

# ISSUES IN COASTAL ZONE MANAGEMENT A SURVEY OF MISSISSIPPI CITIZENS

MASGP-77-008

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## BACKGROUND FOR SURVEY

Only three of Mississippi's 82 counties contain all of the state's tidal shoreline. However, more than 12 percent of all Mississippians live in these three counties — Hancock, Harrison, and Jackson. Latest figures reveal that between 1970 and 1975 the rate of population growth of these counties was 15 percent, while the state average was only 5 percent. This growth coupled with economic expansions has intensified pressures in this critical area.

The Congress of the United States passed the Coastal Zone Management Act of 1972, because it realized that "important ecological, cultural, historic, and aesthetic values in the coastal zone which are essential to the well-being of all citizens are being irretrievably damaged or lost." The act recognizes an urgent need to protect and give high priority to natural systems in the coastal zone. It provides funds on a matching basis to help each coastal state develop a plan to manage its own coastal resources.

The 1974 Session of the Mississippi Legislature amended the Coastal Wetlands Protection Act to charge the Mississippi Marine Resources Council with developing a coastal zone management plan for Mississippi. When completed, this program will help to minimize pressures in the coastal area by providing a system to:

- (1) develop and manage coastal resources;
- (2) insure environmental protection;
- (3) balance competing uses within the coastal zone;
- (4) coordinate the coastal activities of involved agencies; and
- (5) focus research on problems of the coastal zone.

In the early planning stages, the Council realized that Mississippi's coastal zone management plan should be developed with the full knowledge, participation, and support of the people of the state with special attention given to the coastal residents who will be most affected. As a result, this public opinion survey was conducted to learn the opinions of coastal citizens about specific elements that will be addressed in a coastal zone management plan for Mississippi.

## STRUCTURE OF THE SURVEY

In September 1976 the Mississippi-Alabama Sea Grant Consortium conducted the first public opinion survey on coastal zone management. That survey provided an opportunity for local citizens to express their general feelings about the area in which they lived. It was conducted for the Mississippi Marine Resources Council, the state agency responsible for developing a coastal zone management plan.

This second survey, conducted in April 1977, surveyed coastal residents to find out how they feel about certain items that a total coastal zone plan might address. Again conducted by the Consortium for the Council, this second survey was a logical follow-up to the first.

A questionnaire, explanatory letter and postage paid envelope was mailed on March 29 to 14,600 citizens in Hancock, Harrison, and Jackson Counties. A postcard was mailed April 1 requesting each resident to complete and return his questionnaire.

The mailing list was developed by selecting every sixth address from the following current editions of the local city directories published by the R. L. Polk Company of Richmond, Virginia:

- 1976 Bay St. Louis City Directory, including Waveland,
- 1977 Biloxi City Directory, including Ocean Springs,
- 1976 Gulfport City Directory, including Long Beach and Pass Christian, and
- 1976 Pascagoula - Moss Point City Directory.

The Cross Reference Directory of the Mississippi Gulf Coast, published in 1976 by the City Publishing Company of Independence, Kansas, provided addresses for people living outside incorporated cities. Individuals who expressed an interest in coastal zone management, respondents to the first survey, and all who attended any of the coastal zone management public meetings and conferences also received this second survey.

The 2802 replies received before April 28 are included in these results. This represents a return of 19.2 percent. Some respondents did not answer all of the questions on the survey sheet. However, all of the questions that were answered are included in the data. All replies received after April 28 were reviewed, but the opinions expressed are not included in these data.

Each returned questionnaire was computer coded and analyzed according to two variables — place of residence (Table A) and length of residence on the Mississippi Coast (Table B). Inferences are based on the percentage distributions of the responses.

