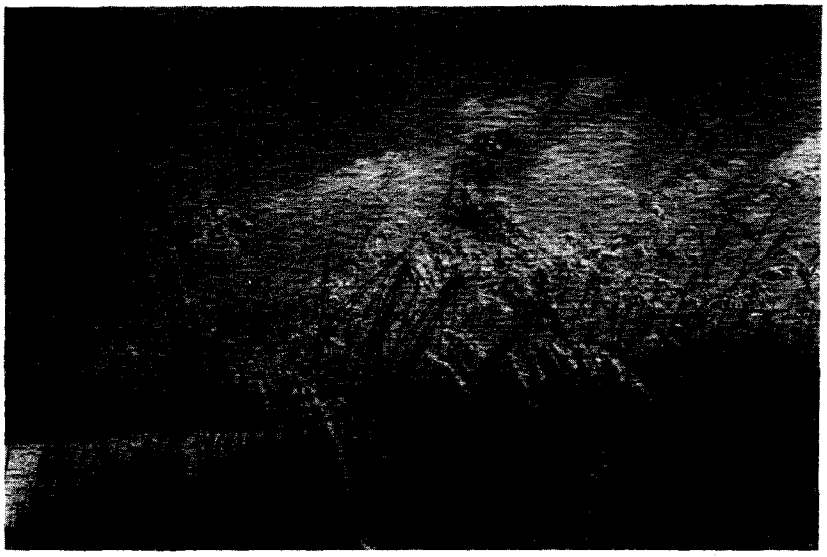
Coastal Zone
Information
Center

07556
C.5
JUL 12 1976

PROCEEDINGS OF ALABAMA COASTAL LEADERS CONFERENCE ON COASTAL ZONE MANAGEMENT



Sponsored for
The Alabama Coastal Area Board
by
The Mississippi-Alabama Sea Grant Consortium

Mississippi - Alabama Sea Grant Program

HT
393
.A2
A43
1975

MASGP-75-012

AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

07556
c.5

PROCEEDINGS FROM THE ALABAMA COASTAL LEADERS CONFERENCE ON COASTAL ZONE MANAGEMENT

April 30, 1975

Mobile, Alabama

The preparation of this document was partially financed through a federal grant from the Department of Commerce, National Oceanic and Atmospheric Administration, as authorized by Section 305 of the Coastal Zone Management Act of 1972. The program was administered by the State Planning Division, Alabama Development Office, Office of the Governor.

US Department of Commerce
NOAA Coastal Services Center Library
2234 South Hobson Avenue
Charleston, SC 29405-2413

HT393.A2 A43 1975

Sponsored for the

Alabama Development Office

Alabama Coastal Area Board

by the

Mississippi-Alabama Sea Grant Consortium

MASGP-75-012

TABLE OF CONTENTS

	Page
Preface	i
Conference Agenda	1
Opening Remarks: The Honorable Gary Greenough, Commissioner, City of Mobile; Member, Alabama Coastal Area Board	2
KEYNOTE SESSION Master of Ceremonies: Sidney D. Upham, Ph.D., Executive Director, Alabama Marine Environmental Sciences Consortium; Acting Chairman, Alabama Coastal Area Board	7
"Coastal Zone Management: The Federal Perspective." Carol Sondheimer, Southeast Regional Coordinator, Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, U.S. Department of Commerce	8
"Coastal Zone Management: The State Perspective." L. Willis Hyde, Alabama Development Office for the Honorable Lionel W. "Red" Noonan, State Senator, State of Alabama	16
"An Overview of the Importance of Alabama's Coastal Region." Bruce W. Mattox, Ph.D., Director, Mississippi-Alabama Sea Grant Consortium	21
"Coastal Zone Management: The Local Perspective." The Honorable Bay Haas, Commissioner, Mobile County Commission; Member, Alabama Coastal Area Board	26
Questions From the Conference Participants	31
Statements of Conference Participants	38
Participants of the Conference	57
Members and Agency Advisors to the Alabama Coastal Area Board	69

PREFACE

The Alabama Coastal Leaders Conference on Coastal Zone Management was held in Mobile, Alabama, on April 30, 1975. This conference was attended by more than 250 concerned citizens and representatives, and the attendance emphasizes the tremendous interest in the coastal area of Alabama. This meeting, the second in a series during the current fiscal year concerning coastal zone management, was sponsored for the Alabama Development Office and the Alabama Coastal Area Board by the Mississippi-Alabama Sea Grant Consortium.

The program for this conference was designed to help inform the public regarding coastal zone management and obtain their suggestions and support for means of obtaining continuing public involvement. This conference will serve as an introduction for a future workshop series where coastal leaders will be encouraged to make recommendations for specific provisional policy goals and policy development.

The Alabama Development Office, Alabama Coastal Area Board and Mississippi-Alabama Sea Grant Consortium would like to express their gratitude to all who helped make this conference a worthwhile contribution to the rational development of Alabama's coastal area.

CONFERENCE AGENDA

ALABAMA COASTAL LEADERS CONFERENCE ON

COASTAL ZONE MANAGEMENT

Wednesday, April 30, 1975
Mobile Bay Hilton Inn
Mobile, Alabama

9:00 a.m. Conference Registration

10:00 a.m. Opening Remarks: The Honorable Gary Greenough, Commissioner, City of Mobile; Member, Alabama Coastal Area Board.

10:20 a.m. KEYNOTE SESSION
Master of Ceremonies: Sidney D. Upham, Ph.D. Executive Director, Alabama Marine Environmental Sciences Consortium; Acting Chairman, Alabama Coastal Area Board.

"Coastal Zone Management: The Federal Perspective"
Carol Sondheimer, Southeast Regional Coordinator, Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

"Coastal Zone Management: The State Perspective"
L. Willis Hyde, Alabama Development Office for the Honorable Lionel W. "Red" Noonan, State Senator, State of Alabama.

"An Overview of the Importance of Alabama's Coastal Region"
Bruce W. Mattox, Ph.D., Director, Mississippi-Alabama Sea Grant Consortium.

12:00 m. LUNCHEON
Master of Ceremonies: The Honorable Archie M. McMillan, Commissioner, Baldwin County Commission; Member, Alabama Coastal Area Board.

1:30 p.m. "Coastal Zone Management: The Local Perspective"
The Honorable Bay Haas, Commissioner, Mobile County Commission; Member, Alabama Coastal Area Board.

2:15 p.m. Questions and Statements From the Public

3:00 p.m. Adjournment.

OPENING REMARKS

The Honorable Gary Greenough
Commissioner, City of Mobile;
Member, Alabama Coastal Area Board

It is my pleasure to welcome those of you from out of the City of Mobile to our city. To those of you from Mobile, we welcome you here to protect yourselves.

At the first meeting of the Alabama Coastal Area Board, Dr. Sid Upham made the prediction that those of us on the Board were going to be in hot water more than we were going to be in saltwater. We all know he was absolutely correct in his prediction.

I am particularly encouraged, I think, to be a participant in this activity. This business of coastal zone management is something new which has good and bad points. It is good in that it gives us an opportunity to do something new and creative. It is bad in that we must bear the direct burdens of our blunders. This sometimes comes home to roost quicker than we would like. Since the beginning of the Republic, this coastal zone management effort is, perhaps, the most newfangled idea in the American system of government. I personally have a great deal of concern, which I trust you share. Today we probably have the extremes represented in this room. I am sure that by the afternoon session when there are statements from the public, you are going to realize this diversity of opinion. The only reason that I am in this business is because I happen to believe in the American system.

There are many things for us to consider. If you study, for example, the permitting procedures of some federal agencies, you will not worry about anyone corrupting the environment. If one more permit procedure is instituted, then

no one will ever be able to do anything, whether good or bad. Some of you folks have been through this already.

All kidding aside, there are a number of things with which we must concern ourselves. Now here comes my remark that will probably get me into trouble with all groups. Hopefully, if it is taken properly, it will get us all on the same track. We are citizens of a machine society. For example, the City of Mobile, one of Alabama's oldest, had about 25,000 residents prior to the Civil War. If we return to a premachine, agrarian state, then about 180,000 folks around here must either move out or starve to death. We do live in a machine society, and we have no other choice. Of course, there are those who point out only the bad aspects of our society. Likewise, there are those who ignore the bad aspects and only recognize the good things. Both are inaccurate. The task of constructive, intelligent citizens is to insure that we make our machine society compatible with our environment. This is it. It is easy to say, but very difficult for us to do. We can choose sides, roll up our sleeves and pound on each other verbally, politically and every other way, which will tear our society to pieces. On the other hand, we can work in a constructive, conciliatory manner to build it better for generations to come.

If you will permit me to indulge in a personal reference, it is my generation who bears the brunt of the Vietnam War, which was terminated last night, according to some news people, by the surrender of Saigon. This is a personal problem for me because some of my dearest friends are over there in that mud forever, a fact which I simply cannot ignore. There is a tremendous lesson in this which is apropos to this sort of meeting. The lesson is that the surrender of Saigon last evening was a product of the division of those people -- Buddhist

against Catholic, city dweller against rural dweller, little villages against the bigger villages, Western against Eastern, educated against the uneducated. These people fought, killed each other, burned their children, and we have participated in this horror of the century, which all came to nothing.

We cannot and will not let this happen to us. As you participate in these discussions and as the Alabama Coastal Area Board begins its operations, let us reflect on this. It is our coast and our state. I am not one of those Southerners who will sit here and wait until Congress enacts something and rams it down our throats. Most of the problems around us in this part of the country today are a result of some folks who sat around and let something be pushed on them. This is our part of the country, and we are going to run it the best we can. We will make mistakes, and we are going to have to pay the price for them. We must get ahead on this thing, do our job, and do it right. This means the folks who run the industries will have to be able to talk constructively, sensibly and positively with the folks who are for nothing but pure air and water. We are going to have to find some middle ground on which we all can meet. If you do not believe there is a middle ground, then you will not recognize it when you find it.

This Coastal Area Board is concerned with some potentially very dangerous business. Quite frankly, the possible power of the Board is awesome. It could, very well, be a new level of government. For those of us in city and county government, another dimension to the Board is that it is principally, or at least potentially, a state agency. If we do not get ourselves together here at the local level and maintain a positive and constructive posture, then we may relinquish our right to make decisions that affect our own lives on our own coast. This would, indeed, be the stupidest thing we could possibly do.

Having said all of that, I want to welcome you to participate in this matter. I want to encourage you to consider it a serious matter to be discussed in a constructive and positive way. You are going to hear many comments today, with different people presenting varying positions. To those who came to present positions which you already have written so that nothing said here today changes a word in your text, let me accuse you of being prescriptive. We must be fair with one another. That is the only way we are going to be able to deal with each other.

I suppose some of you have sensed by now my very deep concern regarding this Coastal Area Board. I can tell you that it concerns me a great deal. I am going to be personally affected. My family is going to be affected. My city is going to be affected. Most of the people I know are going to be affected. I want us all to share a very deep sense of concern about the beginnings and the directions of this Board. Certainly, no one is trying to manipulate or control this Board. Those of us who are members of the Board have inherited a task, which must be accomplished with your support. It is our turn to go to bat. We are not going to throw up our hands and wait for the Federal Government to come down here to make us whatever they would like. The Alabama Coastal Area Board is of, by and for the Alabama coastal area. We need your help in setting it in the right direction. This is going to be an interesting session about an interesting subject. There are some very informed speakers here today to help us all understand better this business of coastal zone management.

In parting I must say that neither I nor you can undo or rewrite history. Hopefully, we will have the good sense to learn and prosper from it. I began by saying we are a machine society. There are many people who work at all sorts

of jobs. They have families which they support. We live in a complex, machine, urban society for the most part. We are going to survive here because we must. So, let us help each other to do it.

KEYNOTE SESSION

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

As we face our problems here in the coastal zone in Alabama, we sometimes get the feeling that we are all alone, our problems are entirely different from those of anyone else, and problems of this type have never been solved. It is rather gratifying to discover other states are having the same problems and are fighting the same battles as we. Of course, this is not true for all that goes on in the coastal states. However, in most instances I feel all states are beginning to see the same kinds of difficulties.

