

U.S. DEPARTMENT OF THE INTERIOR  
U. S. GEOLOGICAL SURVEY

# SURFACE SALINITY OF FLORIDA BAY

BY

ROBERT HALLEY<sup>1</sup>, DEWITT SMITH<sup>2</sup>, AND MARK HANSEN<sup>1</sup>

OPEN-FILE REPORT 95-634

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.

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<sup>2</sup>South Florida Natural Resources Center, Everglades National Park, Homestead, FL





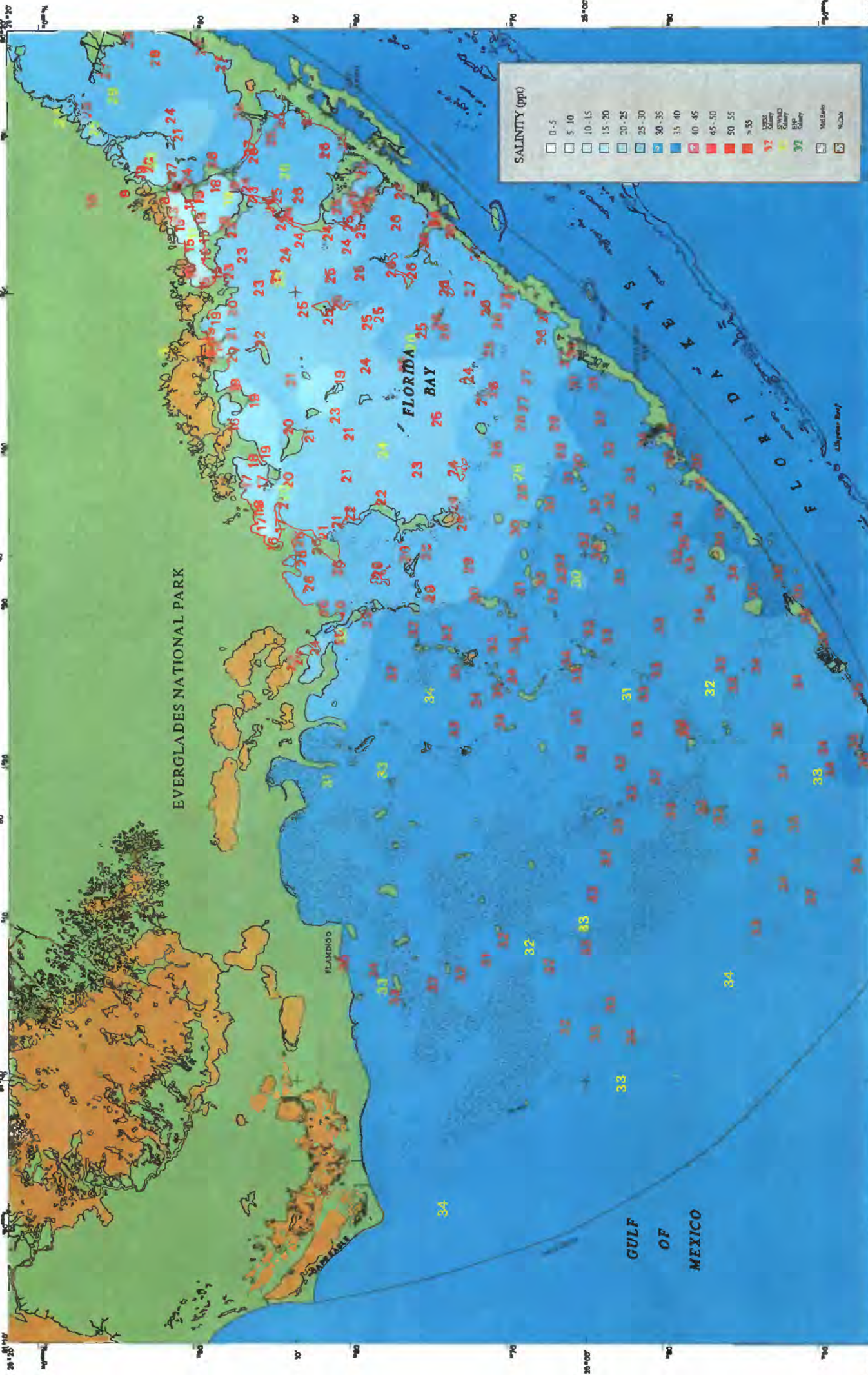












Map data, edited, and published by the Geological Survey  
 Base by National Oceanic and Atmospheric Administration,  
 National Ocean Service, Additional topography and  
 enhancements in areas indicated by Florida Department of  
 Professional Regulation and Florida Research Institute  
 Universal Transverse Mercator zone 17  
 North American Datum of 1983

