in the way of management. What kind of management do we really want? Indeed, what do we want to manage? That subject has been addressed many times, and it is not clear yet what we want to manage or who is going to manage it. Do they want to manage the water, land, mineral resources, underground water and the air, even though not too much has been said about this? Generally speaking, it seems that management should be applied to a certain geographic area. However, even that area is now undefined.

It is my opinion that in most management situations, the first question to be answered is, do you really want it managed? Often those in the area say they want it managed, then are disturbed when it is managed. What these people want is the benefits of good management without any of the penalties of it. In other words, they really do not want the area managed.

There is another very real problem of who gets the power of management? It would be ideal to manage strictly through a visibility system, so that we have good communication. However, this is not always the case.

In issuing power for the purpose of management, someone has to receive that power and someone has to lose it. Certainly, this causes many problems. We must decide whether we want a superagency at the local, regional, state or federal level. Also, does this superagency have the power to interfere with the operations of other existing agencies? It is very difficult to find any agency who is willing to relinquish any power that it has. It is my opinion that the agency to receive this power in coastal zone management should be at the level closest to the problem. Therefore, it would be ideal for this power to be vested with the local people, since they are the ones most involved with coastal zone problems.

Any group to receive these powers must possess certain qualities. First of all, they must be independent enough to be able to represent the people and make decisions without being controlled by other special interest and local groups. Often, however, this is not the case. To vest the authority of coastal zone management at the local level probably would not work, because most of these people are not immuned to money and political entities.

The other quality this group should possess is the ability to recognize the needs of all of those they are bound to represent. In other words, the

control of the affairs of coastal zone management is, at least, a state problem, and more likely a national problem. The lowest level that we could expect these two qualities of independence and representation to be present would probably be the state level. However, it is my opinion that the Feds will keep a tight watch over what the states are doing in coastal zone management. Of course, interstate cooperation is needed, but that should occur by mutual consent.

We have been talking about power, but where does this power originate? I would assume this comes from legislation, whether state or federal. In my opinion, some agency will have to be given the most authority. Undoubtedly, we will have to work through other agencies, but the key question of how successful coastal zone management is depends upon how much authority this superagency has with which to deal and bargain.

The last question I would like to ask is, who will step forward to carry out this business of coastal zone management? I have observed a reluctance of anyone to say that he or his agency is willing to do it. This is a case where much is at stake, and many changes have to be made. Because coastal zone management is such a monumental undertaking, there will be many conflicts. I would suggest that whoever is brave enough to undertake this, whether it is the Governor of the State, President Ford, a key legislator or local leader, will certainly need cooperation and support from those who live in the coastal area and in the State.

TEXAS

Joe C. Moseley
Director, Texas Coastal and Marine Council

I would like to begin by saying that those who believe coastal zone management is new are not being very realistic. In fact, we have had coastal zone management in one form or fashion for at least two hundred years even though we have not called it that. If anyone believes we are not into coastal zone management, they should try to get something done.

Let us take a quick look at the Federal Coastal Zone Management Act, which has three main points. Two of these three parts may be considered worthless by some folks, and the third part will certainly scare you when you read it. The first part, Section 305, gives the states a few dollars to develop a coastal zone management program. Also, we must provide for scientific and technical input, as well as input from the local people.

The coastal zone management agency in any state must have financial resources, and it must be politically feasible. This political feasibility can be described in two manners--political politics and bureaucratic politics. The elected officials do not run the government, because the hired hands do. This is something we must face.

An important thing to discuss here is the process, rather than the planning. In Texas we have talked to folks about the organizational

structure of coastal zone management, and it appeard to be very muddled. It certainly is not very clear, but, after all, we are dealing in Texas politics. I imagine this is the way it is in most of our states. It is not what looks good but what works that really counts.

We have been through an evolutionary process. Back in the late 1950's, Texas passed an act for the protection of its beaches. In the 1960's there have been some legislative committees concerned with coastal resources. In the latter 60's a Governor's Conference was set up, which evolved into a coastal resources management program. One of the things that was accomplished was to clearly define the State General Land Office.

The mission of coastal zone management in Texas has been assigned to the State General Land Office. This was spelled out clearly in the enabling State Legislation. Of course, the Governor, under Federal Law, charged the General Land Office with developing a coastal zone management plan for Texas. Now the General Land Office is off and running. They have the federal grant, and they have some very strong legislation which deals with the coastal public land.

Our basic coastal act in Texas is the Coastal Public Lands Management Act. It gives the Land Commission of the State all the authority that it already had under the Constitution. However, it does spell out this authority a little more clearly. This Act was passed without a hearing. It directs the Land Office to examine all activities that are going on

which might adversely affect any public lands. The Land Office also will make reports to the Legislature whenever needed concerning any steps necessary to protect these public lands.

Where are we going in the future as far as coastal zone management in Texas is concerned? There are going to be some interesting local bills come through our Legislature. These will deal with offshore ports and whether they will be publicly or privately owned. Of course, there will be many other bills introduced which will directly affect our coastal resources. I must say, I am a firm believer that a law does not equal successful management. The key words here are successful and management.

There is one closing point I would like to make. It is almost impossible to arouse any public interest in the coastal zone if we just call it "public interest in the coastal zone." However, if you let the people know that their private property rights may be affected by coastal zone management, there will be no problem in stirring up public interest. We must build public participation, which will generate public interest.