It is reassuring to know we are getting help from the National Office of Coastal Zone Management. These people have had to start from scratch just the same as we have, and they have been very helpful to us in our work. Certainly, their efforts have been beneficial to all of the coastal states.

It gives me a great deal of pleasure to introduce Carol Sondheimer, Southeast Regional Coordinator for the National Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, U. S. Department of Commerce. Ms. Sondheimer will discuss "Coastal Zone Management: The Federal Perspective."

COASTAL ZONE MANAGEMENT: THE FEDERAL PERSPECTIVE

Carol Sondheimer,
Southeast Regional Coordinator, Office of
Coastal Zone Management, National Oceanic
and Atmospheric Administration,
U.S. Department of Commerce

Pressure is building in the coastal areas of the United States. Increasing population and increasing economic activity, crammed into a confined space, mean many conflicts which often result from incompatible uses of land and resources.

The coastal zone is a pressure cooker, precisely, because its bounds are limited. Yet, because it is the interface between land and sea, it is an area which is more complex naturally, socially and economically than the inland portions of the country. In addition, it is an area in which every action or activity seems to involve more levels of government than any other.

There is ample evidence that the public is impatient with the lack of meaningful progress in this area and is demanding much more than a token commitment on the part of its government. The problems of the coastal zone now have too direct an impact on too many people for its issues to be conveniently swept under the rug.

The problems of the coastal zone have an extraordinary range: these include deep-water oil terminals to alleviate the growing energy crisis in contrast to the conservation of shore areas for recreation and protection of living marine resources; commercial versus sports fishing; condominium developments within jumping distance of the breakers as opposed to the preservation of dunes for their inherent physical and aesthetic values; and marinas, housing

developments and industrial sites taking up or impinging upon already scarce and fragile wetlands. Technical and scientific problems include the need for understanding the processes of circulation, stability, waste-receiving capacity, marine productivity and habitat, to mention only a few. Then there are the problems of man's impact on the ecosystem from dredging and filling, engineering and construction, contamination of water, diversion of water and many others. The list is almost endless, but because you live and work in the very area we are talking about, I am sure you have a far better sense than I of what these issues are, their complexity as well as their urgency.

Several features, however, are worthy of special mention. Pollution of the oceans, rivers and other waters is determined largely by what happens in the coastal zone. And yet, in turn, we are greatly dependent on these waters. Most of the species on which commercial or recreational fishing industries depend are dependent on the waters, wetlands and bottoms of the coastal margin. The coastal areas of the world are gateways to the oceans through which must pass most commerce serving man's marine related needs, as well as being some of the most desireable areas in which to live, work and play. The management of man's activities in the coastal zone involves balancing social, economic, political and national security trade-offs of great complexity with local, state, regional, national and international consequences.

The foregoing is from a 1972 report to the President and the Congress by the National Advisory Committee on Oceans and Atmosphere. It was in response to assessments like this one that the Coastal Zone Management Act of 1972, in large measure, was passed.

Clearly, well conceived, carefully prepared programs for wise and balanced use of the nation's coastal zone, which would permit these areas to serve us well economically, while at the same time protecting them for their ecological, cultural, historic and esthetic values, are long overdue. This is the goal of the Coastal Zone Management Act of 1972, legislation which created a partnership between federal and state government. The Act left it to the states, working with their local governments, interested public and affected federal agencies, to develop plans and actions to protect and rationally use lands and waters of the coastal zone. What is involved is a balancing act of sorts, finding the right balance between development and conservation, between recreation and industry, between offshore oil and gas development and the fisheries industry, and between local and national interests.

The National Oceanic and Atmospheric Administration of the Department of Commerce was selected to provide guidance and support to the thirty-four coastal states and territories, including the Great Lakes states, in the development of programs for the management of their coastal zones.

To carry out the federal level of responsibility, the Office of Coastal Zone Management was created within the National Oceanic and Atmospheric Administration (NOAA). Its primary charges are: (1) To help states develop, have approved and implement their management programs by providing both financial and technical support, (2) to bring about a spirit of cooperation and coordination between the states and the numerous federal agencies involved in activities within or affecting the coastal zone, and (3) to help each state in adjusting its state program, if necessary, to meet these needs.

The federal government's role in coastal zone management is largely one of support and coordination, with the burden of success at the state and local levels. Initial federal funding to help states begin their planning effort was made available late in 1974, and the first grants were awarded in the Spring of 1974.

The program is voluntary, but two aspects make it advantageous for a state to participate. One, of course, is money for planning a management program within a three year time frame and then, more importantly, for carrying out the management program. The other incentive for participation is something in the Act called "Federal Consistency." This is a rather new concept and, in effect, what it offers a state is the prospect of some control over federal activities including projects and the granting of licenses and permits in the state's defined coastal management area. After a state program is approved, each federal agency undertaking or supporting activities directly affecting the coastal zone shall do so in a manner that is, to the maximum extent practiceable, consistent with the state's approved management program.

Each area has its own needs, desires and problems where the coastal zone is concerned. In some states the economic potential of the coastal area, consistent with good conservation practices, may be of greater importance to the state as a whole than are other factors. Elsewhere, the people and state governments may be willing to forego increased jobs and incomes in favor of a coastal zone with a greater emphasis on natural values. While

a state may emphasize one aspect or another, the Coastal Zone Management Act is clear in requiring that ecological, cultural, historic and aesthetic values of the coastal area be protected.

The initial planning phase of a management program, as well as the later phase when the planning is put into action, is financed in part by federal matching grants to the states. The Office of Coastal Zone Management, which awards these grants, publishes guidelines for state planners and works with them to assure that the proposed state programs meet the requirements of the Coastal Zone Management Act.

There is no typical state coastal zone management approach that will fit all circumstances. As there are thirty-four different states involved, there will be thirty-four different approaches. However, most states are following similar directions in the initial development of their programs by inventorying and evaluating natural resources and land uses, considering alternative definitions of coastal management boundaries which turns out to be a more complicated process than one would think, determining those land and water uses that are permissible within the defined zone, and designating areas of particular concern and establishing priority uses in those particular areas.

In preparing a management plan state officials will consider both the geography and the function of their coastal zone. Generally, they will find particular geographic areas to be of special concern because of their economic or environmental potential. For example, a section of the coast that performs an important natural function, such as a fish spawning ground, could be protected for its economic potential to the fisheries industry by banning

incompatible uses. Similarly, an area already devoted to heavy industrial or commercial use might be limited as to other uses it could accommodate, if these additional uses would not meet air and water quality requirements. Alternatively, areas appropriate for particular uses, such as oil and gas pipeline corridors, could be designated based on environmental support service considerations.

Determining uses of statewide concern is another consideration for the program managers. How do the people of the state want their coastal zone used? What are their needs? Public hearings are one way to begin this determination, and the Coastal Zone Management Act insists that hearings be held prior to submission of a program for final approval, not only to provide planners with citizen input but also to give the public the opportunity to keep abreast of their state's coastal zone management planning progress. Most states are going further than the public hearing requirement in order to learn the interests of all elements of their society by conducting public opinion polls, creating citizen advisory committees and taking positive steps to keep the public informed and educated so they can understand the issues and respond intelligently. County extension agents, publications created and distributed by a variety of groups and mass media all are being used to carry the coastal zone management story to the people. This meeting today is an example of just the sort of public interest and input that is needed to make the program meaningful to those who will be involved with it.

The needs of the nation, however, cannot be overlooked as a state develops its plan. Some functions of the coastal area are imperative for the welfare of the entire nation, and the Act requires state planners to give serious consider-

ation to the national interest in drawing up their plans. Do national energy needs demand the siting of a power plant or an oil refinery in the state's coastal area? Is it important for national security reasons that a harbor be devoted largely to a Navy base? How much of a national interest contribution is the state's coastal zone already making. What are the plans of adjacent states in this regard. These and other questions must be answered.

Once the mass of required data has been accumulated and digested, the planner must recommend methods to manage the use of the coastal zone in keeping with the findings. This may require the passage of new laws, issuing of new regulations, strengthening of existing legislation, and/or the developing of close coordination with appropriate local, state and federal agencies involved in the coastal area.

Once completed, the proposed management program may be submitted for federal approval if the state wishes and such action seems in the best interests of the state. If approved, the program becomes eligible for additional federal funds to put the program into action, and perhaps more importantly, the state is assured that federal agencies involved in coastal zone activites will conduct these activities in a manner consistent with the state's program once it is approved by the Secretary of Commerce.

Within a year after the Office of Coastal Zone Management announced the availability of planning grants, thirty-one states and territories were participating, and today all of the states and three of four eligible territories are in the process of developing programs. Several states, already well along in their own management programs before the Coastal Zone Management

Act was passed, are close to submitting final programs for approval. However, most states will take close to the three years allowed under the Act for the planning phase.

In conclusion, I think it is fair to note that this is not an easy program in which to participate nor an easy goal to achieve. But one of the things that has impressed me most since taking on this job is the commitment on the part of the people involved in this process in seeing that the job gets done. This includes the people in my office in Washington and other involved federal agencies, particularly the people at work on this program in your state and other states, and the people like yourselves on whom the success of the program ultimately will depend. It is not an easy task, but is one which I personally feel is well worth the effort. I hope you will feel so as well, and that this meeting today will mark the beginning of your input into the development of Alabama's overall coastal zone program.

COASTAL ZONE MANAGEMENT: THE STATE PERSPECTIVE

L. Willis Hyde,
Alabama Development Office

for

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

The recognition of the need for coastal zone management in Alabama is closely related to other developments in coastal Alabama. The evolution of the Alabama Coastal Area Act passed by the 1973 Regular Legislative Session can be traced to April, 1972, when the U.S. Corps of Engineers had its first public meeting in Mobile to consider an offshore deep water port facility. Subsequent meetings were held in Tampa, New Orleans and Galveston. As a result of these meetings, it was apparent that it would be necessary to have an understanding of the physical, social and economic resources as well as the needs of the area to deal with the tremendous impact, both offshore and onshore, of a deep water port facility.

Sixteen federal agencies and departments, including the U.S. Corps of Engineers, Federal Energy Administration, National Oceanic and Atmospheric Administration, Environmental Protection Agency, President's Council of Economic Advisors, transportation and commerce agencies, and other departments were contacted. From these various visits, several bills were introduced into the Alabama House of Representatives and Senate dealing with offshore, deep water, port facilities and the coastal environment. One of the bills was adopted as Act 1274 of the 1973 Regular Session. A major part of the State Act was adopted from the Federal Coastal Zone Management Act of 1972.

Act 1274 established the Alabama Coastal Area Board, composed of eight members, and assigned the staff responsibility to the Alabama Development Office. The Coastal Area Board is charged with the task of directing the development of a comprehensive State coastal area administration program to be compatible with the national policy expressed in the Coastal Zone Management Act of 1972 and in cooperation with local, regional, state and federal interests. The Federal and State Acts both specify that the program should include at least the following components: (a) Identification of the boundaries of the coastal area subject to the jurisdiction of the Coastal Area Board, (b) identification of the State's coastal resources, (c) evaluation of these resources in terms of their quality, quantity, and capability for the use both now and in the future, (d) determination of the present and potential uses and the present and potential conflicts in the uses of each coastal resource, (e) a definition of what shall constitute permissible land and water uses within the coastal area which have a direct and significant impact on the coastal waters, (f) an inventory and designation of areas of particular concern within the coastal area, (g) broad guidelines on priority of uses in particular areas, (h) provision for consideration of the local,regional, State, and National interest involved in the siting of facilities for the development, generation, transmission, and distribution of energy, (i) provision for permitting designated uses of the coastal zone as defined by the program, and (j) adequate provision of public notice, public hearings, and judicial review as provided under Alabama law.

The first work undertaken by the staff of the Alabama Development Office for the Coastal Area Board was the development of an application for federal funds under Section 305 of the Coastal Zone Management Act of 1972. This application

was submitted in May, 1974, and funding for the first year program, in the amount of $150,000 (federal and state), was approved. The coastal area management program was initiated on June 30, 1974. We have just completed and filed an application in the amount of $180,000 for the second year work program.