SCALE 1:160 000  
 15 KILOMETERS  
 15 MILES  
 CONTOUR INTERVAL: 5 ppt SALINITY

Salinity data collected by K. Ludwig and  
 S. Ziehl of the U.S. Geological Survey  
 by the National Park Service, Everglades  
 National Park, were collected at monitoring  
 stations between 28 July 1993 and 21  
 August 1993. The data were collected by the  
 South Florida Environmental Research Program  
 at the University of Florida. The data were  
 processed and mapped using the  
 Salinity is calculated using Unesco  
 algorithms from conductivity and  
 temperature. The salinity contours  
 and trends within the data set,  
 however, are based on interpolation  
 and are not necessarily the same as  
 the original data. The map was  
 prepared by Robert Halley and Mark  
 Hansen. The map has not been reviewed for  
 conformity with U.S. Geological Survey  
 editorial standards.



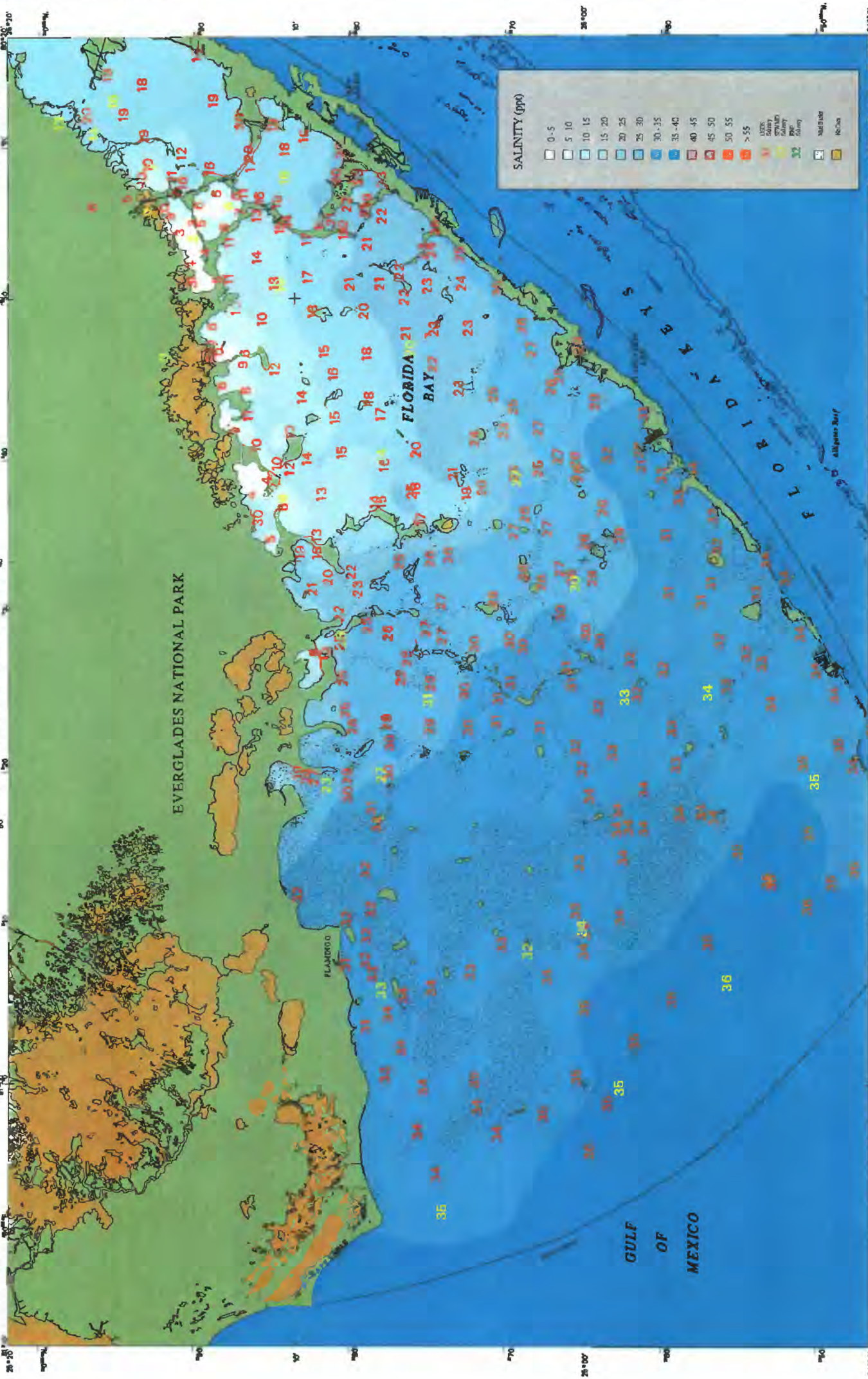
# FLORIDA BAY SURFACE SALINITIES

June 1995

By  
 Robert Halley, Dewitt Smith, and Mark Hansen

Center for Coastal Geology and  
 Regional Marine Studies  
 U.S. Geological Survey  
 2 South Florida Natural Resources Center  
 Everglades National Park  
 Homestead, FL





Salinity data collected by K. Ludwig and M. M. Oyle of the U.S. Geological Survey between 14-17 August 1985. Data provided to the U.S. Geological Survey by the National Park Service. Salinity data were collected at monitoring stations between 14-17 August, 1985. The data were processed by the Florida Environmental Research Program at the University of Florida. Salinity is tabulated using Unesco algorithms from conductivity and temperature data. Contours were based on interpolation and trends within the data set. The map has not been reviewed for conformity with U.S. Geological Survey editorial standards.

Center for Coastal Geology and Regional Marine Studies  
U.S. Geological Survey  
South Florida Natural Resources Center  
Homestead, FL