Coastal zone management is not an umbrella which will solve all of our coastal zone problems. It will, of course, take much cooperation and coordination to relieve some of the problems with which we have been coping. Some of these things which need immediate attention are waterway financing, port financing, disaster planning, flood plaining and, of course, the environmental issues.

PANEL DISCUSSION:

PUBLIC PARTICIPATION IN COASTAL ZONE MANAGEMENT

Moderator:

J. Chester McKee, Jr., Ph. D.
Vice President for Research and Dean of the Graduate School,
Mississippi State University

Panel Members:

Alabama
William E. Powell, Ph. D.
Sea Grant Advisory Specialist,
Alabama Sea Grant Advisory Services

Florida
Bruce Johnson
Staff Director, Florida Coastal Coordinating Council

Louisiana
Marc J. Hershman
Research Director, Coastal Resources Law,
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Mississippi
Raymond Butterfield
General Manager, WLOX Radio-TV Station

Texas
Ron Jones
Director, Coastal Zone Management Program,
Texas General Land Office

ALABAMA

William E. Powell, Ph. D.
Leader and Advisory Specialist,
Alabama Sea Grant Advisory Services

Concerning public participation, education is the key to public understanding, and understanding, I think, is the key to public cooperation. This is a vital part of the acceptance and success of a program of this nature. Briefly, I would like to mention some of the methods that we in Alabama have initiated or planned to use in this area and point out a few of the important areas of concern.

We in Alabama are new in this program. I am new in the position I occupy, so we look forward to meetings such as this, hopefully, to learn and return with some information that we can use in the various areas of work with coastal zone management.

We have initiated the first step toward involving local government and state interests in coastal zone management. As Senator Noonan described yesterday in his remarks, the first step in Alabama was to establish the Coastal Area Board, which consists of eight people representing both state and local interest groups. The Board includes the Director of the Alabama Development Office; Director of the Department of Conservation and Natural Resources; Director of the State Docks; State Geologist; Director of the Marine Environmental Sciences Consortium; a representative from each of the two coastal counties, Mobile and Baldwin; and the Mayor

of Mobile. We do have here a structure that gives us an ear to the government at the state level and, at the same time, includes a representation of the people on the scene through the elected officials. This is a very necessary part of any type of involvement in the educational program. This Board has been functioning for less than a year. Probably, we may need to incorporate more private citizens as Board members, which is now being discussed.

Next, Alabama has contracted with the Mississippi-Alabama Sea Grant Consortium to initiate a public awareness program. This program will get under way next month when we will have an Alabama Governor's Conference on Coastal Zone Management. This will be held on the coast, and the basic purpose of this conference is to involve elected officials and agency personnel to make them aware and educate them in the needs, concerns and directions of coastal zone management.

The next step under this contract with Sea Grant is to develop a Coastal Leaders Program and hold workshops for this group next spring. This program will involve the local community leaders, elected officials and private citizens, who represent the various interest groups in the coastal zone region. This program will be under the Advisory Services of Sea Grant, and the efforts will be coordinated through existing agencies, such as the Regional Planning Commission and the Rural Development Committees. The Regional Planning Commission has already had a good deal of experience in this area under their goals program. Certainly, this

will be beneficial in identifying both local leaders and problems. This Coastal Leaders Program has to be one of action and not just a group of people gathered to talk about some of the problems they perceive from their respective positions.

As to federal and interstate involvement, there exists a vital need for some type of communication between states. This would give the states an opportunity to learn what their sister states are doing in a particular area. We probably do have a communication gap between agencies and states, which can lead to problems. One way to achieve involvement on the interstate and federal level would be to have the states in the Gulf region to agree on certain issues and present their ideas as a united front.

The most important and ultimate purpose of this discussion will be to determine methods for involving the public and private sectors in coastal zone management. Briefly, there are three basic areas. The first is public awareness. The public needs to be made aware of coastal zone management, what it involves and how they fit into the picture. At the outset, they need to be informed that they will be a part of the decision making and the implementation of this program.

After public awareness we need to move into public involvement. This would include workshops at the local level, which would involve the citizens and various interest groups. Through these workshops, the people can make inputs into identifying problems, suggestions for solutions

to problems and a total public education program. This would be a continuing type of public education program. Ultimately, we plan to work with the Sea Grant Advisory Services and other agencies to hold citizen awareness sessions through the coastal community and inland. There will be question and answer forums, which will give the local people an opportunity to express their feelings and get some answers. We must be able to give answers, and one of the urgencies we face is a need to be able to have something concrete to discuss when we meet with the public.

There is no need in my pointing out the importance of citizen involvement from all cross sections, particularly in the coastal zone. In order for coastal zone management to succeed, there must be public involvement from the beginning.

One of the problems I see in public education is general public apathy. If the public does not see the real impact on them today, then they are not going to become involved. As you all know, at most public hearings, the only people present are those who represent special interest groups. We should certainly guard against this trend in coastal zone management.

We must remember that working through the existing agencies and some of the people in the coastal communities will be one of the keys for achieving public involvement. Also, flexibility will be an important part of any type of public education program. Of course, it is essential in public

involvement and public education to follow what you say with action. It is almost impossible to maintain public involvement if there is not any action. We must be able to act, and we must be able to be effective in our action. It is a real challenge to involve both local and state groups in this business of coastal zone management. It is certainly true, as Gene Cody with the Alabama Development Office has said, that any goals program involves a lot of hard work and a lot of good work.