Very broadly, the three year work program is being undertaken in seven major activity areas: (1) Program administration, (2) program coordination, (3) data acquisition and evaluation, (4) policy development, (5) public participation, (6) legal analyses and legislative drafting, and (7) management plan preparation. The various work elements are scheduled so that the three-year coastal zone management program will conclude in time to present a comprehensive coastal zone management plan to the Governor for approval in the spring of 1977. Any necessary legislative revisions could then be considered in the regular legislative session in 1977.

The first year coastal area work effort, which is now in the fourth quarter, is attempting to bring together the many varied elements that must be considered in a comprehensive program. One of the major tasks has been to collect, catalogue, and evaluate previous work by federal, state, regional and local governmental agencies, as well as private studies. Specific research into technical problems has been undertaken and the results of these and other studies will enable the Coastal Area Board to formulate policies for the proper management of coastal resources.

In the past two years a considerable amount of study has been undertaken by the South Alabama Regional Planning Commission, Alabama Marine Environmental Sciences Consortium, Alabama Department of Conservation and Natural Resources, Geological Survey of Alabama and several Alabama universities. Efforts of the

coastal zone management staff are directed toward combining data to determine, identify and inventory problems and resources in the coastal area and to indicate which areas of the coast are best able to withstand demands upon its resources.

Another part of the program has been to acquaint the public with the goals and the program of the Alabama Development Office and the Coastal Area Board and to solicit public input into the program. The Governor's Conference on Coastal Zone Management at Gulf Shores in October, 1974, was our first effort along these lines. This meeting, along with others being planned for later this year, was intended to put forth ideas that will contribute to a better understanding of coastal zone problems and possible solutions and to solicit input from the local citizens. One of the major concerns of coastal zone management must be the consideration of local involvement in the decision making. About ten percent of the total population of the State live within this area. We must determine the ability of the coastal resources to sustain this high concentration of people without undue environmental consequences.

The concept of coastal zone management, as envisioned nationally and on the state level, is a "people's effort." Local leaders must be involved and must understand the Coastal Area Act and the rules and regulations. The program is designed to provide a balance between the varied interests of the coastal zone, not to exclude or to encourage one interest at the expense of others. The Coastal Area Board is aware that to have a workable program that leads to a viable plan, we must have input by local people to deal with local problems. We all need to become involved in learning more about coastal zone management so that we can offer effective input in formulating Alabama's Coastal Zone Management Plan. We hope that public information programs such as this will serve and inform you

of our effort and give us the feeling of the public for input into our plan development.

AN OVERVIEW OF THE IMPORTANCE OF ALABAMA'S COASTAL REGION

Bruce W. Mattox, Ph. D.
Director, Mississippi-Alabama Sea Grant Consortium

For this session I have been asked to talk on the importance of Alabama's coastal zone, which certainly encompasses economics. Rather than talk strictly on economics in professorial terms, I would like to present some basic facts on the coastal zone from the standpoint that it is a gateway to the Gulf of Mexico and to the oceans of the world.

The volume of the world's water supply is estimated to be about 328 million cubic miles. The volume of all land above sea level is only one-eighteenth of the volume of the oceans. If the solid earth were perfectly smooth, level and round, the ocean would cover it to a depth of 12,000 feet. Ninety-seven percent of the earth's water supply is ocean water, approximately 317 million cubic miles. A little more than two percent of that is frozen in the ice caps and glaciers. All fresh and salt lakes, inland seas, rivers and streams make up less than one percent of the world's water. An average of thirty inches of precipitation falls onto the earth annually, which is about 1430 cubic miles of water. Some 1000 cubic miles of this is returned to the atmosphere. About 390 cubic miles runs back to the sea, streams and rivers. Most of the rest goes directly to the sea from ground water sources.

As far as the geology of the earth is concerned, the globe is about 197 million square miles. The land area is approximately twenty-nine percent of this, and the oceans compose the other seventy-one percent. The Gulf of Mexico accounts for 582,100 square miles of the total of all the water area of the earth. You can get an idea from this that the earth really is a water planet. Most of it is in the

ocean, which is the ultimate dumping ground for everything from the land area and from the atmosphere.

The volume of the earth is 260 billion cubic miles. By these boring statistics I am trying to show the difference between the water area and the land area. Land comprises twenty-three million cubic miles, while the ocean contains 330 million cubic miles. The average depth of the ocean is 12,431 feet. On the other hand, the average height of the land is only 2,755 feet. The greatest ocean depths are approximately 36,198 feet and the highest land point is 29,000 feet.

As far as our particular coastal area and the streams and rivers that flow into it is concerned, the main factor to consider is the Mississippi River. This giant river discharges 133 cubic miles of water into the Gulf of Mexico each year. The Mississippi River drains about forty percent of the continental United States.

The oceans cover seventy-one percent of the globe and yield more than fifty-seven million tons of food each year. These foods contain as much protein as a herd of two hundred million cattle. An annual seafood harvest of 200 million tons would provide enough protein for the six to seven billion people expected to be on earth by the turn of the century. With the news the way it has been lately, we hear a lot about food shortages in various parts of the world. It would only take a seafood harvest of much less than the 200 million tons annually to provide enough protein for all of those people.

Let us now move from the world's oceans to the Gulf of Mexico and some facts about the Gulf coastal area. Five coastal states--Alabama, Florida, Louisiana, Mississippi and Texas-- have 17,141 miles of tidal shoreland comprising eighteen percent of the continental United States. Within these states are thirty-three bay systems averaging 550 square miles in area. The important part of this is that each

is ranged by vast concentrations of human population. The Gulf of Mexico probably contains more onshore and offshore observations facilities than any other coastal segment of the continental United States.

As was mentioned earlier, we have to be concerned about pollution. Much concern has been expressed by such well-known people as Jacques Cousteau over the deplorable state of the world's oceans. Cousteau recently remarked that the oceans are dying because of pollution. The coastal zone is the land and sea interface where this pollution reaches the oceans.

The areas of interest in coastal zone management in Alabama are fisheries, industry, agriculture, forestry, tourism and recreation, transportation and navigation, pollution, residential development, population growth, historical aspects of the coast, aesthetics, and the mineral resources. Most have heard just recently that Alabama was one of the three states that increased its production of oil and gas last year. Some of the most significant finds of oil and gas in the United States in the past year have been within twenty-five miles of Mobile.

In the Alabama coastal zone we have 351.7 linear miles of coastline. This is composed of 305.3 miles of estuaries and shoreline and 46.4 miles of sand or swimming beach. To break it down another way, we have 180.6 miles of beach, 124.7 miles of nonbeach and 46.4 miles of swimming type beach to make a total of 351.7 linear miles of coastline.

Concerning fisheries statistics, in 1972 the dockside value was $17.7 million with a retail value of $70.8 million. Eighty-three percent of that value was for shrimp. The dockside shrimp value in 1972 was $14.7 million with a retail value of $58.8 million. It is important to note that 93.7 percent of all commercial seafood species spend a portion of their life cycle in the coastal marshes. Apply

that figure to the value, and we see that $66.4 million of Alabama seafood production is directly dependent on the estuaries of this state.

The 1972 population of what we might consider the Alabama coastal zone was 386,200 people. The projected coastal zone population is 434,000 people in 1980. This is the fastest growing area in the State, and more than seventy percent of the residents of Alabama's two coastal counties live within ten miles of the coastline. We seem to all want to be close to the ocean.

In conjunction with what Ms. Sondheimer said earlier, I would like to read the introduction to the Coastal Zone Management Proposal that was put together in Alabama and sent to the Federal Government. It summarizes the thinking and gives you an overview of what the coast of Alabama is really about:

> The coastal area of Alabama is a valuable and, in many respects, irreplaceable resource of the state, region and nation.
>
> The Mobile Bay and its vast river system is the water gateway to the industrial and commercial complex in the Birmingham area. With the completion of the Tennessee-Tombigbee Waterway, which is now under construction, the Port of Mobile will be directly connected by water transportation with the industrial heartland of the nation. Therefore, the proper development of the Alabama coast is of national importance.
>
> The coastal bays of Alabama are part of a system of shallow water estuaries which are the nurseries and rearing grounds for most species of finfish important to both commercial and sport fishermen along the Gulf Coast of the United States. About two-thirds of the fish landed by American fishermen spend a vital part of their lives in an estuary. The tidal wetlands in Alabama have an important role in promoting recreational activities and preventing flood damage.
>
> The Gulf of Mexico, Mobile Bay and their surroundings are prime attractions for persons seeking water-based recreation. In recent years the tourist oriented businesses have expanded rapidly, and the expansion is expected to continue.
>
> Many industries, early residences, and other places of historical and cultural significance are closely associated with the coastal area because the tidal streams and bays served as transportation routes for the early settlers. Historically, the development of municipalities has been closely linked to one or more coastal assets, such as water transportation, water-based recreation, and water-based industry. Industrial development

> continues to thrive in the coastal area. With the proposed development of a deep water port facility, industrial development will likely increase rapidly.
>
> The coastal area contains extensive open spaces including beaches, tidal marshes and woodlands bordering the Gulf, the Bay, and Mobile River and the River delta. Wetlands in the coastal area are mostly saline and are characterized by low and level terrain, permanent or frequent submersion, and extensive vegetation. The coastal wetlands are associated with an estuary-land or ocean-land interface formed as the result of coastal submergence processes.

I believe this is a fairly concise overview of what the coast of Alabama really contains.

I urge you to make your input into coastal zone management planning, but remember that there are a number of diverse interests. There are certain dangers in not accommodating all, or as many as possible, of these interests. In coastal zone management, we must try to cooperate and accommodate as many uses of the coastal zone as possible. If everyone approaches it that way, we can preserve and enhance the quality of life in the coastal area of Alabama.

COASTAL ZONE MANAGEMENT: THE LOCAL PERSPECTIVE

The Honorable Bay Haas
Commissioner, Mobile County Commission;
Member, Alabama Coastal Area Board

Instead of discussing the Alabama Coastal Area Board in relation to the Alabama Development Office on Alabama's coastal zone management effort, I would like to speak to you about the local perspectives of the Coastal Area Board and coastal zone management. The local perspective of coastal zone management is quite important to us, because we live in the coastal area. In fact, almost all of the people in this room today live in the coastal zone. The impacts of this Coastal Area Law and the actions of this Board are not abstract ideas to us, but are gut level problems. We live in a situation where we will feel the immediate effects of anything that this Board does.

We enjoy all of the advantages of living in the coastal area, playing on the beaches and being close to the fishing and seafood. We also recognize storms and flooding, as well as other problems involved in living here. The point is that it is a very important, very realistic and very complete problem for us to deal with. We cannot isolate one idea or one particular situation and ignore the rest. Coastal zone management is very much a local problem, needs to be recognized as a local problem and must be resolved in a local manner. This is not said to reflect upon the State in any way. We could not ask for a more cooperative attitude and spirit than we have received from Red Bamberg and Willis Hyde in establishing this Board and setting it into operation.

Realistically, we need more local representation on the Coastal Area Board. There are now eight members of this Board, which includes three local officials. Quite honestly, I believe that it is essential that the local people have a greater

representation, because coastal zone management has such an impact on our lives. I am hopeful that legislation can be introduced in the State Legislature to provide for this.

We must keep in mind just what this Coastal Area Board is. Looking at government from the citizens' level, there is the city and county government which provide services. We have a flood insurance program that is involved in some land use management in this area. The Corps of Engineers has some control over development in this area. The State of Alabama, through the Water Improvement Commission and other agencies, has control over this area. The Environmental Protection Agency is quite involved. In fact, the Coastal Area Board should be added to this list. It seems the list of governmental agencies involved in the coastal area is endless.

It is important not to view coastal zone management as a monster or an awesome power that might destroy our way of life. The Board has some real limitations which should be focused into perspective. The Coastal Area Law states that this Board has the power to regulate certain activities. These regulated activities include: dredging, excavating or removing of soil, mud, sand, gravel, flora, fauna or aggregate of any kind from any coastal area; dumping, filling, or depositing of any soils, stones, sand, gravel, mud or aggregate of any kind or garbage, either directly or indirectly, on or in any coastal areas; killing or materially damaging any flora or fauna on or in any coastal area, and the creation on coastal areas of any structures which materially affect the ebb and flow of the tide. Initially, that sounds quite encompassing. When I first read it, I thought this thing sounds pretty frightening. However, if you read further into the Law, you will find things to which it does not apply,

such as the exercise of riparian rights by the owner of the riparian rights, provided that the construction and maintenance of piers, boathouses and similar structures are constructed on pilings that present a reasonably unobstructed ebb and flow of the tide. Also, the riparian owner may reasonably alter the wetland at the end of marsh grass abutting his property. It also does not apply to work for the maintenance, repair, renewal, improvement or alteration of any structure, if the work affects only the interior or the color of the structure or the decoration of the exterior of the structure. Of course, there are many other limitations that apply to the Board and which will not be addressed by the Board. Basically, the Board can deny some developmental activities, primarily dredging. However, this is not a single-step process. It is only one of many involved steps.