**Table A: Place of Residence of Survey Respondents**

	Total Number of Responses	% of Total Responses
Bay St. Louis	106	3.8
Waveland	56	1.9
Hancock County (unincorporated areas)	19	0.7
Total Hancock County	181	6.4
Biloxi	558	19.9
Gulfport	670	23.9
Long Beach	150	5.4
Pass Christian	80	2.9
Harrison County (unincorporated areas)	213	7.6
Total Harrison County	1671	59.7
Moss Point	125	4.5
Ocean Springs	298	10.6
Pascagoula	329	11.7
Jackson County (unincorporated areas)	198	7.1
Total Jackson County	950	33.9
Total of All 3 Counties	2802	100.0

**Table B: Length of Residence on Mississippi Coast of Survey Respondents**

	Total Number of Responses	% of Total Responses
Less than 3 years	167	6.0
3 - 5 years	231	8.3
More than 5 years	2382	85.7

## SUMMARY OF RESPONSES

Now that two public opinion surveys have been conducted concerning coastal zone management in Mississippi, it is interesting to note that the response to similar questions on both surveys is nearly the same. On the first survey almost 95 percent of the respondents felt there was a need for planning for the use of coastal resources. The percentage

of response supporting this attitude in the second survey was almost the same. Most residents feel that development in Mississippi's coastal counties should proceed according to a plan (Table 1). This indicates that a high percentage of coastal residents favor development planning.

**Table 1: Citizens' Perception of Whether Development in Mississippi's Coastal Counties Should Proceed According to a Plan**

	Total Number of Responses	% of Total Responses
Yes	2406	86.7
No	123	4.4
Undecided	246	8.9

Nearly half of the respondents indicate that recreational activities on waterfront land are more important than other uses. It is noteworthy, however, that the place of residence of the respondent did appear to have some effect on the response to this question (Table 2). Residents who live closer to the shoreline are more favorable toward recreational activities having a higher priority than other activities on waterfront land.

**Table 2: Citizens' Perception of Whether Recreational Activities in the Coastal Area are More Important than Other Uses of Waterfront Land**

	% Yes	% No	% Undecided
Bay St. Louis	50.0	43.3	6.7
Waveland	57.1	35.7	7.1
Hancock County (unincorporated areas)	31.5	63.2	5.3
Biloxi	53.7	37.2	9.1
Gulfport	52.1	39.5	8.4
Long Beach	43.3	44.0	12.7
Pass Christian	51.3	38.5	10.3
Harrison County (unincorporated areas)	46.0	42.2	11.8
Moss Point	43.1	48.0	8.9
Ocean Springs	52.2	37.6	10.2
Pascagoula	47.5	40.2	12.3
Jackson County (unincorporated areas)	39.1	49.2	11.7
Total for All 3 Counties	49.5	40.6	9.9

The opinion is equally divided as to whether development which requires a shoreline site should have priority over other types of development along the shoreline. However, it is significant that one-fifth of the respondents are undecided on this question (Table 3).

**Table 3: Citizens' Perception of Whether Development Which Requires a Shoreline Site Should Have Priority Over Other Types of Development Along the Shorelines**

	% of Total Responses
Yes	40.9
No	39.2
Undecided	20.0

The fact that almost 90 percent of the respondents feel that the State Legislature should make it a policy that all property rights be afforded full protection under the law suggests the degree to which coastal residents of Mississippi subscribe to traditional American values. The pattern remains the same whether the respondents are grouped according to their place of residence or their length of residence on the Mississippi Gulf Coast. While the overwhelming majority agree that all property rights should be protected, three-fourths perceive that most problems of the coastal area are caused by improper or unwise use of our land and water resources (Table 4).

**Table 4: Citizens' Perception of Whether Most Problems in the Coastal Area are Caused by Improper or Unwise Use of Land and Water Resources**

	% of Total Responses
Yes	76.0
No	14.4
Undecided	9.7

A further indication of the degree to which the respondents subscribe to traditional American values is the fact that more than 90 percent of them again indicate that our historic, cultural, and scenic sites in the coastal area should be preserved for future generations.

Coastal residents feel very strongly that effective guidelines should be established for the use of land and water resources (Table 5). When asked whether guidelines should be established to resolve land and water use conflicts within our coastal area, less than four percent of the respondents were opposed.