FLORIDA

Bruce Johnson
Staff Director, Florida Coastal Coordinating Council

Education is the key to public participation, as far as I am concerned. Along that line I would like to start with your staff. Some of you may have already hired a staff. Nevertheless, we have found the staff of geographers to be particularly good, if you can find a geographer with some marine experience in his background. If you are going to have a large staff, it is find to have geology and biology specialists. However, if you can only have a few people on your staff, you must have generalists. In fact, you may hire a specialist, but if he is going to work out, he will soon become a generalist. I believe this to be very true.

In education, you must start with the state agencies. You must educate them, which is where you get into your first real job. In coastal management we surely have to use the overview approach. We try to

convince these agencies that someone must sit back and see how well all the pieces fit together.

We are not really trying to tell them how to do their job. We just want to find out what their job is, what their legislative mandate is and see who has done what. We have done this in the Florida Keys, which I will be referring to from time to time here, in a study that we have just finished. We looked at the agency situation in the Keys and identified forty different agencies from the federal level down to the local level that had something to do with the coastal management in the Florida Keys. After viewing this list, some said that never have so few been governed by so many. Hopefully, coastal zone management is a way to simplify this.

Also, it is very important to educate the elected officials. I, personally, believe that all major decisions in coastal management should be made by the elected officials. However, these decisions should be backed by a good professional staff, technical expertise and defined alternatives. But the decisions should be made by elected officials, and then the public can change them at the next election, if they please.

It is interesting to note in an in-house study we did of the Keys that most of the citizens favored a slow growth for the area and environmental protection. Yet, all of the public officials, both elected and part of the local bureaucracy, were all for intense development. This certainly shows a tremendous gap.

In educating the public on coastal zone management we have found the newspapers to be very helpful. We are fortunate in that we have a very good relationship with the newspapers in Florida. These newspapers have excellent environmental correspondents, who are interested in what we are doing. When we have an interesting item or point we want to make, we try to get it in the press. We usually get calls the next day from Legislators after something has been printed. However, when we send them special documents, it seems we never get any reaction.

We have made presentations concerning our Coastal Management Atlas, which I will discuss in a minute, to one of the committees in the Florida House of Representatives. One of the members felt we should put the points concerning preservation, conservation, development and the methodology for coastal zone management in a film. We are providing for a thirty minute film in our next year's budget, which will be used on educational television or anywhere else it is needed.

Let me briefly tell you about our Coastal Zone Management Atlas. There is a format for every coastal county in the Atlas. There is one for preservation, conservation, development, as well as a composite. It shows you, in essence, a growth policy. It leads you to the rationality of growth policy by telling you where you should put people and industries, where you should not put them and why. Beyond that, there is a matrix table in the beginning of the Atlas, which is a storehouse of information. One of two supplementary booklets on this Atlas is concerned with development.

This booklet helps developers to get an update of how easy it is to get something passed through the permitting system. Another booklet, which is for county commissioners, contains statistical summaries. All of these items are entered in square miles or acres, so these commissioner can easily find how many acres of marsh they have or how much land is available and suitable for development.

In summary, I would say that we do push publications concerning coastal zone management in Florida. We make presentations throughout the year to special interest groups. These include the Florida Home Builders Association, Florida Real Estate Appraisers, League of Women Voters, Sierra Club and the Isaac Walton League. The Florida Coastal Coordinating Council answers up to fifty letters a week on coastal problems. The Council has a library and publishes a newsletter to keep the people informed. We maintain a contact register of who has what expertise to help any county, city or private individual who has a problem. Of course, we can always refer these problems to university personnel or consultants.

LOUISIANA

Marc J. Hershman
Research Director, Coastal Resources Law,
Louisiana State University

Louisiana is just beginning to structure its public participation program in coastal zone management. We are struggling with a lot of issues to decide what is the most effective way to make use of the dollars that we will have to put into that effort. We have to draw upon the experience of a two year study commission, which did a "mini" coastal management program, the Advisory Commission on Coastal Marine Resources, as well as the experiences of other agencies in the State , who have worked with public participation. There are a number of approaches at which we are looking.

Hearings are a legal requirement under the Coastal Zone Management Act. You have to show that you have had hearings in convenient places and that material has been distributed in sufficient time. Then a report of the hearing must be published. I believe there are two key problems with hearings. First of all, the timing of these hearings is very important. When is the public input most beneficial in structuring a coastal management program? The second of these key problems is, how beneficial are the hearings in themselves?

The Advisory Commission, which held five public hearings in coastal communities when it was developing its program, found that each hearing

had the same kind of comments from the same list of interest groups, which were saying about the same thing. Almost none of this was directly helpful in preparing the report. We expected a lot more, but that was all we received. I believe the problem was that we were in the initial phases of thinking through our recommendations, and therefore, there was nothing for someone to grab onto that would really mean something to them. We were talking about coastal zone management in a general sense, and the enabling statute for that Commission listed a whole series of things that had to be discussed.

We received a very apathetic response to these hearings. Contrary to that, however, when the Advisory Commission released its report and held a two day conference to review these findings, there was an extremely dynamic response. Here was a set of recommendations, which were very specific statements about how things should be done, for people to react to. After a briefing, the workshops had a tremendous amount of response, both positive and negative. This was a real experience. It was something from which everyone thought he had gained, as a result of participating.

We are struggling now with the question, with what do we go to a hearing in order to generate some sort of meaningful response? Generally, hearings are not a give-and-take exercise, so they do not have very much value from that standpoint.