I believe it is very important for those of us living here in the coastal area to realize that if we are opposed to everything, then there is no way for us to win. If we ignore this Board, then we also cannot win. From the local level, our job is going to be one of resolving conflicts. We are going to be faced with resolving conflicts between the land owner, land developer and ecologists, between the petroleum and seafood industries, and between heavy industry and tourism. From the local level we are going to have to face these things as a total problem of our community and our region. We must see to it that these conflicts are resolved. In the final action, the local people will feel the greatest impact of the Coastal Area Board. We are going to have to resolve the conflicts. In order to do this we are going to have to approach this thing with a spirit of cooperation and a maintenance of balance.

In summary, there are a few basic points I would like to emphasize. Because of its tremendous local impact, it is imperative that we have additional local representation on the Board. We must maintain a reasonable approach to these problems, view them in a positive manner, and try to resolve these conflicts. We must remain positive and involved.

CLOSING REMARKS BY DR. UPHAM

I believe you can see from some of the remarks made today just how seriously the Coastal Area Board takes its job. It has to be serious. I have been involved in coastal zone management since 1969. Actually, as far as the national scene is concerned, it did not start until 1972. This certainly makes me an old-timer. I want to say that I am very much pleased with the way the members of the Alabama Coastal Area Board are growing and looking at the problems we have facing us and the methods of approaching these problems. It is certainly pleasing to me, and I feel we are doing a very fine job.

I would like to mention here that one of the purposes of today's meeting is to serve as an introduction for a future workshop series which will be held beginning in September of this year. These workshops will be held to encourage coastal leaders to make recommendations regarding specific provisional policy goals and policy development for the management of Alabama's coastal area.

At this time I would like to welcome any questions you may have for our speakers. Please fill out one of the question cards and pass it to the center aisle where they will be collected. Following the question and answer period, there will be some time reserved for statements of the public concerning coastal zone management. Anyone wishing to make a statement may do so. Due to the large number of attendees and the short amount of time, we ask that each of you limit your remarks to three minutes, thereby allowing everyone an opportunity to speak.

QUESTIONS FROM THE PUBLIC

QUESTION 1: ALBERT TULLY

Can coastal zone management accomplish one-step decisions in coordination between various state and federal agencies? How?

ANSWER: CAROL SONDHEIMER

That is like asking for the answer to the whole program right at the beginning. I think it is fair to say a hope of those of us involved at the federal level is, in fact, that one of the outcomes of the development of a coastal zone management program within a state would be to develop a mechanism for the coordination of federal permits, as well as state and local permits. A number of our sister federal agencies would view this as a positive development.

The question of how one accomplishes this is not an easy one to answer. It depends on various situations within each state. It would seem to me (I am not implying that this should be a fact in Alabama.) that the Coastal Area Board might well serve as that mechanism for the coordination of various permitting procedures. It is also conceivable that something like the A-95 review process, that all federally funded activities must undergo, is another mechanism that can be used for coordinating various permit activities.

QUESTION 2: CLARA STONE COLLINS

Has any coastal area had a public subscription fund to match federal funds in purchasing "quiet lands"?

ANSWER: CAROL SONDHEIMER

I am not sure I understand the question so the answer is I do not know. Of course, that does not mean the answer is no. I just do not know the answer.

QUESTION 3: MARISA GARDNER

How can we possibly absorb further chemical pollution, keep our marshland for the fisheries and allow oil to be explored in submerged lands?

ANSWER: CAROL SONDHEIMER

Again, I think that is one of the nitty-gritty questions. I will not presume to give the answer because I do not have the expertise nor the knowledge of the specifics of Alabama's particular situation. I would say that this is one of the types of problems that the coastal zone program is designed to address, to find the accommodations between the various competing uses and to find the sort of regulations that will permit economic uses of the coastline and, in turn, allow for the preservation of important resources. The answers to this sort of question would be the result of the planning process that is now going on.

QUESTION 4: MARY BEECH

There are instances in Baldwin County where land has been stripped of woodlands for an extra acre of tillable soil, but adds an enormous amount of silt and mud to the rivers, to say nothing of the insecticides. Are any farmers' organizations involved in coastal zone management planning? Specifically, are you involved with the Department of Soil Conservation?

ANSWER: WILLIS HYDE

One of the things that we have been working on in this first year is to identify all of those agencies that are involved and have an interest in the coastal planning process. We have been, and will continue to be, working with the Department of Soil Conservation, both state and federal. In this coming year, one of the things that we will be working on is preparing basic soil maps and other soil related data for input into our coastal planning program.

QUESTION 5: JOHN F. GRAY

What were the areas of concern mentioned in the Coastal Area Act?

ANSWER: WILLIS HYDE

If you would refer to Alabama Law, Act No. 1274, Section 6, these areas of concern are: (a) identification of the boundaries of the Coastal Area subject to the program; (b) identification of all of the state's coastal resources; (c) evaluation of these resources in terms of their quality, quantity, and capability for the use both now and in the future; (d) determination of the present and potential uses and the present and potential conflicts in the uses of each coastal resource; (e) a definition of what shall constitute permissible land and water uses within the coastal area which have a direct and significant impact on the coastal waters; (f) an inventory and designation of areas of particular concern within the coastal area; (g) broad guidelines on priority of uses in particular areas; (h) provision for adequate consideration of the local, regional, state and national interest involved in the siting of facilities for the development, generation, transmission and distribution of energy, adequate transportation facilities and other public services necessary to meet requirements which are other then local in nature; (i) provision for consideration of whether a proposed activity of an applicant for a federal license or permit complies with the state's coastal area program and for the issuance of notice to any concerned federal agency as to whether the state concurs with or objects to the proposed activity; and (j) adequate provision for public notice, public hearings, and judicial review as provided for under Alabama law. These are listed in the Act and this is a direct duplication of wording in the Federal Coastal Zone Management Act of 1972.

QUESTION 6: VERDA HORNE

Are copies of the first and second grant applications available?

ANSWER: WILLIS HYDE

If I may take the second first, the answer to that is no because I have only three copies which I am about to give to Ms. Sondheimer after we finish this meeting. They will be available, however, in executive summary form at a later date. Essentially, the first year application is summarized in the publication that was available here today entitled "Alabama's Coastal Area Program." This outlines the first year work program, as well as the three year work program. I think the supply has probably been exhausted. If any others would like to have a copy of that, let me know and I will make arrangements to get you a copy. The second year program will be outlined in somewhat the same manner.

QUESTION 7:

When will the definition of the coastal zone be completed? Will the public be asked to help in this decision?

ANSWER: DR. SIDNEY UPHAM

I do not know when it will be complete, but I hope it will be in the very near future. The public has been asked already, and anything that we can get from the public will be welcomed.

QUESTION 8: HELEN STAFFORD

Since the rivers affect the coast, how much of the river development will be managed under this plan?

ANSWER: DR. SIDNEY UPHAM

I believe this type of situation, when some type of boundary is set, will have

to be managed in cooperation with other state and federal agencies and groups who do have control over the inland rivers.

QUESTION 9: MRS. JOHN WALDING

Will the Board utilize the hundreds of citizens in organizations represented here to help pass legislation and influence the public on specific projects?

ANSWER: DR. SIDNEY UPHAM

They certainly will.

QUESTION 10: FORREST LITTLE

Would not the Coastal Area Board be strengthened by including nonelected or appointed members from the communities?

ANSWER: DR. SIDNEY UPHAM

I believe Bay Haas has already touched on this. This is something we are viewing, and I hope we can implement it.

QUESTION 11: VERDA HORNE

In what form and from what source have you obtained an inventory of State lands?

ANSWER: DR. SIDNEY UPHAM

Of course, part of this is still going on. This inventory is being compiled mainly by the South Alabama Regional Planning Commission and from what work has been done by the Alabama Marine Environmental Sciences Consortium in a number of different areas.

QUESTION 12: DIXON MEYERS

Can a state or county give land as its share of the 50-50 matching funds?

ANSWER: DR. SIDNEY UPHAM

I believe so. This is inkind matching. Ms. Sondheimer says that this has been changed to 2/3-1/3.

QUESTION 13: LINWOOD L. LEWIS

Are there any laws now in existence or are any bills before the State Legislature for the preservation of the sand dunes along the coast and on the offshore islands?

ANSWER: DR. SIDNEY UPHAM

I do not believe there are, and this is a problem that will be coming before the Coastal Area Board in the near future.

QUESTION 14: SHIRLEY SLAY

What is the inland boundary of the coastal zone?

ANSWER: DR. SIDNEY UPHAM

It has not been set yet.

QUESTION 15: ALBERT TULLY

Is some legislative reform needed to simplify the decision making process? What reforms seem best?

ANSWER: DR. SIDNEY UPHAM

There are a few things that we would like to change in the Coastal Area Act of Alabama. This is being accomplished, I believe.

QUESTION 16: EDNA SINCLAIR

Who appointed the Coastal Area Board members?

ANSWER: DR. SIDNEY UPHAM

The Coastal Area Board was appointed by the State Legislature. The Coastal Area Act states that the Board shall consist of the Director of the Alabama Development Office, Director of the Alabama Department of Conservation and Natural Resources, Director of the Alabama State Docks, member of the Mobile City Commission, member of the Baldwin County Commission, member of the Mobile County Commission, State Geologist, and Director of the Alabama Marine Environmental Sciences Consortium.

QUESTION 17: FREDDY COCKRELL

What portion of Mobile County is included in the coastal zone?

ANSWER: DR. SIDNEY UPHAM

This has not been established yet. As has been stated, we are working on this right now.

STATEMENTS OF THE PUBLIC

MRS. RUTH PEROT

The Mobile League of Women Voters, a nonpartisan, public interest organization committed to citizen participation in government at all levels, is concerned that public information regarding the management of the coastal zone is virtually nonexistent.

Although the major decisions regarding the National Coastal Zone Management Act, Public Law 92-583, and the 1973 State law which implemented that law locally, as many of the speakers have pointed out, are almost entirely the responsibility of the citizens of Mobile and their elected and appointed representatives, little attempt has been made to inform the public of the issues involved. You have heard almost everyone here say we do need more local public participation, but we do not know anything about it. I am an editor of a weekly newspaper. I received an invitation to come today, and I had never heard of this. I am sure this goes on all over.

Both the press and the broadcast media must take the major responsibility for this situation, but the League members who have tried to obtain necessary information have found it very hard, indeed. This gathering is an important attempt to right that condition, but it must be only a beginning. We urge the Board to develop public information preceding Board decisions and to encourage and assist those who are trying to interpret for the citizens the deficiencies, as well as the advantages, of the state law and the national law with which it must be coordinated.

MRS. MYRT JONES

I am Myrt Jones, President of the Mobile Bay Audobon Society, and I have been attending some of these meetings the Board has had in Mobile. I will agree with the lady that we do not get proper notification, but I believe you can blame this on the local press and television stations. If you get on the mailing list, Mr. Hyde will keep you informed.

I attended a Corps' hearing on erosion control problems and possible solutions regarding the western shore of Mobile County about three weeks ago. There was a general discussion of ways to possibly correct the problem. One possible solution was the depositing of spoils dredged from the ship channel onto the shore, but concern was voiced about the possible covering of the wetlands and marshes.

I would like to mention Drs. Odum, Gosselink and Pope's report, "Value of the Tidal Marsh." A conservative estimate of $83,000-$100,000 per acre was given based on the monetary value of identifiable, present commercial and recreational uses such as the value of fishery production; aquaculture potential; the estuaries important function in tertiary waste treatment; its important role in the global cycle of nitrogen and sulfur; its function as a buffer against storms; its prevention of siltation of harbors and inlets; and its serving as a habitat for migratory birds and fur-bearing animals.