**Table 5: Citizens' Perception of Whether Effective Guidelines Should Be Established for the Use of Land and Water Resources**

	<b>% of Total Responses</b>	<b>Hancock County (%)</b>	<b>Harrison County (%)</b>	<b>Jackson County (%)</b>
Yes	92.3	93.4	92.3	92.0
No	3.7	1.7	3.9	3.8
Undecided	4.0	5.0	3.8	4.2

One example of guidelines now in effect are those developed by the National Flood Insurance Program. When asked whether current building regulations required by this program are sufficient to minimize destruction when hurricanes strike, respondents who have lived on the Mississippi Gulf Coast for five years or longer were more likely to respond positively. Upon closer inspection, however, almost one-half of the respondents feel these hurricane defense regulations are insufficient (Table 6). This may indicate that coastal residents might not be opposed to more stringent building regulations to protect against hurricanes. It must be taken into account that a large number of respondents in each category are undecided on this question.

**Table 6: Citizens' Perception of Whether Current Building Regulations are Sufficient to Minimize Destruction When Hurricanes Strike**

	<b>% of Total Responses</b>	<b>% of Residents of Less than 3 yrs.</b>	<b>% of Residents of 3 - 5 yrs.</b>	<b>% of Residents of More than 5 yrs.</b>
Yes	32.5	18.1	22.5	34.5
No	47.1	51.2	55.4	45.9
Undecided	20.3	30.7	22.1	19.5

The siting of heavy industry in the coastal zone is another resource use for which guidelines might be included in a coastal zone management program. Related to their support of the concept of development planning, the respondents indicate that heavy industrial development should be confined to industrial parks established for this purpose (Table 7). This feeling remains constant regardless of the county of residence of the respondent.

**Table 7: Citizens' Perception of Whether Heavy Industrial Development Should Be Confined to Industrial Parks Established for this Purpose**

	<b>% of Total Responses</b>	<b>Hancock County (%)</b>	<b>Harrison County (%)</b>	<b>Jackson County (%)</b>
Yes	84.7	78.0	86.0	83.8
No	10.0	15.4	8.3	11.8
Undecided	5.4	6.6	5.8	4.4

Several questions are included on the survey sheet which deal with the interaction of the various agencies and governmental units in the coastal area and possible conflicts between these entities. The respondents indicate that governmental and agency coordination is a necessity.

A state energy policy coordinated between all relevant governmental units is favored by more than three-fourths of the respondents from each of the three counties. This may indicate that respondents would favor coordination at all levels of government — Federal, state, and local. Furthermore, the respondents feel so strongly about coordination that two-thirds of those surveyed favor one agency having responsibility for coordinating all water related activities in the coastal zone (Table 8). The county of residence of the respondent does not appear to have a significant effect on his feelings concerning this matter.

**Table 8: Citizens' Perception of Whether One Agency Should be Responsible for Coordination of all Water Related Activities and Development in the Coastal Zone**

	<b>% of Total Responses</b>	<b>Hancock County (%)</b>	<b>Harrison County (%)</b>	<b>Jackson County (%)</b>
Yes	62.1	56.6	62.4	62.5
No	27.8	35.2	27.3	27.2
Undecided	10.0	8.2	10.2	10.3

The response to a question dealing with overlapping of authorities among the various governmental agencies again shows the respondents' strong support for coordination. Almost 90 percent of the respondents from all three of Mississippi's coastal counties favor legislation to remedy any overlapping of authorities of the various agencies (Table 9).

**Table 9: Citizens' Perception of Whether Overlapping of Authorities of State Agencies, Where this Exists in the Coastal Zone, Should be Remedied through Corrective Legislation**

	% of Total Responses	Hancock County (%)	Harrison County (%)	Jackson County (%)
Yes	88.3	88.5	88.3	88.4
No	3.6	4.9	3.2	4.2
Undecided	8.0	6.6	8.5	7.4

The only significant difference concerning the desire to preserve unusual areas where fish and wildlife live and breed by purchasing these areas from private individuals was indicated by Jackson County residents. These residents are somewhat less favorable toward purchasing these lands from private individuals (Table 10).