A second approach to public participation would be in the area of technical advisors. These advisors were to give us reports, help us

evaluate our thinking and give us the benefit of their thinking. However, we over extended ourselves and really were not able to effectively use our technical advisors in Louisiana. If you do go to a technical advisors type of thing, you have to be able to support it. California has an interesting approach in this area of committees. They have established in each of the six regions in California watchdog committees, which watch over the activities of the Regional Coastal Commission. These committees review the actions of the Commission on a regular basis, both in the permits they issue and the planning they do. There are very specific problems that the watchdog committees could deal with directly.

A third approach to public participation could be seminars and workshops. These can be very valuable. As I mentioned earlier, the two day workshop that we had in Louisiana turned out to be an extremely valuable exercise, which helped to educate a broader group that we had been dealing with in coastal management. I think the key to the success of seminars and workshops is to have something very real and alive to talk about and discuss.

Another approach to public information is in the traditional forms of a newsletter or brochure describing a program. The newsletter form is pretty common, and most groups use this means. The brochure of the program itself is very useful also. Of course, annual reports could explain in simple fashion what a state's coastal zone management program has been doing. I would like to emphasize a point that was made in relation

to the news media. This is really very critical. In Louisiana we have had a very good working relationship with every major newspaper to help us get across the issues of coastal zone management to the public.

There are several things that would be very critical to a good coastal zone management developmental program. First of all, coastal zone management is relatively small compared to other programs going on in the coastal zone. It is new, and we are all involved. When you look at the total picture, all we can expect to do is make minor adjustments in the way the whole scheme operates. The theme should be to use existing forms for coastal zone management purposes to the greatest extent possible. Establish whatever communication should be used whenever possible. The extension services at state universities have well-established networks of communication. Also, fisheries agencies within the states have field officers who have direct contact with fishermen.

I certainly believe there needs to be a touch of advocacy in the program. This will surely not solve all your problems, but coastal management is competing with many other programs for attention. If you are not in a stance where you are really trying to convince someone that this is a good thing, the program might get buried. There needs to be a little bit of salesmanship involved, and this is where friendly politicians can be very helpful.

Decentralization is a theme which should be followed whenever possible in establishing local contacts. People, who can spread information and

gather information on the local level, should be involved in the program.

We surely should develop the research which is necessary to understand what is best to be done in public participation. In Louisiana we have had two kinds of programs that I think are valuable which have been done through Sea Grant. The first is a sociological analysis of who are the people of the coastal zone. Secondly, we have tried to determine the attitudes of influentials in the coastal zone about the coastal problems and issues. A state-wide survey to see what the attitude is throughout the State about the coastal area has also been undertaken. The results from this survey, we hope, will be translated into a meaningful public education and participation program.

We also have in the Louisiana Sea Grant Program an Extension Agent, who is based in the coastal zone. This representative has regular contact with all the people of this particular area. Also, this person in the field, who can be there discussing the problems and getting feedback from the local people, is a critical part of any effective public participation in developing a coastal zone management program.

MISSISSIPPI

Raymond Butterfield
General Manager, WLOX Radio-TV Station

I wondered why I was asked to speak here today, especially since I am a member of the broadcast media or the news area. I think, however,

I do have it figured out. Oftentimes most of us are a little bit too close to see the forest for the trees. This probably is the way you folks dealing with coastal zone management think. Since you are concerned with it every day, it is hard to see that everyone does not know about coastal zone management. There is a definite need for good public education. Direct contact with the public is important, because you can gain much support with the proper public opinion.

To gain helpful news coverage, it is important to be sure you have good public relations. Therefore, you do need to make some news, bring in top speakers and have both sides of controversial issues presented. It is a real responsibility that rests on your shoulders to guide us in the proper direction. I know they will ask many questions in the news media area as to who, where, what, when, why and how? We must have those answers when we prepare what we present in our media. I think it is up to you who are dealing in coastal zone management to supply us with those answers.

A controversial issue will continue to make news longer than if it is just a simple statement. Those of us in the media will seek all sides of a controversial issue. We will try to present this in a way that the public can understand and make its own decisions. By using the news media you are in direct, personal contact with that individual who reads the story, listens to the radio or watches television. How this news affects that individual personally is what is important.

Repetition is another thing that you must remember and take a serious look at. You can repeat an idea many times before you get your point across, and advertising is a perfect example of this. The way to sell a point to the public is to repeat it many times.

In the media, and especially in the broadcast area, we have a responsibility to determine the problems, needs, interests and issues of the communities we serve. We have worked with the coastal management group, Sea Grant group and with all of the many different groups to present discussion types of programs on the air. We have a certain responsibility to present this type of program for the local people. Most of the news media are vitally interested, because they do want to inform the public. I think you will find the media to be an effective means for telling your story and getting your points across.

I guess what I am really trying to tell you right now is that we in the news media are interested in what you are doing, but we are interested in only reporting to the people. If you will take the time to sit down and talk to our news directors and the people in our public program area, you will be able to get your story across a lot more effectively. Here in the State of Mississippi, and especially on the Gulf Coast, we have had excellent cooperation in this area, and I think we have seen the results of that cooperation. The Wetlands Act, which was passed in the last legislative session, is probably a pretty good example of what can be done when the

public knows what is going on. Those of us in the media helped to inform the people about this Act.

Public opinion is your greatest problem solver. If you tell your story right and get your points across, the public will be with you. We can all work together to improve the living conditions in the coastal areas for generations to come.