Sherwood Gagliana of Louisiana State University also did a report on the damage done to the marshes of Louisiana because of natural and man-made or induced processes, such as shoreline erosion, canal dredging, flood control measures and navigational improvements. Mineral extraction has had its own brand of destructive effects on the marshes. Barge and pipeline canals are needed to reach these mineral deposits and their construction has resulted in

run-off, tidal exchanges and saltwater intrusion. These processes have come to represent the loss of land at the phenomenal rate of $16\frac{1}{2}$ square miles per year. During the past thirty years, the loss is found to be almost five hundred square miles. The mineral extraction industry is responsible for sixty-five percent of the total dredging; drainage canals, twenty-one percent; and navigation canals, eleven percent. Ignorance largely accounts for mistakes of the past.

The reason I mention these two reports is that it looks like we are going the same way of Louisiana. Yesterday, Chevron requested a permit through the U.S. Corps of Engineers and the Alabama Water Improvement Commission to dredge one of these canals so they can get a drilling rig placed in our delta marshland. This should be denied.

You have heard mention of a possible superport off our coast. Because of the serious problems associated with these ports, both offshore and onshore, this should be opposed. If you do not know anything about these ports, then read Supertankers by Noel Mostert.

Other issues that should concern this Coastal Area Board and the local citizens is Mobile's request to drill a wildcat well in the Mobile Bay, maintenance dredging of Mobile Harbor, deposition of spoils in wetlands, Theodore Channel dredging operation and the influx of petrochemical and other pollution industries within our coastal area.

All of you must realize that if the Coastal Area Board members are in awe of the meaning of coastal zone management, then citizens should see that the only way to be effective in having a voice in the decisions of this Board is to become involved, get on their mailing list, read the material and attend their meetings.

ALICIA LINZEY

I would like to point out a few things from a biologist's point of view. First, I would like to concur with Mr. Greenough, who is no longer here, that extreme polarization of sides in this problem really is only going to prevent or delay the jobs that face all of us. While we are arguing, some of these marshlands that may be worthy of preservation are continuing to degrade.

Environmentalists are not at all antidevelopment, but we are for planning. Alabama has a very small coastline and this is going to intensify the competition for its use. According to our Chamber of Commerce, however, tourism is our number one industry. There may be some disagreement with this, but this is what they say. We certainly should keep this in mind when we plan for what we use our coastal zone. We should also remind ourselves that despite the vastness of the oceans, which was pointed out by Dr. Mattox, the majority of ocean life is concentrated on the continental shelves and in the estuaries that surround our continents.

I would take issue with the notion that the importance of the coastal zone can be expressed purely in economic terms. This is despite the fact that many of the factors that we are taking into consideration here have a real economic value to us. It is simply very difficult to quantify this in some instances.

The choices are not black and white here, as I am sure you realize after hearing the various speakers this morning. If you read Victor Roselle and his columns, he would have you believe the choices that we are facing are black and white, that we have to choose between fish and people and we have to choose between birds and people. This is just not the reality of the situation. What we are talking about here is a healthy environment for all of us. What is good for fishing and wildlife, believe it or not, is good for people.

ALTON B. HANKINS

I am Sonny Hankins, a member of the Baldwin County Commission, and I would like to make two or three comments for the record. First of all, I would like to take issue with the Commissioner from the City of Mobile. This is not a no man's land. This is Baldwin County and we're proud of it. It is just as much a part of us as Courthouse Square is in Bay Minette. Seriously speaking, we have the Coastal Area Board, and there is not much we can do about that. I am not one to want to give up the ship just because we think someone is about to take us over. I cannot see any difference in state bureaucrats and federal bureaucrats. They are all bureaucrats to me, looking from the standpoint of local government.

We have approximately 250 to 300 miles of shoreline in Baldwin County. If you look at a listing of the Coastal Area Board members, you will see that Baldwin County has only one member out of eight. About eighty percent of what we are going to decide directly affects our county. I feel like this is not fair, and I think all of you will agree with me. I would ask the people here to write your State Senator and State Representatives to vote for a bill to remedy this situation when it is introduced. This will allow local people, and I mean Baldwin and Mobile County folks, to have the authority to say what we want to do down here. When we do that, then democracy is at work.

MARISA GARDNER

The fact that we are in attendance at this meeting proves to me that we are interested in the future of the area. It tells me that we are good citizens who cherish our democratic values, that our intent is to get informed as to what type of actions we can take to save our great State of Alabama.

I speak for many people whom I know to be concerned with the too rapid changes brought on in the past few years. We are a proud and independent people with a deep sense of community pride. Our strong sense of personal values is transmitted by closely knit family units.

To us religion and patriotism is very important. However, we have respect for the living things which surround us. We love animal and plant life, the land, rivers, rain and clean air. We now tend to question the aspects of sudden changes. We ask whether it is undertaken for its own sake or for a worthwhile reason.

After being very patient for many years, we have now come to the realization that we are actually being taken advantage of because of our resources. We realize that the time has come for us to question the cost which we will incur in order to sustain these so-called great chemical complexes.

We know that great debates are going on regarding rate increases for the Alabama Power Company. It is only fair to assume that once you invite all these industries into the area, they will, in turn, need the services which are mainly supported by the average working man. These same industries need roads. Some of them are ruining the present roads as clearly indicated by the newspapers. The Mobile County Commission is spending up to $700,000 for a road off of Highway 43 to serve the Dow Chemical complex. Now, mind you, the Commissioners have stated that if Dow does not build, the company will pay for the road.

I am going to speak briefly on Dow Chemical Company, because I feel this one chemical plant is the most dangerous plant which has been announced to date. Dow says they will manufacture caprolactam, which is a highly flammable vapor used to make nylon. A similar plant blew up in England on June 1, 1974, with twenty-nine killed and forty injured. The whole complex was destroyed, as well

as one hundred homes. The British Government ordered an investigation regarding the siting of these plants in England.

Dow's methylcellulose plant explosion in Germany in April, 1974, could hardly come at a worse time for the company. The blast at the town of Stade occurred early in the month shortly before government authorities were to make their decision on a long delayed permit for Dow to build a second chlorine plant there. Ironically, the plant's late 1973 start up was ushered in by a governmental permit that included a record high of 222 operating instructions, most of them pertaining to control of dust explosions.

The April 21 edition of the Mobile Press Register carried this story. Dow Chemical Company gave up its lease to Rockwell International last June after operating the plant for twelve years. During the period of Dow's lease the plant came under increasing criticism for lack of safety standards. In 1969 the plant was hit by a $50 million fire.

"Plastic Bottle Use Granted Despite Environmental Harm, Cost," was headlined April 25. Dow has expressed an interest in manufacturing these throw away plastic pop and beer bottles. The Food and Drug Administration is granting the nation's corporate giants permission to produce billions of throw aways which it concedes will foul the landscape, consume precious energy and possibly boost consumer prices. We are against plastic bottles.

Now, publically, Dow has put off building. However, they are proceeding with their plans to build, nevertheless. Public Notice 75-13 went out recently from the U.S. Army Corps of Engineers regarding the dredging of over 500,000 cubic yards of sandy soil at the Tombigbee River and the building of a barge dock 220 feet wide by 850 feet long. We need letters to the District Engineer, P.O. Box 2288, Mobile, asking for a public hearing on such a huge undertaking.

Some of you might say, why should I do anything about Dow, after all it is not in downtown Mobile? If you read the National Enquirer of April 1, 1975, you see an article stating that as much as eighty-five percent of all cancer is caused by man-made products introduced into the environment. Dr. Irving Selikoff, who discovered the link between asbestos and cancer says that these environmental cancers are like time bombs. Cancers we are seeing now stem from cancer producing agents introduced into the victim's environment twenty, thirty, or even forty years ago. This means that right now we are determining the health of our children in the year 2000.

Dr. Selikoff, head of the environmental health unit at New York's Mount Sinai Hospital, and his associates revealed that the earth's soil, water and even the air are full of traces of cancer causing plastics, asbestos, aerosol spray chemicals, smoke, talcum powder and dozens of other chemical pollutants. The list is growing every year.

"Today, one in five Americans dies of cancer," declared Dr. Arthur Langer, also of Mt. Sinai. "Most of the cancers result from the chemicals we need to support our high standard of living. Talc is also a suspected cancer causing agent, yet we sprinkle it liberally all over our children and ourselves," he said. In Japan, which has the highest incidence of gastrointestinál cancer in the world, there is also the highest consumption of rice which is polished with the talc to make it look white. Dr. Langer said vinyl chloride, used for years as an aerosol propellant, is now in the atmosphere and can cause cancer.

We are under the opinion that politics is our biggest problem of all, because it insists on industrial development at any cost, and the cost will be growing all the time. Alabama was number one in the United States in the sales of land to

industries in 1974. U.S. News and World Reports and the Christian Science Monitor have selected Mobile as one of the few metropolitan areas where the economy is holding up and moving ahead despite the recession. Allied Van Lines designated Alabama as a magnet state considering that fifty-five percent of its total Allied relocation activity consisted of families moving into the state.

Under normal circumstances, we would say, "Great! Wonderful!" However, we must look at the total picture and try to describe what lies under this so-called great fortune. We know we are being taken over by chemical industries, and it takes manpower to build them. But after they are up, what do we have?

We are afraid we are going to have environmental problems the likes of which we never knew existed. We will have automated companies spewing poisons into the air and water and very few job opportunities for the people of this state, since these companies are bringing a good many people to work here. We believe a folly is being committed in the name of jobs. Surely, people who already have employment and their families should not be subjected to poisons which the Environmental Protection Agency has on their list as harmful to health.

Those who are rejoicing now may have to cry in the end, because the web of nature is very delicate. Somehow nature always finds its way to punish those of us who tread a thin line.

Do not be misled by those who tell you that we can have all the added chemical companies, because we have the strongest antipollution laws found anywhere. With the energy crisis, these laws will one day be rescinded, and then we will find ourselves in a terrible predicament.

We must repeal the Wallace-Cater Act which made it easy for some to buy extensive land holdings at bottom prices and then resell them to industry at inflated prices. We do not need industrial development boards that do not have to answer for their actions to anyone, not even the Governor. Now is the time for us concerned citizens to act in behalf of those innocent individuals, who will have to bear the consequences for the actions of today. We desperately need a land use bill which will protect the cities from further chemical pollution. Write your Legislators in Washington and at the local level to save our citizens. Please join with us in prayer so that our health and our communities may be spared.

CURTIS SUMRALL

Ladies and gentlemen, I am Teddy Sumrall, an Industrial Representative with the Alabama Development Office. I would like to respond briefly to the last speaker, who advocated repeal of the Wallace-Cater Act for financing a new industry. While the Wallace-Cater Act has, of course, been very helpful many times in establishing new industry, jobs, and incomes, it has not always been used to help establish industry if an industry can provide its own cash. So, repealing those two acts would not necessarily completely stop the economic development of south Alabama. True, however, it would cripple or retard the economic development.

I believe the purpose of this meeting today is to find a medium between this extreme and the other extreme of destroying the coastal area. If we limit our industrial development to its present state and allow no more industrial development, then how do future generations feed, clothe and medicine themselves based on where we are and what we are doing now? Do we simply stop progress

in the economic field or do we reach a happy medium and have what we are aiming for and a good economy?

VERDA HORNE

I am delighted to find out that we were working for estuarine protection in south Alabama before Dr. Upham was involved, for it was in 1969 that the League of Women Voters of the United States was the recipient of grants to conduct seminars on the problems of estuarine and coastal resources. Our first seminar was held in Gulf Reef, Florida, for the coastal zone states, which was certainly well attended. Before that was activated, the League published a small pamphlet called "Where Rivers Meet the Sea", and it is still being sold by the thousands. I urge you to get a copy.

