

Florida State Board of Conservation  
Division of Salt Water Fisheries

**PROPOSED DREDGE AND FILL AREA, SOUTH BISCAYNE BAY,  
DADE COUNTY, FLORIDA**  
(SAKSP Permits 62-278)

by

Kenneth D. Woodburn

Florida State Board of Conservation

Marine Laboratory, Maritime Base, St. Petersburg, Florida

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## FOREWORD

Fishing is Florida's oldest industry. Florida saltwaters produce a greater variety of marine products, including game and food fishes, than any other state. The combined value of the commercial and sports fisheries established by a state-wide professional survey, is at least \$300,000,000 yearly. The whole State, and all 35 coastal counties in particular, share in this wealth - a gift of Nature - so long as they judiciously exploit their shorelines, saltwaters and submerged bottoms. The State Board of Conservation has a vested interest in seeing that this is done. It is charged with the supervision and development of the different fisheries through scientific management, control and aquaculture based on research. The job is difficult. Problems are acute because rapid urbanization has accelerated lucrative waterfront development and unfavorable changes in marine environments.

Damage to our multimillion dollar fisheries is not inherent in urbanization unless planning is poor and shortsighted and destructive dredging, filling and pollution are condoned because of apathy, ignorance or greed.

Coastal, estuarine and island development can be planned to best serve conservation. The State Board of Conservation stands ready to aid and advise counties, other governmental units and private interests in the best known ways to sustain and further marine productivity.

**Proposed Dredge and Fill Area, South Biscayne Bay, Dade County, Florida  
(SAKSP Permits 62278)**

Maps 1 and 2 in this report show the locale and scope of the dredging and contemplated. Plans dated August 21, 1962, and submitted by the Biscayne Engineering Company, Miami, to the Trustees of the Internal Improvement Fund indicate that about 100 acres have been deducted from the proposed dredging area since a notice of application for Department of the Army Permit (SAKSP Permit 62278) was issued on May 14, 1962. This means that approximately 400 acres of submerged land would still be dredged to 10 foot MLW. A 100-foot wide breakwater strip of bottom would not be dredged bayward of the 50 foot wide channel to parallel the proposed concrete bulkhead. By letter report to the Corps of Army Engineers on July 12, 1962, the Bureau of Sports Fisheries and Wildlife of the U. S. Fish and Wildlife Service objected strenuously to the dredging and filling projected in SAKSP Permit 62278.

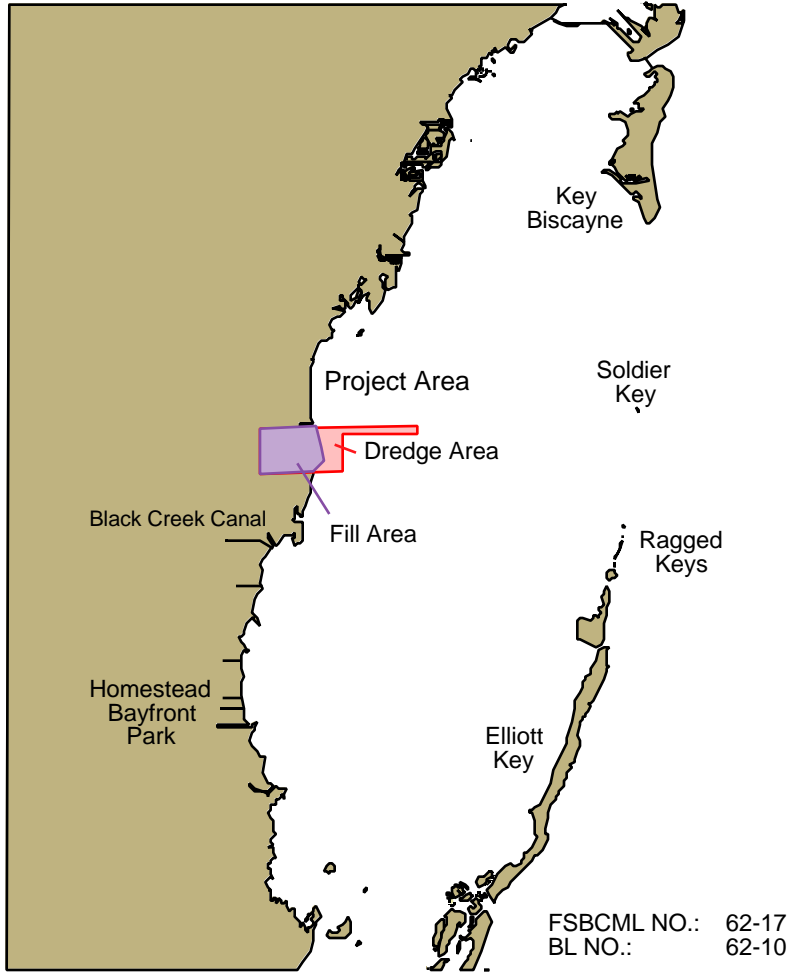
Since the modified project would still affect most of the heavily vegetated bottoms, marine life and fisheries mentioned in the U. S. Fish and Wildlife Service report and corroborated by State Board of Conservation studies, it is pertinent to record the following comments of the federal conservation agency:

Field studies at the site show that the bottom is about 90 percent covered with Cuban shoalweed, red algae, turtle grass, manatee grass, and Venus Wine Glass (a green alga) in those waters less than 3 feet deep. These extended bayward about 200 feet from the mangrove shoreline. The abundance of bottom vegetation drops gradually bayward until at about 2,400 feet from shore the percent coverage largely turtle grass and Cuban shoalweed is about 50 percent. This level of abundance is characteristic of the midportion of the Bay out to 2 or more miles from shore.

Biological samples made in the project area produced an abundance of small fishes. Pinfish, rainwater killifish, silver jenny and the tidewater silver side were very abundant in mid May. These are important food fishes for larger predator fishes. Occurring with them were juvenile gray snapper, spotted sea trout and great barracuda, showing that this is also a nursery area for important sport fishes of the region. In addition, many mature Caridean shrimps (non commercial, but significant as food of fishes), juvenile swimming crabs and juvenile commercial shrimp were taken. The Bay shallows are also important feeding grounds for several species of birds, including egrets, herons, pelicans and others.

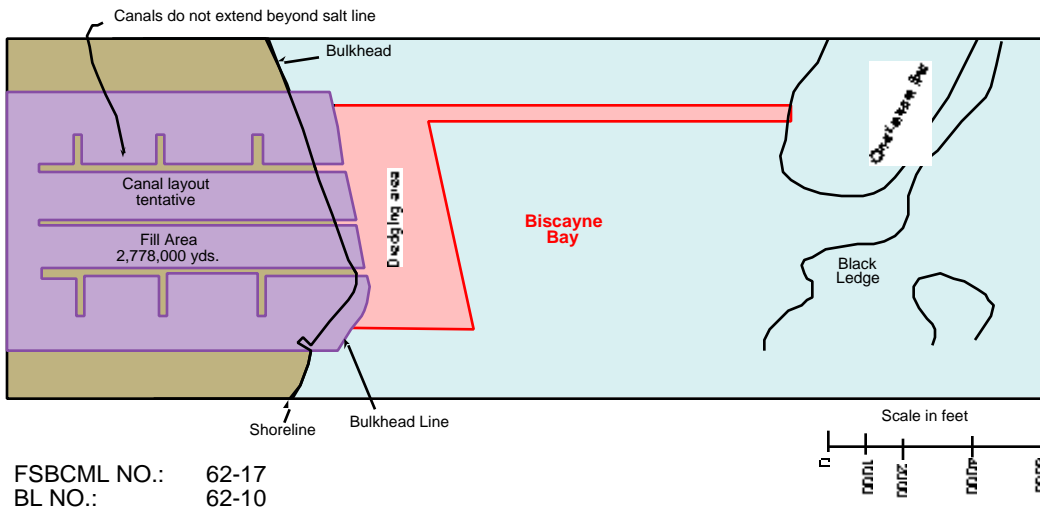
The effects of the proposed works on the fish and wildlife resources of the immediate project area would be direct and massive and are therefore readily described. Production of aquatic organisms, both plant and animal, in the area to be filled would be completely and permanently halted. In the area to be deepened by dredging, the existing bottom vegetation would be immediately destroyed by the mechanics of the operation. It is very doubtful that vegetation would return to the dredged area in its present abundance even after several decades because the proposed depth would be highly unfavorable to such growth. By virtue of such drastic effects, especially on vegetation, the present production of forage and sport fishes in the project area would be greatly curtailed. Use of the area by wading birds as a feeding ground would be eliminated.

The overall significance of this project to fish and wildlife is better seen in light of the value of the fisheries of south Biscayne Bay and through appraisal of the probable effects of the project on those fisheries.