TEXAS

Ron Jones
Coastal Zone Management Coordinator,
Texas General Land Office

All of the other panel members have done such a good job at saying what I was going to say, that I will give you some time back. I do not believe there is any point in my reiterating what they have already said. They have covered the field quite well. There are, however, two areas that I would like to emphasize.

I believe there are three primary objectives of public participation. First of all, public participation should help to facilitite an understanding of the program. This is a very complex program. Next, we should identify and determine the positions that the various interest groups hold. How do these interest groups perceive the coastal management program, and how are we stepping on their toes? We must know these things. Also, we must obtain assistance in the development of the program. In Texas we now have

three major industry groups that have offered personnel to help us on a full time basis

I do not believe you can expect to get information that will help you develop a program from traditional public hearings. You cannot develop a public hearing process. You must find out who understands what you are talking about and what their position is. From this, you can develop your public information program.

I would like to mention something that was brought up by a previous speaker concerning the media. The word controversy kept creeping up in order to get coverage. I think this is find and good, but sometimes this business of controversy can be overworked. In fact, if not handled properly, it could cause some needless problems.

We cannot wait until a coastal zone management program is developed before we involve the legislators. They must be involved so that they know exactly what is going on with the program. Also, interest groups must have an opportunity to participate in the development of the program.

This covers a few scattered points that I wanted to make. Once again, I believe the other panel members did a fine job telling about public participation in coastal zone management.

LUNCHEON ADDRESS INTRODUCTION

Charles Lyles
Director, Mississippi Marine Conservation Commission

This conference on coastal zone management is rapidly coming to a close, and I have been asked to introduce the speaker today. I find myself in about the same position as Charlie Brown or Peanuts might be if they were asked to introduce Mr. Schultz.

Our speaker today is a very distinguished gentleman. He is a native of Oklahoma. Our speaker is a graduate of West Point Academy. In addition to his training at the Academy, he has received a Masters Degree in Civil Engineering from Princeton University. As a practicing civil engineer, he was also a professor at the Academy. He has served both staff and command positions in the Army in this country, Korea, and Vietnam.

He has also served at the Pentagon. In his capacity at the Pentagon, he was assigned to the Office of the Deputy Chief of Staff for logistics.

He has been awarded the Legion of Merit, Brown Star, Air Medal, Army Commendation Ribbon, Meritorious Unit Emblem and a number of foreign decorations.

In his present capacity he is responsible for directing military construction in Alabama, Mississippi, Tennessee, Florida and the Canal Zone. He is responsible for civil activities in Mississippi, Florida, Georgia and parts of Alabama and Louisiana.

Ladies and gentlemen, I bring you the distinguished, Colonel Drake Wilson, District Engineer, Mobile District, U.S. Army Corps of Engineers.

LUNCHEON ADDRESS

Colonel Drake Wilson
District Engineer, Mobile District
U. S. Army Corps of Engineers

I am very much pleased to be here today. The Corps of Engineers shares the acute national concern over wise management of our coastal zones and is intensely interested in the efforts the various states are making to accomplish this. In addition, I appreciate the opportunity that participation in this conference provides for laying a firm groundwork for our future cooperation in working toward our common goal of safeguarding our coastal resources.

If we may have the lights lowered, please, I should like to illustrate my remarks with slides. To show how the Corps of Engineers is involved in coastal zone management, I should like to explain briefly the Corps' civil works responsibilities and organization.

Since the early days of the Republic, when the only trained engineers available were army engineers, the Corps has been responsible for developing the nation's water resources. At first, when transportation and communication by water was of paramount importance, navigation was the principal purpose of development. Later flood control and shore protection were added, and, still later, as the wisdom of multiple-purpose development became apparent, a number of other secondary purposes were also added.

The Corps performs its civil work through a decentralized organization, under the direction of the Chief of Engineers at the Washington level. Under the Chief there are eleven geographical divisions engaged in civil works. These are, in turn, subdivided into thirty-six geographical districts. Along the Gulf Coast there are four Engineer Districts, Galveston in the Southwestern Division, New Orleans in the Lower Mississippi Valley Division, and Mobile and Jacksonville, both in the South Atlantic Division. The coastal zone of Alabama is in the Mobile District.

Many of the activities of these four districts profoundly affect the coastal zones of the Gulf States, physically, economically and socially. That is their purpose. The improvements have been made in accordance with the desires of local people as expressed by their representatives in Congress and concurred in by the Governors of the states affected.

The hallmark of the Corps of Engineers has always been its ability to respond to the changing needs and demands of the American people, whether for economic development, protection from the ravages of nature or enhancement of the quality of life. Persistent criticism notwithstanding, the Corps has become a leader in the preservation of environmental quality. Since it is our function to serve the people of this nation as they wish to be served, we look forward to cooperating with you fully as you work out guidelines for the wise usage of the coastal zone resources.

Now I should like to review briefly the major activities of the Corps of Engineers in the Gulf Coastal Zone, using my own district as an example. The first activity I should like to mention is the construction and maintenance of navigation channels. Although conditions have changed radically since the days when waterways were, in many cases, the only feasible means for transportation and communication, navigation is still of tremendous importance to the economy of the nation. It is the most economical method of moving many bulk commodities between points within the country and the only feasible means of moving many commodities to and from overseas points.

In the Mobile District we have six deep-draft harbors. These include Gulfport, Pascagoula, Mobile, Pensacola, Panama City and Port St. Joe. Two of these, Mobile and Pascagoula, are at the mouths of extensive river systems and are surrounded by extensive marshlands and deltas. All have a decided impact on the coastal environment. Let us take a closer look at Mobile, the busiest of these harbors, since it is the one in which you are most interested.