I was going to make some further statements, and did not know that we were limited as far as time was concerned. Therefore, I want to express a couple of concerns. In the first place, I agree heartily with this symposium. I hope it is to be repeated many times in the coastal area. I think it is absolutely necessary. What we need to know, however, is that when someone tells you that we are choosing between environment and production, that is not quite true. No oil company or anyone produced one single gallon of gasoline or oil. They collected it. It is not being made anymore, and it is a limited resource. It will be gone within a foreseeable time. What we need to do is decide how much of it we will collect or allow to be collected, what it will be used for, and what we are going to do when it is gone. I have had it, you know, because I have lived when it was a lush resource. You will not be so lucky, because I preceive that most of you are much younger than I. Your children, my children and our grandchildren

may be facing the results of our profligate use of natural resources. That goes for a great many other mineral resources, as well.

In the meantime, we are succeeding in destroying or threatening the one source of energy in this world. Remember that food and fuel come from the same source. We might now be destroying the ability of a plant cell to manufacture the organic substances we live on and burn.

Instead of talking from the particular to the general, I would like to go from the general to the specific. If we want the human race to survive, and I assume that the people in Washington are interested in the same problems as you and I, I think my Congressman has as much right to be concerned with the laws for all the United States as we here are concerned about Alabama's two coastal counties. I do not want to see us annihilate the rest of the world and succeed ourselves, nor annihilate the rest of the United States and succeed in Baldwin and Mobile Counties. I think we all have the right to take a look at the National Coastal Zone Management Act of 1972, particularly Sections 306 and 307, which are concerned with critical areas. Then we can make our best attempt at identifying and preserving them.

TOLLEF TOLLEFSON

I am Tollef Tollefson of 8 Hill Street, which is in the East Village of Chickasaw. I am speaking for more effective management and planning in the distribution of industrial sites in the coastal areas, more than just approving a given site proposed by the industry. The industry should be required to state and limit the size the plant would ever be and state the total amount of air, water and noise pollution the plant would discharge when the original application is made.

There should be more attention paid by the boards as to the effect the plant would have on the people who live in the area. A brief history of the industries in the area shows how plants will grow. International Paper Company started with two small Kraft machines in 1928. They now have six. Hollensworth and Whitney had three and Scott Paper expanded that to nine machines. Union Carbide started with a small molecular sieve plant, and has continuously expanded its production and processing equipment. This is the same type of plant that was so dirty it was forced to move from Tonawanda, New York. Aluminum Ore was a World War II production plant, and after the War Ideal Cement got part of its equipment. Their air pollution stopped a sugar refinery from being built here. Barry Steam Plant started with two 125,000 kilovolt-ampere units that burned about 4,000 tons of coal a day and discharged ten percent of that coal into the air as fly-ash. Barry now has the generating capacity of over 1,375,000 kilovolt-amperes and discharges the same percentage of fly-ash and sulfur dioxide.

There is a small refinery planned that will be less than three miles from all the fifteen thousand citizens of Chickasaw and thousands more in Saraland. Yet the Louisiana owners bought ten square miles of marshlands. There are many other plants being built and expanding, such as Coutaulds, Stauffer Chemicals, Shell, Geigy, Olin Mathesion, Alabama Refinery, Degussa, and others. If all these plants expand as their predecessors have, we can expect this area to become another Gary Indiana, or Texas City, Texas.

It is not necessary for all the industry to be built right in or close to the city. As you fly north to Birmingham or east to Atlanta, you can see miles of rivers, thousands of acres of hills and forests, and miles of highway with hardly

a car or truck on them. Therefore, it would be good management to spread this pollution over a larger area.

During my school days in the early 20's Mobile was a clean city of sixty thousand. By April the Bay would be as clear as the Gulf, and people swam from the beaches on both sides of the Bay. The air was clean and good, and at night the stars were bright. All the bays of the Delta, Chockalotta, Chugfe, Polecat, Gustang, Grand Bay and Bay Grass, had white sand bottoms with patches of seaweed and wild celery. In the winter they were home to thousands of ducks and geese. About this time the Inland Waterways Commission built seventeen locks and dams up to Birmingham, and the Federal Barge Lines built push boats and barges. This was to make Mobile the great Gulf seaport. Yet 1940 found Mobile with scarcely eighty thousand people even with the World War II boom. In 1960 Mobile had just over 180,000 with all the new industry and the new pollution.

Recently, I parked at Spanish Fort and looked across the Bay. The air was clear enough to see the hangars at Brookley. But from McDuffie Island to Chickasawbogue Creek only the Battleship and the tops of the tall buildings could be seen. With proper management the pollution of the air and water, as well as noise pollution, can be eliminated.

About 1962 Rust Engineers built a paper mill in Snow Flake, Arizona. They recruited many of the key personnel here. A friend of mine went there for an interview and they asked if he could operate the mill without water and smoke. Since his experience was in Mobile's mills, he said he could not. He did not get the job because they hired people who could operate a paper mill without smoke or water. If you demand high standards of environmental protection, you will

get them. Industry needs our mild climate, geographic location, water and good workers more than we need their few jobs and their usual pollution.

LARRY CLARK

I am Larry Clark, a resident of Alabama and, occasionally, Mississippi. I have visited in most of your communities, and they are my communities. I would like to make one point this afternoon. The point I am going to make is referred to in this book, Alabama Coastal Area Program, and in Alabama Law 1274, the Alabama Coastal Area Act. One of the identified problems is that of transportation and navigation. Also identified in this book under Goals is one to develop the available resources for the economic benefit of all the citizens of the State of Alabama. Section 2 of Alabama Act 1274 states that the policy of the State is to assure that adequate consideration is given to such uses of the coastal area as the establishment of harbor facilities in the development of the State's coastal areas.

I would like to talk to you this afternoon on Alabama's one seaport, the Port of Mobile. The Alabama State Docks is a large machine. It is extremely important to all of us in Alabama, but especially to us in the coastal area of Alabama. The State Docks is a machine that is forty-five years old, out of repair and needs improvements.

I am the Public Affairs Chairman of the Mobile Branch of the American Society of Civil Engineers. This afternoon I would like to express the Mobile Branch and the Alabama Section's support of the bond issue for the improvement and the upgrading of the Alabama State Docks, an important part of the coastal facilities. This is a very necessary port facility that should not continue to degrade, but should remain an asset to the coastal area of Alabama.

MRS. ALBERT NONKES

I am Mrs. Albert Nonkes of Fairhope, Alabama, in Baldwin County. We have been talking about Mobile and Baldwin Counties. In between those two counties is the beautiful Mobile Delta. This consists of many acres of marshlands, which are very, very valuable. I believe this should become a wildlife refuge for all the people living in the southern part of Alabama for fishing, hunting, bird watching or whatever one would like to do. It should not be dredged, and the marshes should not be ruined. They should be protected so we can show our tourists how beautiful our Delta is.

Now I come to another point. The Coastal Area Board should see that good technology prevails over bad technology. Some examples of bad technology are the dredging for building lots on lowlands or wetlands and sold for speculation by out of state corporations; supertankers which bring the owners a profit up to $4 million per run versus American built ships which are smaller and safer with double wall compartments; and low levees around oil storage tanks. As we ride along the road north of Chickasaw, we see the oil storage tanks built mostly on lowlands because they are cheap lands. Will these levees be high enough if one of these tanks has a rupture? Will this oil be allowed to run into the surrounding water, marshes, mud and grass? How are we going to clean this up?

Next, the valuable wetlands are disappearing fast by dredging for industry, buildings and canals for people's boats to reach their private land which is behind the marshes on the mainland. If everybody is allowed to dredge a canal, where will the spoils be dumped? Upland would be fine if it is dry. However, all these canals side by side will eventually drain a whole marsh. The marsh would be ruined with saltwater intrusion. Also, if more and more houses are built along

our rivers and coastlines, no park lands will be left for the people. How can people reach the beaches and rivers if all the land approaches are privately owned?

I have lived here in this southern state of Alabama for three years. It is a beautiful state, and we should help to protect it. Let us not say we cannot listen to these federal rules. Let us turn around, show the federal rules what we in Alabama can do, and take a step forward.

PYME EBENSTEIN (Represented by Myrt Jones)

I am representing Mrs. Pyme Ebenstein, the Secretary of the Save Our Bay Club. With the showing of the people in this room, the Coastal Area Board should realize that there is enough interest here to have all the meetings of the Board in the Mobile and Baldwin County areas and not hold them in Montgomery or Tuscaloosa. If a meeting is held in Tuscaloosa or Montgomery, a bus should be provided to take us up there. Otherwise, we want the meetings kept here.

Another thing that Mrs. Ebenstein and I have discussed was that we think the Coastal Area Board should be enlarged so that private citizens, those who are willing to take the time and interest to attend these meetings and become involved, are represented on the Board.

I would now like to read a statement from Mrs. Ebenstein:

> Mistakes are going to be made, but please let us never allow damage that is irretrievable. For example, wetlands, the marine nurseries, can never be replaced once they are filled. Let us in this blessed State of Alabama learn from the mistakes made in other states.

HATTIE LITTLE SMITH

I would like to support the recommendation of both Baldwin County Commissioner Sonny Hankins and Mobile County Commissioner Bay Haas for more representation on the Coastal Area Board by local persons, especially from Baldwin County.

As the Commissioners pointed out, the eight member board consists of only three Mobile-Baldwin members. Only one of those three is a Baldwin Countian, the largest land area affected. He is from north Baldwin County and lives one hundred miles inland.

While all those persons in Board positions are either elected or appointed politically, and they are no doubt extremely capable advisors in coastal matters, I believe it would be suitable to add Board members who have the following qualifications: (1) Sincere devotion to the public good; (2) interest in the future of the coastlands; (3) knowledge of the past and present development of the area; and (4) broad overview of the South's development potentials. If legislative changes are necessary to make these additions to the Board, I urge that measures are expedited to do so.

PARTICIPANTS IN THE

ALABAMA COASTAL LEADERS CONFERENCE ON

COASTAL ZONE MANAGEMENT

Boyd Adams
President, Alco Land
and Timber
P.O. Box 345
Mobile, Ala. 36601

O.L. Adams
Dredge Consultant, O.K.C.
Dredging, Inc.
55 Oakland Avenue
Mobile, Ala. 36608

Robert F. Adams
Attorney at Law
P.O. Box 1988
Mobile, Ala. 36601

R. Michael Akridge
Engineer, Research and
Environmental Projects
Alabama Power Company
P.O. Box 2641
Birmingham, Ala. 35226

George W. Allen
Division Biologist
U.S. Army Corps of
Engineers
30 Pryor Street, S.W.
Atlanta, Ga. 30303

Antis Alls
Special Assistant P.R.
Federation of Southern
Cooperative
P.O. Box 95
Epes, Ala. 35460

Claude W. Arnold
Baldwin County Planning
Commission
100 North Bancroft Street
Fairhope, Ala. 36532

Dr. A.K. Barakeh
Associate Professor, Department
of Economics
University of South Alabama
307 University Boulevard
Mobile, Ala. 36688

R.S. Bateman
R.S. Bateman & Associates, Inc.
P.O. Box 6431
Mobile, Ala. 36104

Jerry L. Batts
Administrative Assistant
Lieutenant Governor's Office
State Capitol
Montgomery, Ala. 36104

Sandra Baxley
Mobile Press Register
P.O. Box 2488
Mobile, Ala. 36601

Janet Bayne
International Relations Chairman
Baldwin County League of Women Voters
Box 622, Pat Lynn Apartments
Fairhope, Ala. 36532

Don Bean
55 South Julia Street
Mobile, Ala.