# FLORIDA BAY SURFACE SALINITIES

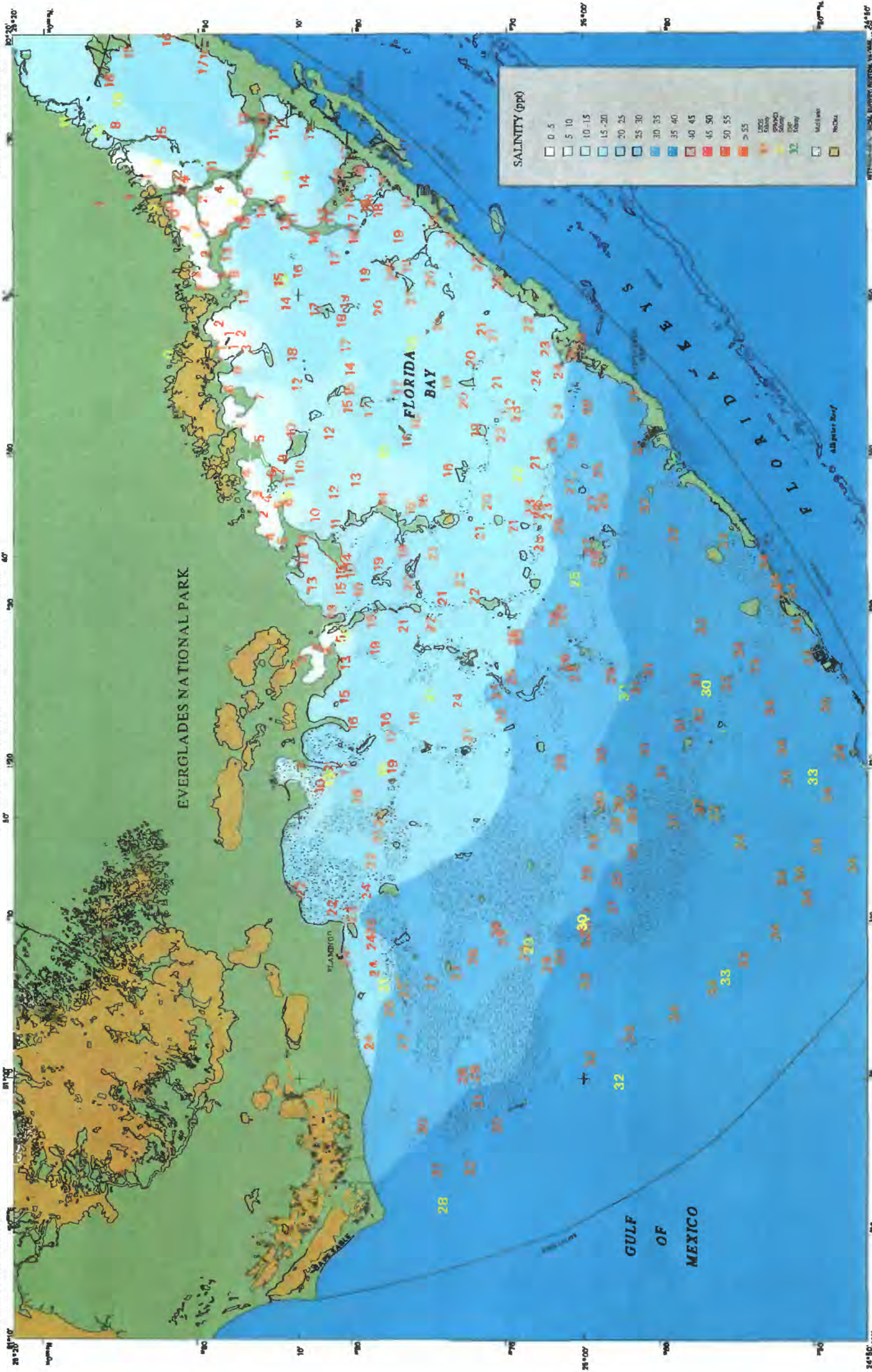
August 1995

By  
Robert Halley<sup>1</sup>, Dewitt Smith<sup>2</sup>, and Mark Hansen<sup>1</sup>  
1995

Mapped, edited, and published by the Geological Survey, U.S. Department of the Interior. Based on National Ocean Service and Atmospheric Administration, National Ocean Service, Additional Topography and Bathymetry, in some locations by Florida Department of Environmental Protection, and other sources. Original data collected by K. Ludwig and M. M. Oyle of the U.S. Geological Survey, Florida Environmental Research Program, University of Florida, Gainesville, Florida, 1985.







Mapped, edited, and published by the Geological Survey  
Based by National Oceanic and Atmospheric Administration,  
National Ocean Service. Additional topographic and  
environmental data were provided by Florida Department of  
Environmental and Natural Resources, Florida Research Institute,  
University of Florida, and the U.S. Geological Survey.  
Universal Transverse Mercator grid is  
North American Datum of 1983.

WTA 188 AND 189 MARITIME  
REGISTRATION CENTER OF MIAMI

SCALE 1:180,000  
CONTOUR INTERVAL 5 ppt SALINITY

Salinity data collected by K. Ludwig and  
M. Moly of the U.S. Geological Survey  
between 1983 and 1985. The data were  
provided by the National Park Service, Everglades  
National Park. The data were plotted on  
National Park Service maps of Florida  
National Park between 1983 and 1985.  
Management District was collected by the  
Southwest Environmental Research Program  
19-22 October 1985. The data were  
collected from conductivity and  
temperature measurements. The  
contours are based on interpolation  
and trends within the data set.  
The map has not been reviewed for  
conformity with U.S. Geological Survey  
additional standards.

# FLORIDA BAY SURFACE SALINITIES

October 1995

By  
Robert Halley, Dewitt Smith, and Mark Hansen

Center for Coastal Geology and  
Regional Marine Studies  
U.S. Geological Survey  
400 U.S. Fish and Wildlife Service  
Everglades National Park  
Homestead, FL

