



**NOAA Technical Memorandum**

**NMFS-SEFSC-320**

**A Bibliography of Research on St. Andrew Bay,  
Its Tributaries, and the Nearby Coastal Waters  
of Bay County, Florida**

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**March 1993**

**U.S. DEPARTMENT OF COMMERCE  
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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
D. James Baker, Administrator  
NATIONAL MARINE FISHERIES SERVICE  
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## INTRODUCTION

This indexed bibliography is one of a three-part project, the goal of which is to collect and to make available the research that has been performed on St. Andrew Bay. In addition to the bibliography, there is a physical collection of this material housed at the Panama City Laboratory Library of the National Marine Fisheries Service, and available to the public by appointment. Also, this material is accessible on a computer database (ANDREW), and searchable by keyword and author. The software used is Pro-Cite.

While many bay systems have been studied extensively, and have the advantage of a nearby university with a staff of scientists, St. Andrew Bay has received comparatively little attention, except for governmental agencies, free-lance scientists, and consulting firms. Many of the publications are considered "gray literature"--they have not appeared in professional, refereed journals. As a result, much of the literature is difficult to access by means of the traditional scientific indexes. It is hoped that this compendium will serve as a guide to what has been accomplished so far in understanding the biota and ecology of St. Andrew Bay, its tributaries, and the nearby coastal waters.

In cases where authors have used more than one form for their names in publications, these names have been standardized to the fuller form (e.g., John L. Smith rather than J. L. Smith).

## ACKNOWLEDGMENTS

I thank everyone who contributed to this effort by providing documents, or allowing me to rummage through their collections. Special thanks go to the U.S. Fish & Wildlife Service, Panama City, Florida Office for their support in the printing of this document.

1. Abbott, R. Tucker. 1986. "Cantharus multanqulus new subspecies grandanus from northwest Florida (Buccinidae)." Nautilus 100(4):120-121.  
A description of a newly discovered marine mollusc collected from St. Joseph Bay and St. Andrew Bay.
2. Addy, Sunit K., and J. Lamar Worzel. 1979. "Gas seeps and subsurface structure off Panama City, Florida." AAPG Bulletin 63(4):668-675.  
[American Assoc. of Petroleum Geologists]  
An investigation of the presence of natural gas, using seismic profiles and core sampling. Gas seeps were found in waters of 50-200 meter depths. Includes information regarding sediments.
3. Addy, Sunit K., J. Lamar Worzel, and Daniel A. Goodwin. 1979. "Seismic stratigraphy and structure off Panama City, Florida." AAPG Bulletin 63(3): 409.  
[American Assoc. of Petroleum Geologists]  
A seismic profile of the bottom topography in the vicinity of Destin Dome and De Soto Canyon. (Abstract only).
4. Allison, Donald T. 1961. List of fishes from St. Andrew Bay system and adjacent Gulf of Mexico. Florida State University, Tallahassee, FL, 63 p.  
[Unpublished report]  
A report of fish collections made during the period August 1958 - September 1959.
5. Austin, George B., and Robert H. Payne. 1962. Results of a field study of the tide line mechanism. U.S. Navy Mine Defense Laboratory, Panama City, FL, Research and Development Report no. 165, 34 p.  
An investigation into the properties of this interface between St. Andrew Bay waters and the gulf.
6. Bader, Richard G. 1956. Sedimentary analysis of Panama City samples. Texas A&M Univ., Dept. of Oceanography, College Station, TX, Unpaged.  
Analysis of bottom samples taken during a research cruise off of Panama City.
7. Balech, Enrique. 1967. "Dinoflagellates and tintinnids in the northeastern Gulf of Mexico." Bulletin of Marine Science 17(2):280-298.  
Most of these planktonic organisms were collected off of Panama City, May-September 1964. Approximately 170 species were identified.
8. Balsillie, James H. 1975. Analysis and interpretation of littoral environment observation (LEO) and profile data along the western panhandle coast of Florida. U.S. Army Corps of Engineers, Fort Belvoir, VA, Technical Memorandum no. 49, 104 p.  
A 100-mile segment of the Florida panhandle coast was studied, from St. Andrew Bay to Pensacola Bay. Includes information on beach profiles, longshore transport and currents, winds and storms.