Mrs. Gould Beech
President, Magnolia Springs
Garden Club
River Route
Magnolia Springs, Ala. 36555

Daniel A. Benton
Bailey, Taylor & Benton
Attorneys at Law
P.O. Box 361
Fairhope, Ala. 36532

Mary Abbie Berg
Executive Director, Senior Citizens Services, Inc.
P.O. Box 7191
Mobile, Ala. 36607

Mrs. Micke Bergeron
President, Dogwood Garden Club
603 Johnson Avenue
Fairhope, Ala. 36532

Robert F. Berry
District Conservationist
USDA Soil Conservation Service
P.O. Box 969
Bay Minette, Ala. 36507

Chester Billie
Fairhope City Planning Commission
850 Cherry Court
Fairhope, Ala. 36532

David E. Bishop
Councilman, Fairhope City Council
517 Myrtle
Fairhope, Ala. 36532

Mrs. Dorothy S. Bivens
Social Services Committee Chairman
Mobile United
351 North Broad Street
Mobile, Ala. 36605

W. H. Black, Jr.
Chief Engineer
Alabama State Docks Department
P.O. Box 1588
Mobile, Ala. 36601

Wesley Blackwell
President, West Chickasaw Civic Association
503 4th Avenue
Chickasaw, Ala. 36611

C. A. Bodden
Director, Bay Minette Chamber of Commerce
P.O. Box 268
Bay Minette, Ala. 36507

Cecelia G. Bowling
Pilot Club of West Mobile
P.O. Box 9154
Mobile, Ala. 36609

Samuel E. Box
Councilman, City of Fairhope
300 North Summit Street
Fairhope, Ala. 36532

Mrs. Ray D. Bridges, Jr.
2013 Japonica Lane
Mobile, Ala. 36609

Martha Broadus
Conservation Chairman
Eastern Shore Junior Woman's Club
612 Southern Way
Spanish Fort, Ala. 36527

Mrs. Karen T. Burgett
Mobile United
71 St. Michael Street
Mobile, Ala. 36601

C. E. Burrell
Chickasaw Chamber of Commerce
320 Hillside Drive
Chickasaw, Ala. 36611

Mrs. Freda H. Cain
164 South Cedar Street
Mobile, Ala. 36602

Douglas Capps
South Alabama Regional Planning and Development Commission
P.O. Box 1665
Mobile, Ala. 36601

Cecil G. Chason
City Attorney, Gulf Shores
P.O. Box 458
Foley, Ala. 36535

Alfred S. Chipley
Director, Division of
Solid Waste
State Health Department
State Office Building
Montgomery, Ala. 36104

Lawrence B. Clark
405 Pine Court
Mobile, Ala. 36608

Jewell Coats
Extension Farm Agent
Cooperative Extension Service,
Auburn University
P. O. Box 389
Bay Minette, Ala. 36507

John T. Cochrane, Jr.
P. O. Box 16203, Bel Air
Station
Mobile, Ala. 36616

Freddy Cockrell
District Conservationist
USDA Soil Conservation Service
3038 Springhill Avenue
Mobile, Ala. 36607

Gene Cody
Alabama Development Office
State Office Building
Montgomery, Ala. 36104

James H. Coil, Jr.
Manager of Administrative
Services
Scott Paper Company
P. O. Box 2447
Mobile, Ala. 36601

Mrs. Sim C. Coker
International Club
2203 East Vaughan Drive
Mobile, Ala. 36605

Clara Stone Collins
Steering Committee, Mobile
United
1950 Hunter Avenue
Mobile, Ala. 36606

Ronald F. Confer
Production Superintendent,
Diamond Shamrock Chemical
Company
1300 Jarvis Road
Mobile, Ala. 36611

Cecil M. Cork
Acting Director, Division of
General Sanitation
State Department of Public Health
State Office Building
Montgomery, Ala. 36104

Joe M. Courtney
1005 Government Street
Mobile, Ala. 36604

Mrs. John Cowan
Secretary, League of Women
Voters of Alabama
1456 Shelton Drive
Mobile, Ala. 36605

Harry E. Crawford
C. P. Taylor Real Estate Company
413 South McKenzie Street
Foley, Ala. 36535

Doris Crenshaw
Public Relations Director
The Federation of Southern Cooperatives
P. O. Box 95
Epes, Ala. 35460

J. C. Davis, Jr.
Mayor, City of Chickasaw
P. O. Box 11307
Chickasaw, Ala. 36611

Joseph L. Davis III
Regional Director
The University of Alabama Regional
Office
1515 First National Bank Building
Mobile, Ala. 36602

Julian R. de Ovies
Steering Committee, Mobile United
26 Japonica Avenue
Mobile, Ala. 36606

B. J. Diamond, Jr.
Sales Representative, Ideal Cement Co.
P.O. Box 6707
Mobile, Ala. 36606

Jack Dismukes
President, The Villagers
4 Village Court
Spanish Fort, Ala. 36527

Harry D'Olive
Judge of Probate,
Baldwin County
Bay Minette, Ala. 36507

R. C. Dowdle
Mobile County Wildlife
Association
5354 Dogwood Court
Mobile, Ala. 36609

Sue Dunlavy
Education Chairman, Eastern
Shore Junior Woman's Club
3 Ranger Road
Spanish Fort, Ala. 36527

James C. Eddins
Baldwin County Tax Assessor,
Engineer
Route 1 Box 20 A
Perdido, Ala. 36562

Mrs. Catharine Ellis
Baldwin County League of
Women Voters
Box 242
Daphne, Ala. 36526

Mrs. Maude Van Eysbergen
Publications Co-Chairman,
Baldwin County League of
Women Voters
110 Wilfred Street
Fairhope, Ala. 36532

James E. Fibbe
Director, Bureau of
Environmental Health, Mobile
County Board of Health
P.O. Box 4533
Mobile, Ala. 36604

John Foley
Vice President, Magnolia Land
Company
413 South McKenzie Street
Foley, Ala. 36535

Helen Folmar
Cooperative Extension Service
800 Downtowner Boulevard, Suite 104
Mobile, Ala. 36609

Mike Ford
President, Fairhope Rotary Club
317 North Ingleside
Fairhope, Ala. 36532

Marquerite Franklin
South Alabama Regional Planning
Commission
355 North Ann Street
Mobile, Ala. 36603

Phyllis Freeman
Town Clerk, Town of Wilmer
P.O. Box 147
Wilmer, Ala. 36587

George E. Fuller, Jr.
Chairman, Baldwin County Planning
Commission
P.O. Box 368
Spanish Fort, Ala. 36527

Mrs. William E. Furlow
President, Cosmopolitan Club of
Mobile
Route 2,Box 570
Daphne, Ala. 36526

Mrs. Marisa Gardner
111 Idlewood Drive
Chickasaw, Ala. 36611

A. M. Gates
Box 277
Gulf Shores, Ala. 36542

Debbie Gautier
Mississippi-Alabama Sea Grant
Consortium
P.O. Drawer AG
Ocean Springs, Miss. 39564

Verda Horne
Chairman for Environmental Quality
Alabama League of Women Voters
708 Fairhope Avenue
Fairhope, Ala. 36532

John D. Hudson
Manager, Office of Intergovernmental Relations, City of Mobile
P.O. Box 1827
Mobile, Ala. 36601

H. L. Hughes
Vice President, Equipment Sales Corp.
P.O. Box 7393
Mobile, Ala. 36607

Ben W. Hutson
Division Manager, Alabama Power Company
P.O. Box 2247
Mobile, Ala. 36601

Willis Hyde
Alabama Development Office
State Office Building
Montgomery, Ala. 36104

Mrs. Elizabeth Imsand
Bienville Chapter, American Business Women's Association
112 South Dearborn Street
Mobile, Ala. 36602

T.H. Ingram
Vice President, Baldwin County Planning Commission
P.O. Box 815
Fairhope, Ala. 36532

R.B. Jefferies
Supervisor, Mobile County Soil and Water Conservation District
P.O. Box 485
Citronelle, Ala. 36522

John A. Johnson
President, Mobile County Wildlife and Conservation Association
250-B Larkspur Drive
Mobile, Ala. 36609

Thomas D. Johnson
Executive Director, Baldwin County Industrial Development Division
P.O. Box 27
Fairhope, Ala. 36532

Windy Johnston
Commodore, Fairhope Yacht Club
855 Seacliff Road
Fairhope, Ala. 36532

Dianne Jones
Administrative Assistant to the Director
Mississippi-Alabama Sea Grant Consortium
P.O. Drawer AG
Ocean Springs, Miss. 39564

Mrs. Myrt Jones
President, Mobile Bay Audobon Society
724 Brannan Court
Mobile, Ala. 36609

Mrs. William J. Joseph
President, Federated Garden Clubs of Mobile, Inc.
Route 1, Box 453
Theodore, Ala. 36582

Mrs. Rosanne Kilborn
859 Cottage Hill Avenue
Mobile, Ala. 36609

Charles H. Kilpatrick
Extension Farm Agent, Cooperative Extension Service
East Wing - Courthouse
Mobile, Ala. 36602

N. D. Knight
Administrative Vice President
and Secretary, Alabama Dry
Docks and Shipbuilding
Mobile, Ala. 36601

George M. Lamb
Chairman, Department of
Geology and Geography
University of South Alabama
307 Gaillard Drive
Mobile, Ala. 36688

McMillan Lane
Commissioner, Department of
Agriculture and Industries
P. O. Box 3366
Montgomery, Ala. 36109

Patricia Davis Laraway
Vice President, League of
Women Voters of Baldwin
County
Route 1 Box 153
Silverhill, Ala. 36576

James E. Leachmen
United Fund of Mobile County
P. O. Box 1561
Mobile, Ala. 36601

Linwood L. Lewis
Building Inspector, Mobile County
P. O. Box 1443
Mobile, Ala. 36601

Alicia V. Linzey
Conservation Chairman, Mobile
Bay Audobon Society
6312 St. Moritz Drive
Mobile, Ala. 36608

Jim Litsey
Secretary-Treasurer, Daphne-Spanish
Fort Lions Club
P. O. Box 29
Daphne, Ala. 36526

Forrest Little
2 Office Park, Room 401
Mobile, Ala. 36526

Henry R. Luscher, Jr.
Co-Chairman, Social Services
Mobile United
109 Levert Avenue
Mobile, Ala. 36607

Dr. John E. Lutterell
Health Committee, OEDP
Health Committee
Box 577
Bayou La Batre, Ala. 36509

William F. Mann
Inspector, City of Saraland
716 Highway 43
Saraland, Ala. 36571

Elizabeth F. Martin
Professor, University of South
Alabama
University Boulevard
Mobile, Ala. 36688

James R. Martin
Coopers Company, Inc.
1366 Spring Valley Court
Mobile, Ala. 36609

John W. Martin
Industrial Development Representative
Alabama Development Office
State Office Building
Montgomery, Ala. 36109

Craig L. Mason
Mobile Area Chamber of Commerce
P. O. Box 2187
Mobile, Ala. 36601

Dr. Bruce Mattox
Director, Mississippi-Alabama
Sea Grant Consortium
P. O. Drawer AG
Ocean Springs, Miss. 39564

Edwin B. May
May Environmental Engineering, Inc.
P.O. Box 9092
Mobile, Ala. 36609

Delores Mayes
1300 Shore Acres Drive
Mobile, Ala. 36609

N. D. McClure III
26 South Hathaway Road
Mobile, Ala. 36608

Mrs. Joseph H. McCoy
International Club
2205 East Vaughan Drive
Mobile, Ala. 36605

Mrs. Therese McCoy
International Club
2008 Bakers Lane
Mobile, Ala. 36605

Mrs. Ruth McDonnell
Alabama Constitutional Revision
Chairman, Baldwin County League
of Women Voters
P.O. Box 57
Daphne, Ala. 36526

W. I. McElroy
Mobile Area Chamber of Commerce
3505 Stein Street
Mobile, Ala. 36608

W. M. McGough
Dixie Engineering Corporation
Foot of Duval Street
Mobile, Ala. 36605

C. C. McGraw
Commander, Fairhope Squadron
United States Power Squadron
Route 1 Box 126 A
Summerdale, Ala. 36580

Barry McIlwain
Mississippi-Alabama Sea
Grant Consortium
P.O. Drawer AG
Ocean Springs, Miss. 39564

Archie M. McMillan
Commissioner, Baldwin County
Commission
County Courthouse
Bay Minette, Ala. 36507

Francis Meaher
Director, Mobile County
Wildlife Association
108 Idlewood Drive
Chickasaw, Ala. 36611

Mrs. Ivan G. Melrose
President, Wisteria
Garden Club
26 Fels Avenue
Fairhope, Ala. 36532

Larry Merrihew
Assistant Director, Industrial
Development, Merchants
National Bank
P.O. Box 2527
Mobile, Ala. 36622

Dr. Dixon Meyers
Chairman, Environmental Committee
Mobile Area Chamber of Commerce
1729 Springhill Avenue
Mobile, Ala. 36607

Clarence H. Montgomery
Mobile County Coordinating
Commission on Voter
Registration and Job
Opportunities
666 Florida Street Extension
Mobile, Ala. 36617