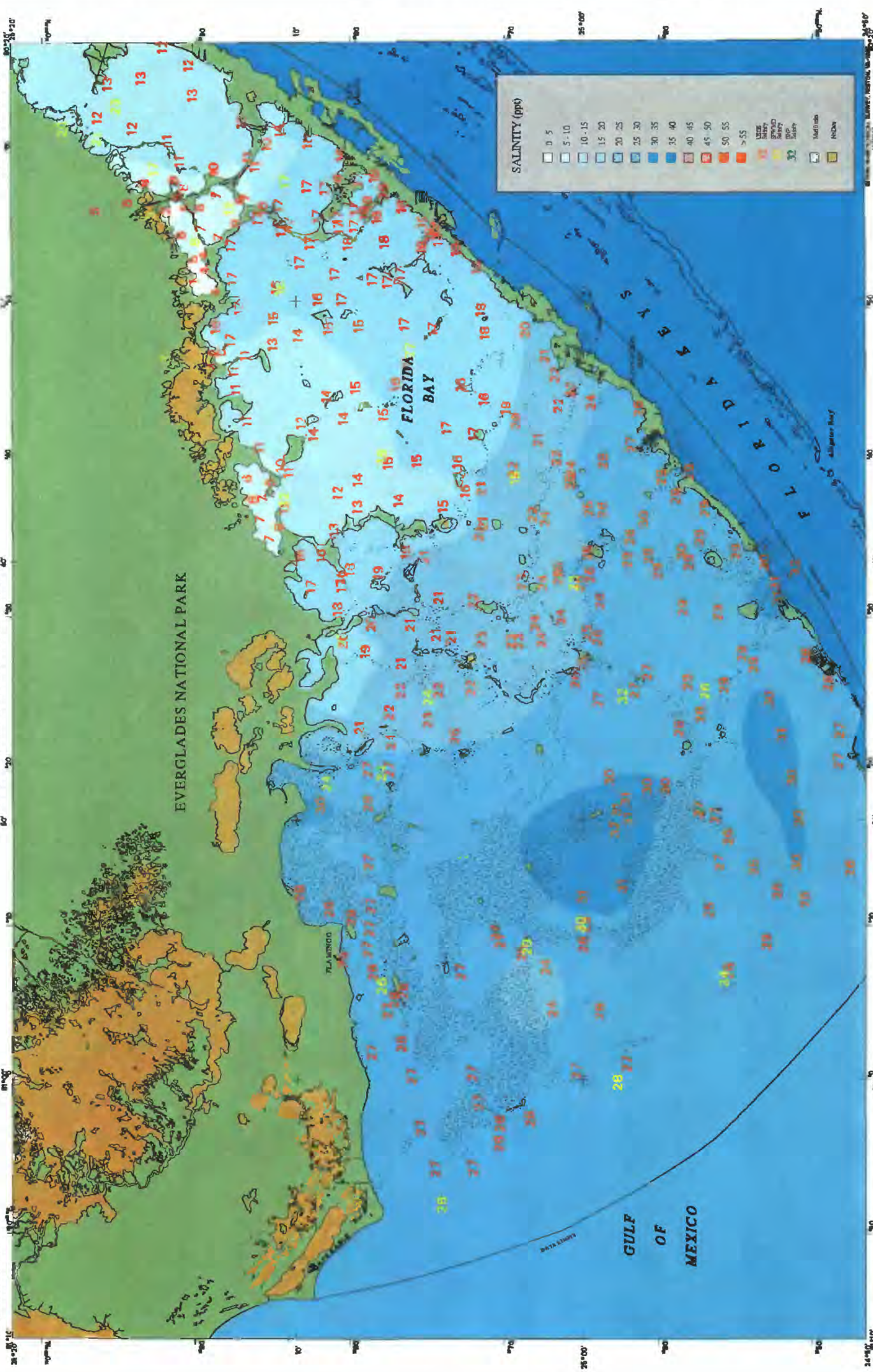




U.S. DEPARTMENT OF THE INTERIOR  
U.S. GEOLOGICAL SURVEY

Prepared for the  
SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

FLORIDA BAY SALINITY MAP - 7A  
OPEN-FILE REPORT #95-634



SALINITY (ppt)	
0-5	Lightest Blue
5-10	Light Blue
10-15	Medium-Light Blue
15-20	Medium Blue
20-25	Medium-Dark Blue
25-30	Dark Blue
30-35	Very Dark Blue
35-40	Dark Blue-Grey
40-45	Grey-Blue
45-50	Grey
50-55	Light Grey
>55	White
UNDETERMINED	White with Black Border
MISSING	White with Black Border
NO DATA	White with Black Border