**Table 10: Citizens' Perception of Whether Mississippi Should Preserve Unusual Areas Where Fish and Wildlife Live and Breed by Purchasing these Areas from Private Individuals**

	% of Total Responses	Hancock County (%)	Harrison County (%)	Jackson County (%)
Yes	70.0	76.9	70.4	67.8
No	17.3	11.0	16.1	20.5
Undecided	12.8	12.1	13.5	11.7

## PROBLEMS IN THE COASTAL AREA OF MISSISSIPPI

The Mississippi Governor's Conference on Coastal Zone Management in July 1974 was one of the first public participation efforts dealing with coastal zone management. The entire second half of that conference was a workshop where participants used a modified nominal grouping technique to identify and prioritize problems in Mississippi's coastal area. The 53 identified problems were grouped according to categories of concern for use in this survey questionnaire. The categories of concern were: population and resource use, fisheries, recreation and tourism, mineral extraction and energy production, commerce and industrial development, transportation and navigation, governmental regulations, and pollution.

In this survey, respondents were asked to indicate either one, two, or three problems in each category of concern they felt were the most important. Respondents also had the option of specifying a new problem, indicating they had no opinion, or indicating that none of these items were problems.

Coastal residents acknowledge the existence of all 53 problems listed on the questionnaire. The following is a listing of the 15 problems that were perceived to be most important by at least 35 percent of the 2802 respondents:

IDENTIFIED PROBLEM	TOTAL NUMBER OF RESPONDENTS	PERCENT OF RESPONDENTS FOR EACH PROBLEM
Water Pollution	1857	66.3
Garbage and litter	1704	60.8
Lack of public restroom facilities on beaches	1674	59.7
Sand blowing on highways	1499	53.5
Not enough industry	1343	47.9
Poor roads	1301	46.4
Unplanned residential development	1291	46.1
Rapid Population Growth	1237	44.1
Conflict between industry and environment	1197	42.7
Sewage disposal	1157	41.3
Conflict between state, local, and federal interests regarding energy	1152	41.1
Lack of coordinated industrial development program	1139	40.6
Complicated or unclear zoning regulations	1092	39.0
Lack of public fishing piers	1060	37.8
Conflict between sport and commercial fisheries	1058	37.8

## SUMMARY OF RESULTS

- An overwhelming number of respondents indicate they believe that all development in Mississippi's coastal zone should proceed according to a plan.
- Coastal residents apparently recognize the value of a balanced diversification of activities or uses of the shoreline.
- Coastal residents are about equally divided in their opinion concerning priorities for development along the shoreline.
- Coastal residents overwhelmingly agree that the Mississippi Legislature should make it a policy that all property rights be afforded full protection under the law.
- Three-fourths of the coastal residents who responded to this survey believe that most coastal problems are caused by improper or unwise use of land and water resources.
- Nine out of ten respondents agree that there should be some established procedures for resolving land and water use conflicts within our coastal area.
- Nine out of ten respondents feel that guidelines should be established for the use of land and water resources.
- Less than half of the respondents indicate they feel that building regulations are sufficient to minimize destruction when hurricanes strike.
- A great majority of those responding to the survey indicate they feel that heavy industrial development should be confined to industrial parks established for this purpose.
- A majority of respondents indicate they believe Mississippi should develop a state energy policy coordinated between all relevant governmental units.
- Almost two-thirds of those responding indicate that one agency should be responsible for coordinating all water related activities and development in the coastal zone.
- Preservation of historic, cultural, and scenic sites is favored by almost all of the respondents.
- Almost all respondents are in favor of the implementation of legislation to correct the overlapping of authorities among the various agencies.
- The preservation of unusual areas where fish and wildlife live and breed by purchasing these areas from private individuals is favored by almost seventy percent of the respondents.



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