The economic influence of the Port of Mobile reaches far beyond the coastal zone of Alabama. It has served a wide area as a center of domestic and foreign trade since its settlement by the French in the early 1700's. In 1973 commerce at the Port exceeded thirty million tons. The Corps of Engineers has repeatedly improved the harbor channels since 1826. The present projects consist of a channel forty-two feet

deep across the bar at the mouth of Mobile Bay, a channel forty feet deep and thirty-five miles long through the Bay and in the lower end of the Mobile River, and various turning basins and feeder channels. In 1970 there was authorized a forty-foot branch channel from the main ship channel in Mobile Bay to an industrial area on the western shore near Theodore. The first phase of advance planning for this channel and a draft environmental impact statement are under way. We are also studying the advisability of deepening the main channels and providing additional turning and anchorage basins.

Of particular interest to this audience may be the hydraulic model of Mobile Bay which has been constructed at the Corps of Engineers Waterway Experiment Station at Vicksburg for determining the effect of the harbor improvements under consideration on the over-all environment of Mobile Bay.

The model, which is a little larger than a football field, reproduces to scale an area of about one thousand square miles, including all of Mobile Bay and adjoining water and land areas. Not only topography but also flow patterns, current velocities, salinities and tidal discharges are reproduced.

We have just completed a series of tests on the model designed to determine the effects on the Bay of various arrangements of the islands we propose to build out of the material excavated from the new Theodore

Channel. Next we will study the effect of the various other harbor improvements we have under consideration. When the model is not being used by the Corps of Engineers, it will be available for use by other agencies on a reimbursable basis. While speaking of models, I might mention that we are investigating the feasibility of constructing a mathematical model of Mississippi Sound to study island designs for material which may be excavated from improvements to the Gulfport Channel.

In addition to the six deep-draft harbors, we have in the Mobile District over twenty shallow-draft harbors and coastal channels scattered along the Mississippi, Alabama and Northwest Florida coasts. One of these is the important shallow-draft harbor here at Biloxi. Among the others are the small craft harbor at Pass Christian, Mississippi; the channel serving the fishing village of Bayou La Batre, Alabama; the barge channel in Escambia Bay, Florida; and the firshin port of Apalachicola, Florida. Several of the entrance channels from the Gulf are protected from shifting sands by stone jetties; this one leads through East Pass in Choctawhatchee Bay, Florida. All of these harbors and channels make important contributions to the economy of the coastal areas. All have an impact on the coastal environment.

One of the most important waterways in the Gulf Coastal Zone is the Gulf Intracoastal Waterway, a protected water route by which light-draft vessels not suited to navigating long stretches of the open Gulf can move to all coastal points from Carrabelle, Florida, to the Mexican Border. In 1973 movements on this waterway amounted to $16\frac{1}{2}$ billion ton miles.

All of these projects involve dredging, both when first constructed, and periodically thereafter to maintain channel dimensions. Dredging has become one of the most controversial activities in the coastal zone. This is probably due in large part to the fact that it is so noticeable and is by its nature a dirty operation.

The Corps of Engineers has devoted a great deal of study to the effects of dredging and this study is continuing. I will mention here a few of the effects we have been investigating.

Initial dredging frequently causes a fairly sudden physical change. For example, deepening a coastal stream may permit the salt wedge to penetrate farther up the estuary, thus modifying the existing salinity regimen. Constructing a channel across an offshore bar may interfere with the transport of sand down the beach. Creating a mound of dredged material in a body of water may influence flushing values and currents.

The dredging process itself also has its effects. Most of the adverse effects from the process result from the placement of the dredged material, rather than from its removal. These adverse effects can be largely avoided if the material can be placed on land. Let me say, the Corps is keenly aware of the difference between land and wetland.

The most obvious effect of discharging any dredged material in water areas is turbidity. The immediate effect of the turbidity plume is the reduction of light penetration in the water column and a temporary

reduction in the rate of photosynthesis in the floating and bottom plants which are a part of the food chain. However, studies have shown that the primary productive capacity of estuaries is principally from marshes and tributary streams, rather than from open water areas. Studies in Mobile Bay and other estuaries have indicated that surface turbidities from dredging operations approach normal levels within twelve hundred to fifteen hundred feet from the point of discharge. Ambient wind and water conditions determine the existence and extent of visible plume.

The most significant adverse conditions produced during material placement are due to sediment deposits, or mud flows. The two primary factors in causing mud flows are the kind and amount of particles resuspended. When silts and clays are deposited in open water, mud flows can be expected to occur. The thickness of the layer is reduced with increasing distance from the discharge point and with time. Until concentrations are in excess of 175 grams per liter and consolidation occurs, mud flows are subject to movement by gravity and, to a lesser degree, by tidal or wind action. Mud flows have been found to extend up to two thousand feet from the point of discharge. The mud flow covers the original bottom from one to several inches and some organisms capable of migrating up through it survive. But others, such as immobile and burrowing invertebrates and bottom-dwelling algal forms, may be covered and lost.

The effect of open water disposal on dissolved oxygen concentration is pronounced in the area surrounding the discharge point. There is an immediate oxygen demand when the sediments are dispersed. As a result, although the dissolved oxygen at the surface and mid-depth are only slightly depressed, a regimen of low dissolved oxygen exists in the mud flow. On the bottom this condition has been observed to extend for approximately eight hundred to seventeen hundred feet.