9. Barnett, Ernest L., and John S. Gunter. 1986. Comprehensive shellfish growing area survey for North Bay, Bay County, Florida. Editors: Charles R. Futch, John W. Schneider, and David C. Heil. Florida Dept. of Natural Resources, Shellfish Environmental Assessment Section, Tallahassee, FL, 159 p.  
Includes information regarding pollution sources, water quality, hydrography and biota of North Bay.
10. Barr, Douglas E., and Jeffry R. Wagner. 1981. Reconnaissance of the ground water resources of southwestern Bay County. Northwest Florida Water Management District, Havana, FL, Technical File Report no. 81-8, 28 p.  
A survey of the aquifer and wells of southeastern Bay County.
11. Baskerville-Donovan Engineers, Inc. 1988. Report of operating performance at the Military Point Lagoon, Bay County, Florida. Baskerville-Donovan, Panama City, FL, 33 p.  
[Prepared for the Board of County Commissioners of Bay County, FL.]  
This assessment of the wastewater treatment lagoon includes data regarding flow, total suspended solids (TSS), biochemical oxygen demand (BOD), and fecal coliform bacteria.
12. Baskerville-Donovan Engineers, Inc. 1989. North Bay County sewerage and treatment facilities feasibility study. Baskerville-Donovan Eng., Panama City, FL, 42 p. + maps and append.  
[Prepared for the Bay County Board of County Commissioners]  
An evaluation of the wastewater treatment needs of this area and the different options available.
13. Baskerville-Donovan Engineers, Inc. 1989. Report on system capacity needs of the Bay County domestic wastewater treatment system, Bay County, Florida. Baskerville-Donovan, Pensacola, FL, 42 p.  
[Prepared for the Board of County Commissioners, Bay County, Florida]  
A report on the projected sewage treatment needs of the county, and the various options available. Includes population projections to the year 2010.
14. Baskerville-Donovan Engineers, Inc. 1988. Report of recommended actions at the Military Point Lagoon system. Baskerville-Donovan, Pensacola, FL, 32 p.  
[Prepared for Bay County, FL]  
This report presents plans and options for improving this wastewater treatment facility.
15. Baskerville-Donovan, Inc. 1991. Pre-draft environmental document prepared for the Bay County Bridge Authority. Baskerville-Donovan, Panama City, FL, 123 p., incl. maps.  
[Prepared in association with Sanford Young & Assoc., Vittor & Assoc., Inc., on behalf of Figg Engineers, Inc.]  
A study of the proposed new bridge across St. Andrew Bay, and its potential ecological impacts. Includes information concerning the environmental communities in the vicinity of the proposed routes.

16. Bay County Wastewater System Review Committee. 1987. Final report. The Committee, Panama City, FL, 18 p. + append.  
Discusses the wastewater treatment needs and options for Bay County.
17. BCM Converse, Inc.  
[See also: publications by Reidenauer; Converse, J.B., Inc.]
18. BCM Converse, Inc. 1987. Bay County, Florida, sewage treatment expansion study. BCM Converse, Panama City, FL, unpagged.  
[Project no. 05-2000-86]  
A study of the existing and future sewage needs of Bay County.
19. BCM Converse, Inc. 1987. St. Andrew Bay system environmental database. BCM Converse, Panama City, FL, Various pag.  
[Submitted to the U.S. Environmental Protection Agency]  
A collection of reports on the water quality, hydrography, sediments and biota of St. Andrew Bay.
20. Bennett, Carl M., and F. C. W. Olson. 1971. An assay of environmental data collected off Panama City, Florida from 1962 to 1968. Naval Ship Research and Development Lab., Panama City, FL, NSRDL/PC no. 3444, 314 p.  
[A joint effort of the Texas A&M Univ., Office of Naval Research, and the Naval Ship Research and Development Lab.]  
Presents oceanographic and meteorological data collected from the offshore research stages off of Panama City.
21. Bigger, Charles H. 1980. "Interspecific and intraspecific acrorrhagial aggressive behavior among sea anemones: a recognition of self and not-self." Biological Bulletin 159(1):117-134.  
Includes Anemonia sargassensis, collected from the jetties at the entrance to St. Andrew Bay.
22. Bock, Wayne D. 1982. "Coexistence of deep- and shallow-water foraminiferal faunas off Panama City, Florida." Geological Soc. of America Bulletin 93(3): 246-251.  
A study of the species composition of benthic foraminifera, taken from offshore sediments at depths of 37-192 m.
23. Boston, Noel E. J. 1964. Observations of tidal periodic internal waves over a three day period off Panama City, Florida. Texas A&M Univ. Dept. of Oceanography & Meteorology, College Station, TX, Project 286-D, Ref. no. 64-20T, 49 p.  
[Also produced as a Master's Thesis, Texas A&M Univ., 1963]  
A report on studies conducted during June 19-22, 1962.