Salinity data collected by K. Ludwig and M. Moya of the U.S. Geological Survey between 5-7 December 1986. Data provided by the National Park Service, Everglades National Park, and the Florida Department of Environmental Protection, Florida Marine Research Institute. Data provided by South Florida Water Management District, Everglades National Park, and the South Florida Environmental Research Program of Florida International University on 8-14 December 1986 using Unesco algorithm from conductivity and temperature field measurements. Contour interval is 5 ppt. Contour lines were drawn by computer using a program developed and amended using contouring software. The map was not been reviewed for accuracy by the U.S. Geological Survey additional standards.

Center for Coastal Geology and Regional Geoscience  
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3400 University Avenue  
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Homestead, FL



# FLORIDA BAY SURFACE SALINITIES

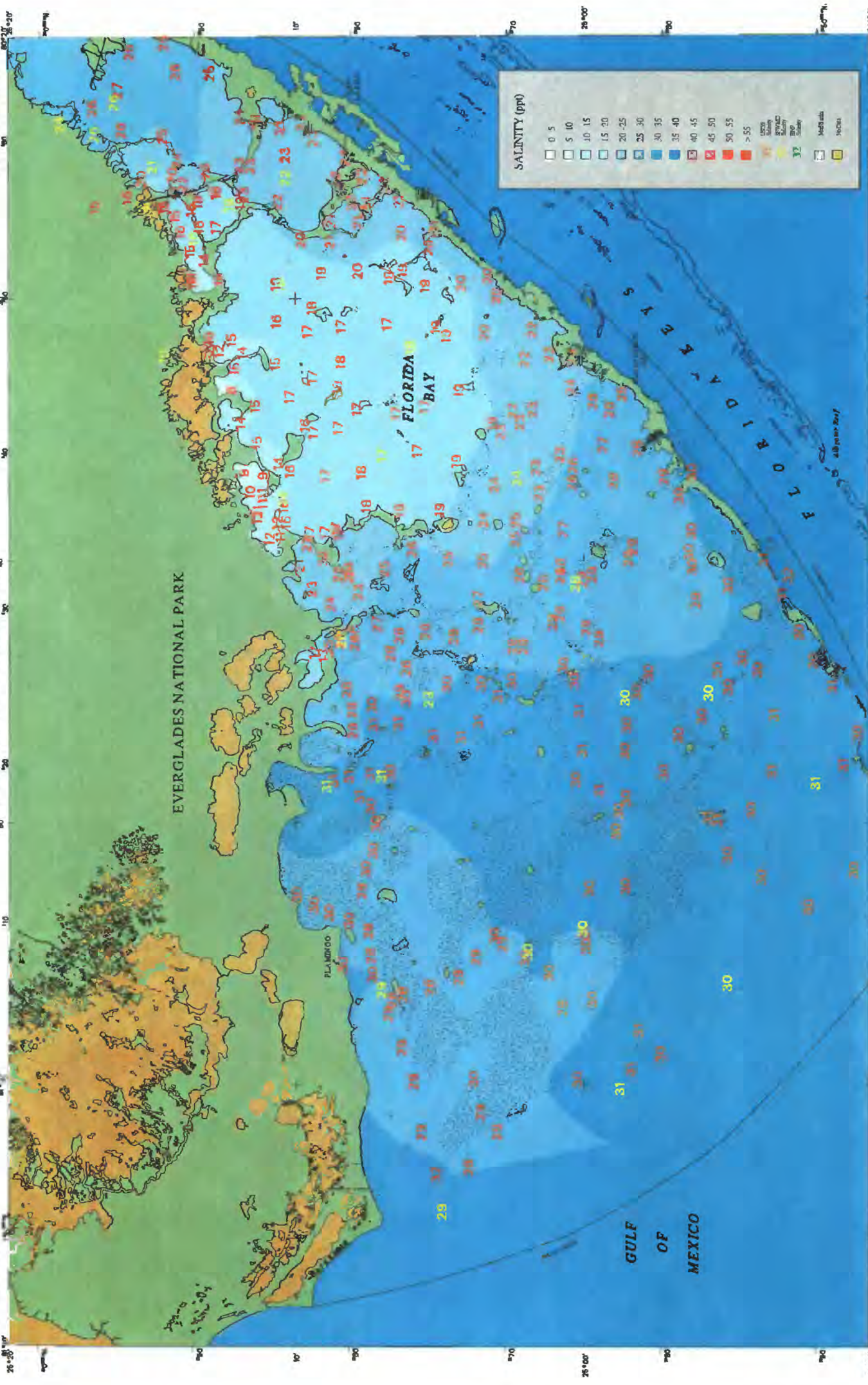
December 1995

By  
Robert Halley, Dewitt Smith, and Mark Hansen  
1995

Mapped, edited, and published by the Geological Survey  
U.S. Department of the Interior  
National Science and Atmospheric Administration,  
National Oceanic and Atmospheric Administration,  
Environmental Protection, Florida Marine Research Institute,  