In the last two years a great deal of effort has been expended to determine if compounds bound to silts and clays are released when dredged material is placed in water areas. Our studies are not complete, but some release of heavy metals such as zinc has been found to occur. The released metals are apparently reabsorbed by the particles at the earliest opportunity.

The biggest problem we have in connection with a dredging project is finding suitable disposal areas for the dredged material. In the early days we simply placed the material alongside the channel in open water areas and along the banks of streams. However, the build-up of dredged material in some areas, the increasing quantities of material which must be removed from the larger channels required today, the disappearance of undeveloped areas along the waterfronts for land disposal and the necessity for preserving valuable estuarine systems all combine to require a different procedure. Throughout the coastal zone we are engaged in a search

for disposal sites and methods which will insure continued maintenance of the navigation channels while at the same time protecting the estuaries and remaining economically feasible. This tremendous problem must be solved if our ports and coastal waterways are to continue to exist.

In some instances we have found happy solutions. For example, the last time we performed maintenance dredging in the Ship Island Channel at Gulfport Harbor, we placed the material by Old Fort Massachusetts on the seriously eroded western tip of Ship Island to form a protective beach around the old fortification. Two years ago, while dredging a channel into Grand Lagoon from St. Andrew Bay, we used the sand removed from the channel to nourish the eroded beach at St. Andrews State Park near Panama City.

At East Point in Apalachicola Bay an island has been formed from material dredged from the channels. This island is used extensively as a resting place by shore birds. We are studying the feasibility of constructing islands in connection with dredging in Mobile Bay, as I showed you in discussing the Theodore Channel project. Such islands could be used in many different ways. We do need to find other constructive uses for the dredged material.

I should like to mention here a recent change in our procedure for reviewing our own Corps of Engineers' dredging projects. New regulations, promulgated by the Secretary of the Army in July of this year, set out in detail the factors we consider in the evaluation of all federal dredging

projects when they involve the disposal of material in navigable waters, whether they are inland, coastal or ocean waters. In general, these factors are the effects on marine ecosystems; wetlands; fish and wildlife; historic, recreational and scenic areas; and archaeological and cultural sites. While consideration of these factors themselves is not new, a new step has been added whereby we will issue a public notice of our plans, coordinate the planned work with all interested parties and even hold a public hearing at the request of any person who has a clear interest which may be affected by the dredging. Disposal sites will be selected in accordance with EPA guidelines for the disposal of dredged material. If following the guidelines would impair or prevent the continued maintenance of navigation, the economic impact will be evaluated and the question will be referred by the District Engineer to higher authorities for resolution. This new procedure is now in effect. The first public notice on Corps' dredging has been issued from my office on September 3.

One of the special problems in the maintenance of navigation channels along the Gulf is the removal of water hyacinths and other aquatic growth which effectively obstruct passage if allowed to accumulate in streams.

The water hyacinth was introduced into the United States at the Cotton Exposition in New Orleans in 1884. By 1898 it had spread to such an extent that Congress was requested to intercede. The Corps has been combatting the plant by various means since 1900. In Alabama the most serious problem is in the Mobile River Delta.

In 1965 Congress authorized a considerably expanded program for the control and progressive eradication of water hyacinths, alligatorweed, Eurasian water milfoil and other obnoxious aquatic plant growths from the navigable and allied waters of the United States in the combined interest of navigation, flood control, drainage, agriculture, fish and wildlife conservation, public health and related purposes. Under this program, all research and planning costs and seventy percent of operational costs are borne by the United States, and thirty percent of opera tional costs borne by local interests. The various Engineer Districts along the Gulf work with the appropriate state and local agencies on this program. The Department of Conservation and Natural Resources has been designated to represent the State in carrying out the program in Alabama. However, no work has been accomplished so far because of the lack of State funds, which could be allotted to field operations.

Another important activity of the Corps of Engineers in the coastal zone is shore protection. Federal participation in beach erosion control projects is subject to special laws and regulations. The extent of federal assistance depends on individual circumstances.

Basic research is done by the Corps of Engineers Coastal Engineering Research Center, which studies such matters as the transportation of sand by winds, waves and currents; the measurement and management of the natural forces that shape beaches and dunes; the relationships between

natural coastal forces and manmade structures; shoaling and pollution in tidal waters and rivers; the effects of shore and harbor programs on marine life; the natural forces involved in inlets, lagoons, sand bars and the like, particularly as they affect navigation channels; the effectiveness of manmade works of various shapes, spacings and materials in various coastal situations; and methods and effects of handling or moving sand and dredged materials.

At the present time the Mobile District has under way surveys to consider means for providing beach erosion and hurricane protection for the three coastal counties in Mississippi, Mobile County in Alabama, and the shores of Northwest Florida from the Alabama line to Indian Pass in Gulf County. Congressman Jack Edwards has requested the House Public Works Committee to authorize a similar study for Baldwin County in Alabama.

The last Corps of Engineers' activity which I should like to mention is our regulatory or permit program. This program is designed by Congress to assure wise and orderly development in and along the nation's inland and coastal waters. The program requires a comprehensive review process involving all federal, state and local agencies vested with environmental authority.