Hugh A. Moore
Mobile City Planning Commission
P.O. Box 1827
Mobile, Ala. 36609

William F. Moore
Deputy Director, Ameraport
Bel Air Office Mall II, Suite 119
3100 Cottage Hill Road
Mobile, Ala. 36606

Mr. W. O. Mozingo
President, Southwest Alabama
Labor Council
951 Government Street, Room 818
Mobile, Ala. 36606

Leo E. Mullins, Jr.
Executive Director, Mid-Gulf Employers'
Council, Inc.
3100 Cottage Hill Road, Suite 409

John A. Murphy
Assistant Director for Urban Renewal
Mobile Housing Board
151 South Claiborne Street
Mobile, Ala. 36602

Mrs. Duncan Naylor
Alabama League of Women Voters
Route 2, Box 596
Daphne, Ala. 36526

Dr. George W. Newburn, Jr.
Health Officer, Mobile County
Board of Health
P. O. Box 4533
Mobile, Ala. 36604

Albert Nonkes
606 North Mobile Street
Fairhope, Ala. 36532

Mrs. Albert Nonkes
Baldwin County League of Women Voters
606 North Mobile Street
Fairhope, Ala. 36532

Mrs. Minnie Nonkes
Treasurer, Baldwin County League
of Women Voters
606 North Mobile Street
Fairhope, Ala. 36532

Ernest O. Nordquist
P. O. Box 408
Dauphin Island, Ala. 36528

Claude J. O'Connor
Councilman, Town of Gulf Shores
P. O. Box 276
Gulf Shores, Ala. 36542

Mason B. Oldham, Jr.
Chief, Urban and Regional Branch
U. S. Army Corps of Engineers
P. O. Box 2288
Mobile, Ala. 36608

Donna Olson
Administrative Assistant, State
Senator Bill Roberts
148 Tuscaloosa Street
Mobile, Ala. 36607

Layton Overstreet
111 Canal Street
Mobile, Ala. 36602

Robert D. Palmore
Radcliff Materials, Inc.
P. O. Box 2068
Mobile, Ala. 36601

Mario M. Pamatmat
Associate Professor, Department
of Fisheries and Allied
Aquaculture
Auburn University
Auburn, Ala. 36830

Jack C. Parker
215 Lee Street
Chickasaw, Ala. 36611

V. M. Parker
Chairman, Chickasaw Planning
Commission
City Hall
Chickasaw, Ala. 36611

Mrs. Florence Parks
Baldwin County League of
Women Voters
Box 24, South Winding Brook Lane
Montrose, Ala. 36559

R. Joseph Pearson, Jr.
Executive Director, Mobile United
71 St. Michael Street
Mobile, Ala. 36601

Mrs. Joe Pearson
71 St. Michael Street
Mobile, Ala. 36601

Ruth S. Perot
Managing Editor, Mobile Beacon
P. O. Box 1407
Mobile, Ala. 36601

Cecil Pitman
Fairhope Planning Commission
P. O. Box 482
Fairhope, Ala. 36532

Eugene Poe
117 Phillip Street
Prichard, Ala. 36610

Dr. Billy Powell
Auburn University and Sea Grant
Advisory Service
800 Downtowner Boulevard, Suite 104
Mobile, Ala. 36609

Don Pruitt
Executive Director, South Alabama
Regional Planning Commission
P. O. Box 1665
Mobile, Ala. 36601

Mrs. Doris Rich
Birmingham News, Baldwin
Publishing Company
Box 33, Star Water Route
Magnolia Springs, Ala. 36555

John S. Richburg, Jr.
USDA Soil Conservation Service
Area Conservationist
P. O. Box 638
Grove Hill, Ala. 36451

Mary Richerson
Secretary, Mobile Joint Legislative
Council
104 South Ann Street
Mobile, Ala. 36604

Lolly Rickert
3404 Emelye Drive
Mobile, Ala. 36609

H. Ray Roberts
Chairman, Saraland Planning
Commission
Saraland, Ala. 36571

Gus Rodriguez
Steering Committee, Mobile United
538 Hillview Road
Mobile, Ala. 36608

Dr. George A. Rounsefell
Professor, Marine Environmental
Sciences Consortium
Dauphin Island Sea Lab
Dauphin Island, Ala. 36528

Shellene Scarbrough
Mississippi-Alabama Sea Grant
Consortium
P. O. Drawer AG
Ocean Springs, Miss. 39564

William E. Schenk
University of South Alabama
Mobile, Ala. 36688

J. D. Sellars
Mayor, City of Robertsdale
P. O. Drawer CC
Robertsdale, Ala. 36567

Homer Sessions
Haiman Building
1509 Government Street
Mobile, Ala. 36604

Joe E. Seward
Coordinator of Publications
Mississippi-Alabama Sea Grant
Consortium
P. O. Drawer AG
Ocean Springs, Miss. 39564

Bill Sims
Assistant Vice President,
First National Bank of Mobile
P. O. Box 1467
Mobile, Ala. 36621

Mrs. Stuart E. Sinclair
President, Foley Woman's Club
Route 3, Box 1625
Foley, Ala. 36535

Shirley Slay
President, Spanish Fort Estates
Garden Club
522 General Gibson Drive
Spanish Fort, Ala. 36527

R. B. Smallwood
Councilman, City of Chickasaw
403 Sutherland Drive
Chickasaw, Ala. 36611

Mrs. R. B. Smallwood
403 Sutherland Drive
Chickasaw, Ala. 36611

Hattie Little Smith
Manager, South Baldwin County
Chamber of Commerce
117 North McKenzie Street
Foley, Ala. 36535

Julian W. Smith
Manager, Economic Development
Department, Mobile Area Chamber
of Commerce
P. O. Box 2187
Mobile, Ala. 36606

John McClure Snook
Baldwin County Historical
Society
Box 670
Foley, Ala. 36535

Roslyn Snyder
310 Sengstak Street
Mobile, Ala. 36603

Mrs. H. D. Sommer
Junior League of Mobile, Inc.
630 Tuthill Lane
Mobile, Ala. 36608

Carol Sondheimer
Southeast Regional Coordinator
Office of Coastal Zone Management
NOAA, Department of Commerce
Rockville, Md. 20852

William B. Speir
6 Office Park Circle
P. O. Box 7422
Birmingham, Ala. 35223

Mrs. E. W. Stafford
Wisteria Garden Club
Route 2, Box 7
Fairhope, Ala. 36532

Bill Starnes
Alabama Development Office
State Office Building
Montgomery, Ala. 36104

Harry Still
Administrator, City of Bay Minette
P. O. Box 770
Bay Minette, Ala. 36507

George Stone
Legal Advisor, Mobile Public Schools
504 Government Street
Mobile, Ala. 36602

Judy P. Stout
Research Biologist, Dauphin Island
Sea Lab
P. O. Box 386
Dauphin Island, Ala. 36528

Lois E. Strickland
2369 Buena Drive North
Mobile, Ala. 36605

Reverend Monsignor J. Edwin Stuardi
Vicar General of Diocese, Catholic
Diocese of Mobile
370 South Section
Fairhope, Ala. 36532

Curtis Sumrall
Industrial Representative, Alabama
Development Office
State Office Building
Montgomery, Ala. 36104

Hugh A. Swingle
Assistant Chief Biologist
Alabama Marine Resources Division
P. O. Box 188
Dauphin Island, Ala. 36528

J. Trachy Tew
Environmental Technical Superintendent
CIBA-GEIGY Corporation
P. O. Box 113
McIntosh, Ala. 36553

J. E. Thomas
Executive Director, Mississippi
Marine Resources Council
P. O. Box 959
Long Beach, Miss. 39560

May F. Tillman
Business Manager and Registrar
Marine Environmental Sciences
Consortium
P. O. Box 386
Dauphin Island, Ala. 36528

Kendrick N. Tindal
Building Official, County of Baldwin
P. O. Box 662
Bay Minette, Ala. 36507

Tollef Tollefson
8 Hill Street
Chickasaw, Ala. 36611

Albert J. Tully
Attorney at Law
P. O. Box 47
Mobile, Ala. 36601

Dr. Sidney D. Upham
Executive Director, Alabama Marine
Environmental Sciences Consortium
Dauphin Island Sea Lab
Dauphin Island, Ala. 36528

John Walding
Alabama Conservation Director,
National Campers and Hikers
Association
P. O. Box 8505
Mobile, Ala. 36608

Mrs. John Walding
National Campers and Hikers
Association
P. O. Box 8505
Mobile, Ala. 36608

Edward L. White
Mobile County Public Schools
P. O. Box 1327
Mobile, Ala. 36601

Mrs. Marvin G. Whitley
President, Woman's Club House
Association, Inc.
1200 Government Street
Mobile, Ala. 36604

Ralph E. Whitson
Aluminum Company of America,
Mobile Works
P. O. Box 2647
Mobile, Ala. 36601

W. T. Willis
Director, Environmental Health
Administration
State Health Department
State Office Building
Montgomery, Ala. 36104

George M. Wolff
President, Fairhope Optimist Club
111 Ashley Drive
Fairhope, Ala. 36532

David G. Wood
Administrator, Baldwin County
Commission
P. O. Box 148
Bay Minette, Ala. 36507

G. W. Woodson
Chairman, Bay Minette City
Planning Commission
P. O. Box 356
Bay Minette, Ala. 36507

Jerry A. York
Marketing Representative, First
National Bank of Mobile
P. O. Drawer 1467
Mobile, Ala. 36621

H. E. Younkers
South Central Bell Telephone
Two Office Park, 312
Mobile, Ala. 36609

Charles K. Zehner
Chief Sanitarian, Baldwin County
Health Department
P. O. Box 150
Bay Minette, Ala. 36507

Mrs. Stanley Zinner
Robertsdale Garden Club
Route 2, Box 284
Robertsdale, Ala. 36567

MEMBERS OF THE ALABAMA COASTAL AREA BOARD

Mr. R. C. "Red" Bamberg, Chairman
Director, Alabama Development Office
State Office Building
Montgomery, Alabama 36104

Dr. Sidney D. Upham, Acting Chairman
Director, Marine Environmental Sciences
Consortium
P. O. Box 386
Dauphin Island, Alabama 36528

Mr. Claude Kelley
Director, Alabama Department of Conservation
and Natural Resources
Administrative Building
Montgomery, Alabama 36104

Colonel Reuben Wheelis
Director, Alabama State Docks
P. O. Box 1588
Mobile, Alabama 36601

Dr. Philip LaMoreaux
State Geologist
Geological Survey of Alabama
P. O. Drawer O
University, Alabama 35486

Mr. Bay Haas
Mobile County Commission
P. O. Box 1443
Mobile, Alabama 36601

Mr. Archie M. McMillan
Baldwin County Commission
Bay Minette, Alabama 36507

Mr. Gary A. Greenough
Mobile City Commission
P. O. Box 1827
Mobile, Alabama 36601

AGENCY ADVISORS TO THE ALABAMA COASTAL AREA BOARD

Dr. Ira L. Myers
State Health Officer
State Health Department
State Office Building
Montgomery, Alabama 36104

Mr. James W. Warr
Chief Administrative Officer
Alabama Water Improvement Commission
State Office Building
Montgomery, Alabama 36104

Mr. Ray Bass
Director, State Highway Department
State Highway Building
Montgomery, Alabama 36104

Mr. McMillan Lane
Director, Department of Agriculture
and Industry
1445 Federal Drive
Montgomery, Alabama 36109

Mr. Kenneth Hammond
Director, Alabama Public Service Commission
State Office Building
Montgomery, Alabama 36104

Dr. Philip E. LaMoreaux
Supervisor, State Oil and Gas Board
P.O. Drawer O
University, Alabama 35486

Mr. James W. Cooper
Director, Alabama Air Pollution Control
Commission
645 South McDonough Street
Montgomery, Alabama 36104

For further information:

L. Willis Hyde
Alabama Development Office
Alabama Coastal Area Board
State Office Building
Montgomery, Alabama 36104

J. Baron McIlwain
Mississippi-Alabama Sea Grant Consortium
P.O. Drawer AG
Ocean Springs, Mississippi 39564

Property of CSC Library

NOAA COASTAL SERVICES CENTER LIBRARY
3 6668 14101 7113