Projection and 10 000-meter grid base  
North American Datum of 1983







Mapped, edited, and published by the Geological Survey  
 based on data collected by the U.S. Geological Survey  
 National Ocean Service, Additional topography and  
 bathymetry data were provided by Florida Department of  
 Environmental Protection, Florida Marine Research Institute,  
 University of Tampa, and the University of Florida.  
 North American Datum of 1983

SCALE 1:150,000  
 15 MILES  
 30 KILOMETERS  
 CONTOUR INTERVAL: 5 ppt SALINITY

Salinity data collected by K. Ludwig and  
 M. M. O'Neil of the U.S. Geological Survey  
 between 13-18 February 1988. Data provided  
 by the U.S. Geological Survey, National  
 Ocean Service, were collected at monitoring  
 stations between 14-16 February 1988.  
 The data were collected by the  
 Manatee County District Office of the  
 South Florida Environmental Research Program  
 at Florida International University on  
 the Florida Bay side of the bay.  
 Salinity is calculated using Unesco  
 algorithms from conductivity and  
 temperature field measurements.  
 Contours were drawn by computer  
 and then smoothed by hand. The data set  
 was developed and smoothed using  
 the same procedures as those used for  
 the other maps in this series.  
 This map series has been reviewed for  
 conformity with U.S. Geological Survey  
 additional standards.