Map 1. Proposed dredge and fill area, South Biscayne Bay, Dade County, Florida (SAKSP Permits 62-278).

Dredge and Fill Plan



Map 2

By report of November 1961, on your Hurricane Studies for Biscayne Bay, this Bureau provided you the results of studies which we had made of sport fisherman use in the upper portion of South Biscayne Bay. The area of the Bay considered in our study included Rickenbacker Causeway on the north and went south as far as the Town of Cutler. Our estimate was that approximately 365,000 fisherman-days are expended annually in that area, and that this figure should increase to about 317,000 fisherman-days with an annual value of \$2,040,600 by the year 1985.

Our November 1961 report also provided estimates of the annual values of the commercial finfish fishery of South Biscayne Bay, and of the livebait shrimp fishery of the same area. These were \$75,000 and \$600,000, respectively.

The immediate area of the project where extensive damages to fish and wildlife resources are expected comprises about one square mile of vegetated bay bottom. In the greater reach along the mainland shore from Rickenbacker Causeway south to Mangrove Point (see plate I), there are now about sixteen square miles of such valuable bottom. Thus, this project alone, the first of any size south of Matheson Hammock Beach, would drastically damage about one sixteenth of the most productive bottom in the western half of the Bay south of Rickenbacker Causeway.

This Bureau, as you will understand, views the proposed project with great concern. We are concerned not only with the damages expected from this project, but also with the precedent for large-scale development of the south Bay shoreline which this project could establish. The quality of the south Bay fisheries, and their attractiveness to sport and commercial fishermen, can be seriously reduced by such developments.

The seriousness of the problem is heightened by the fact that very great increases in human population in South Dade County are expected in the near future. With such increases in population, the need for recreational resources such as the fish populations of South Biscayne Bay will be even greater than at present. The Metropolitan Dade County Planning Advisory Board has predicted that "South Dade Center" will some day rank equally with Broward Center (Fort Lauderdale - Port Everglades) and Magic City Center (Downtown Miami) in growth and development.

In accordance with the principles of the Fish and Wildlife Coordination Act, the Department of the Army has an obligation, in evaluating applications for Department of the Army permits, to consider effects of proposed works on fish and wildlife resources. This Bureau asks that this aspect be carefully evaluated in the present case, and that you do not grant a permit for works which would be so greatly damaging to the fish and wildlife resources, and associated recreational values, of South Biscayne Bay, as those presently proposed under CE Permit 62-278.

Besides the sports, commercial and other species of marine animals noted in the USFWS report, small stone crabs and spiny lobsters (crayfish) frequent the project area. These two crustaceans are important commercially.

The low upland involved in the project can be expected to lie in the path of the southerly urbanization of Dade County. The basic conservation problem concerns whether adjacent productive bay bottom outside the bulkhead line must be sacrificed as dredging or borrow areas to get fill material. If so, then the bulkhead line loses meaning as a conservation measure and a precedent for large scale dredging has been set in southern Biscayne Bay. Dredging has already eliminated northern Biscayne Bay as a productive marine area.

MAILING LIST Proposed Dredge and Fill Area, South Biscayne Bay, Dade County, Florida  
(SAKSP Permits 62-278)

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University of Florida

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Mr. Alex Dragovich  
U. S. F. W. S. Regional Office  
St. Petersburg Beach, Florida

Mr. Seton Thompson, Regional Director  
Mr. Ed Arnold  
U. S. F. W. S. Regional Office  
St. Petersburg Beach, Florida

Mr. Arthur Marshall, Field Supervisor  
Mr. Kneeland McNulty  
Bureau of Sport Fisheries & Wildlife  
Vero Beach, Florida

Mr. Herb Hunter  
Mr. W. L. Towns  
Bureau of Sport Fisheries & Wildlife  
Atlanta, Georgia

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Colonel, Corps of Engineers  
U. S. Army Engineer District  
Jacksonville 2, Florida

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Florida State Board of Conservation  
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NOTE: A letter dated October 9, 1962) from Van H. Ferguson (Director, Trustees of the Internal Improvement Fund) to the Florida Board of Conservation is attached to the report. The body of the letter is as follows:

Please report concerning the probable effects of the dredging indicated on the enclosed map. Except for the channel 50 feet wide at the bulkhead line the main dredging will be beyond 153 feet from the bulkhead line and will include a channel 300 feet wide to the 5-foot contour.