The basis for the Corps of Engineers' regulatory function over our waterways was formed when Congress grouped several statutes into

Sections 9 through 20 of the River and Harbor Act of 1899. Specifically, Section 10 provides that the creation of any obstruction not authorized by Congress to any navigable water of the United States is prohibited, unless the work has been recommended by the Chief of Engineers and a permit obtained from the Secretary of the Army prior to the start of construction. This statute applies to all structures from the smallest recreational dock to the largest commercial facility. It includes any dredging or excavation, as well as fills, which take place adjacent to or in navigable waters.

Navigable waters are defined as those which are presently, or have been in the past or may be in the future, susceptible for use by the public as a highway for trade and commerce. Federal regulatory jurisdiction extends laterally over the entire water surface and bed of a navigable waterway and includes all land and waters below the average high water mark in non-tidal areas or below the mean high tide line in coastal areas. In addition, activities which affect navigable waters are subject to federal jurisdiction, whether such activities occur within or outside of navigable waters.

Private ownership of underlying lands has no bearing on the prevailing federal jurisdiction. Marshlands and similar areas which are subject to innundation by mean high waters or the development of which would affect navigable waters are within the jurisdiction of the United States.

The requirement to obtain a permit for any work affecting navigable waters applies to federal, state, county and municipal agencies, as well as to the general public. Failure to obtain a permit may subject the parties involved to criminal or civil prosecution, or possibly both.

In processing a permit, the Corps coordinates each application with all appropriate federal, state, and local agencies and issues a notice to the general public allowing time, usually thirty days, for the submission of comments. In evaluating the permit application, the Corps considers all the comments received and makes its own analysis of the impacts of the proposed activity upon the public interest.

On April 3, 1974, the Chief of Engineers issued revised regulations which considerably broaden the factors which we consider in balancing the benefits which reasonably may be expected to accrue from the proposal against its reasonable foreseeable detriments. These factors include conservation, economics, aesthetics, general environmental concerns, historic values, fish and wildlife, flood damage prevention, land use classification, navigation, recreation, water supply and water quality. No permit will be granted unless its issuance is found to be in the public interest.

In addition to taking into consideration the national concern for both protection and utilization of important resources, the District Engineer must determine whether an environmental impact statement is

required in connection with the permit application. If granting the permit appears to be warranted but the proposed activities would have a significant environmental impact, an environmental impact statement will be prepared, coordinated with interested agencies and individuals and filed with the Council on Environmental Quality prior to final action on the application.

In some instances the review may be a very time-consuming activity. If there appears to be sufficient interest to justify it, we hold a public hearing or meeting to make sure that all interested parties understand the work for which the permit is being requested and that both supporters and opponents have full opportunity to present their opinions in the matter. If a decision cannot be reached locally, all information is forwarded to the Chief of Engineers with a recommendation from the District Engineer.

Obviously, our permit program is an important element in coastal zone management. It is one which affords a continuing opportunity for the Corps of Engineers and state and local agencies to work together for the betterment of the coastal area.

This brings me to the note on which I would like to end, which is cooperation. During a recent speech the Chief of Engineers stated, "Today the human way of life, as it was known for thousands of years, is strained and threatened by the sudden vast acceleration of technical man on a course which can alter dangerously, and perhaps irreversibly, the ecological system of this planet on which his biological survival depends."

We all recognize this. That is the reason for the Corps' increasing emphasis on environmental considerations in all its programs. That is the reason for the establishment of the National Coastal Zone Management Program and for your conference here today. At the same time we must remember that a basic duty of government is to provide a social environment where its citizens can obtain food, clothing, shelter and some amenities of life. In meeting the continuing demands of an increasing population, we must seek to regulate resource use so as to make the utilization as beneficial as possible in terms of the resulting environment. To do this, all levels of government and all private interests concerned must work together on a continuing basis, not taking pot shots at each other after a decision has been reached, but cooperating in the decision making from the outset.

I offer you the full cooperation of the Corps of Engineers in your efforts to manage wisely the valuable resources of the coastal zones. I am sure the Corps can count on your full cooperation in its efforts in the same direction.

CONFERENCE ADJOURNMENT

J. E. Thomas
Executive Director,
Mississippi Marine Resources Council

I feel this conference has been a most productive meeting. Since we have been here this day and a half, we have all come to understand that our areas of concern are uncommonly common. We all can readily see that coastal zone management is an awesome task. Unfortunately, no one has indicated that he has the answers. I surely wish he had.

The natural follow-up to this meeting is for us to stay in contact. Those of us in the Gulf region, where our problems are so common, can reenforce each other as we attempt to develop an effective state program and address broad area needs at the same time. It may be that we need to look forward to the possible structure of some sort of formal area organization. If this is not to be necessary, maybe a continuing series of conferences will serve the same purpose.

My last point is really two points, and they both came out of today's session. We have had clearly pointed out to us that while we have a Coastal Wetlands Act, we do have some rather significant management problems in coping with the responsibilities that we have been assigned. It was also pointed out that we have to deal with the public whose individual interests are going to be affected by what we do, and they may not like how they are affected.

This leads to one final comment. I believe we must be able to communicate with the public who live in the coastal zone. We must be able to communicate with them in possibly a better fashion than is necessary for us to communicate with each other. It is much more difficult to teach at the fifth grade level than it is at the master's level. We get so involved sometimes in what we know ourselves and the way we talk to each other about the same problems, that we forget the people who may be most affected by what we do . They may not even understand the words we are using. This does not mean the words are wrong, but it does mean that we are not communicating.

It has been a pleasure to have you here. We appreciate your coming and wish for you a safe journey home. The conference stands adjourned.

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