# FLORIDA BAY SURFACE SALINITIES

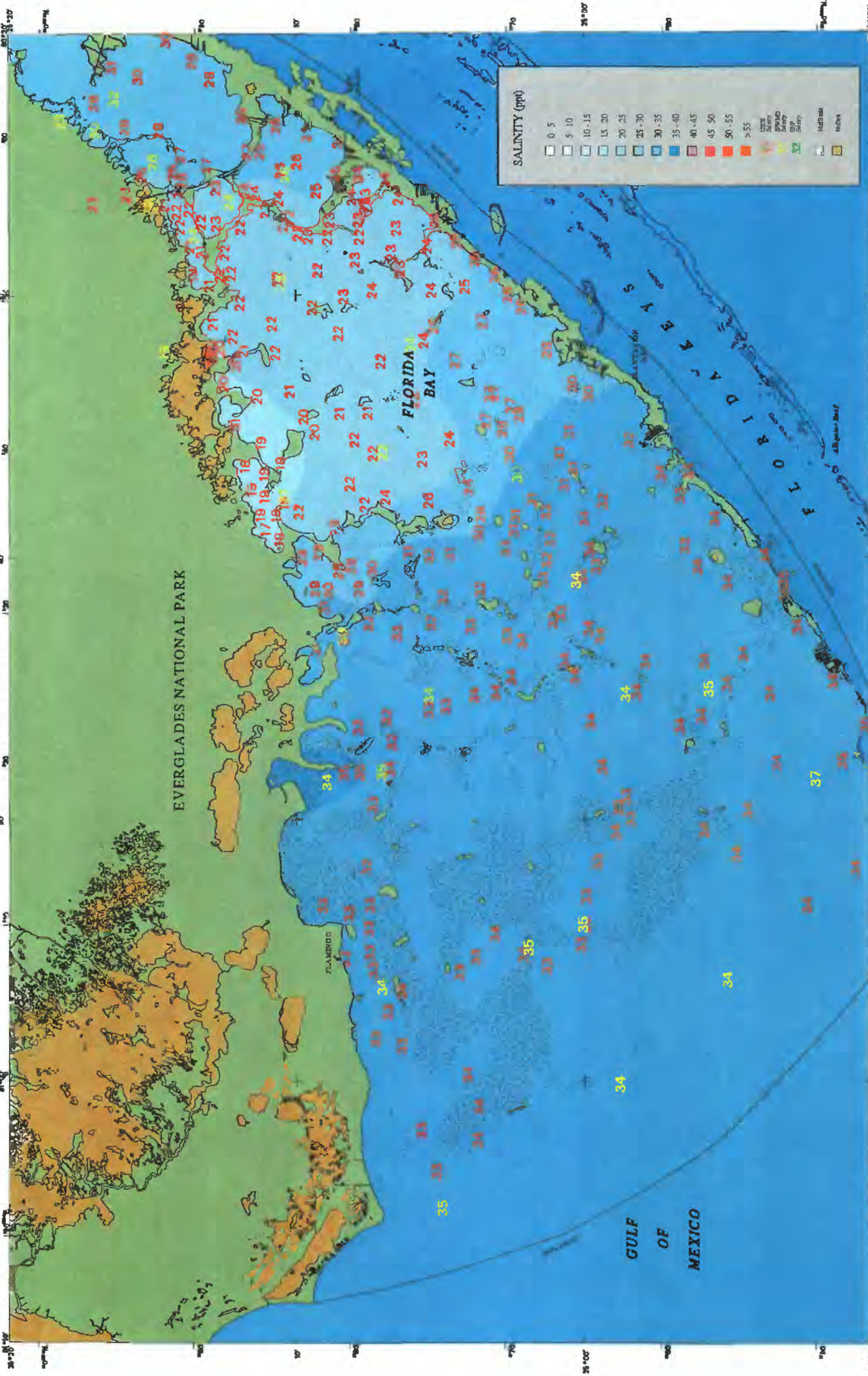
February 1996

By  
 Robert Halley,<sup>1</sup> Dewitt Smith,<sup>2</sup> and Mark Hansen<sup>1</sup>  
 1995



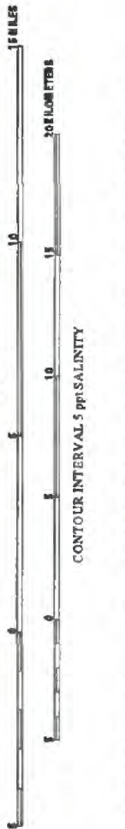
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 201 N. Pine Street, Ft.  
 Lauderdale, FL 33301  
<sup>2</sup>Everglades National Park  
 Homestead, FL





Mapped, edited, and published by the Geological Survey  
 from data collected by the U.S. Geological Survey  
 between 8-12 April 1986. Data provided  
 by the U.S. Geological Survey  
 National Park was collected at monitoring  
 stations between 8-12 April 1986.  
 The map was prepared by the  
 U.S. Geological Survey  
 Florida Bay Salinity  
 Map. Computer program was developed by the  
 South Florida Environmental Research Program  
 at Florida International University on  
 2/27/88. The map was prepared using  
 algorithms from conductivity and  
 temperature data measurements.  
 Contour interval is 1 ppt. Contour lines  
 and trends with the data are  
 developed and smoothed using  
 the same algorithms.  
 The map has not been reviewed for  
 conformity with U.S. Geological Survey  
 editorial standards.

Salinity data collected by K. Ludwig and  
 L. Reilly of the U.S. Geological Survey  
 between 8-12 April 1986. Data provided  
 by the U.S. Geological Survey  
 National Park was collected at monitoring  
 stations between 8-12 April 1986.  
 The map was prepared by the  
 U.S. Geological Survey  
 Florida Bay Salinity  
 Map. Computer program was developed by the  
 South Florida Environmental Research Program  
 at Florida International University on  
 2/27/88. The map was prepared using  
 algorithms from conductivity and  
 temperature data measurements.  
 Contour interval is 1 ppt. Contour lines  
 and trends with the data are  
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 The map has not been reviewed for  
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 editorial standards.



# FLORIDA BAY SURFACE SALINITIES

April 1996

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 1995



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