24. Bousfield, Edward L. 1991. "New sandhoppers (Crustacea: Amphipoda) from the gulf coast of the United States." Gulf Research Reports 8(3):271-283.  
Includes a newly-discovered species from Panama City Beach.
25. Brandes, Robert J., and Howard O. Andrews. 1976. Water quality analysis of St. Andrew Bay, Florida. Water Resources Engineers, Inc., Austin, TX, 29 p. [Prepared in support of the 201 Wastewater Treatment Facilities Studies, Bay County, FL, for J.B. Converse & Co., Panama City, FL.]  
An analysis of projected water quality conditions in St. Andrew Bay, using a mathematical model.
26. Branham, Joseph M. 1958. An ecological survey of the ascidians of Alligator Harbor, Florida, and the adjacent Gulf of Mexico. Florida State Univ., Tallahassee, FL, 71 p.  
[M.S. Thesis]  
Includes 3 species of these tunicates taken from St. Andrew Bay and offshore waters.
27. Briggs, John C., and David K. Caldwell. 1957. "Acanthurus randalli, a new surgeon fish from the Gulf of Mexico." Bulletin of the Florida State Museum (Biological Sciences) 2(4):43-51.  
Describes a newly discovered species found at the jetties of St. Andrews State Park.
28. Brim, Michael S. n.d. Species lists for the course, "Sea Life of St. Andrew Bay". Compiled by Michael S. Brim, from various sources, Panama City, FL, unpagged.  
Lists of species to accompany the author's course given at Gulf Coast Community College. Includes sponges, coelenterates, molluscs, crustaceans, echinoderms, fishes, and sea birds.
29. Brim, Michael S. 1981. "A special park in the panhandle." Florida Sportsman 13(5):54-61.  
Describes the fishing and diving opportunities at St. Andrews State Park.
30. Brim, Michael S. 1985. Student/citizen handbook of environmental laws affecting Bay County's saltwater resources. Gulf Coast Community College, Panama City, FL, 50 p.  
A compendium of federal and state laws and regulations.
31. Broutman, Marlene A., and Dorothy L. Leonard. 1988. The quality of shellfish growing waters in the Gulf of Mexico. U.S. Dep. Commer., NOAA, National Ocean Service, Rockville, MD, 43 p.  
[National Estuarine Inventory Program]  
Includes data on oyster acreage and water quality in St. Andrew Bay.

32. Brown, Maurice V. 1962. "Seismic profile in St. Andrew Bay." Journal of Geophysical Research 67(11):4513-4515.  
Analysis of sound waves yielded information regarding the bottom sediment layers of St. Andrew Bay.
33. Bruno, Richard O. 1971. Longshore current system, Panama City to Pensacola, Florida. Florida State Univ., Tallahassee, FL, 167 p.  
[M.S. Thesis]  
An analysis of the longshore current, based on one year's data from six beach observation stations, including one at St. Andrews State Park. Data is given regarding waves and wind.
34. Brusher, Harold A., and Larry H. Ogren. 1976. "Distribution, abundance, and size of penaeid shrimps in the St. Andrew Bay system, Florida." Fishery Bulletin 74(1):158-166.  
Presents distribution and abundance information regarding eight species of shrimp occurring in the various areas of the bay. Also includes some hydrographic data.
35. Brusher, Harold A., Lee Trent, and Mark L. Williams. 1978. "Recreational fishing for king mackerel in Bay County, Florida, during 1975." In: Austin, C. B., et al. (Editors), Mackerel workshop report, Miami, FL, April 28-29, 1977. Univ. Miami Sea Grant Report no. 14, p. 120-142.  
[Workshop sponsored by the National Marine Fisheries Service]  
Presents statistics and analysis based upon a survey of charter boats, party boats and privately owned boats.
36. Bullis, Harvey R., Jr., and Robert M. Ingle. 1959. "A new fishery for scallops in western Florida." Proceedings of the Gulf & Caribbean Fisheries Institute 11:75-78.  
Report of a fishing survey for calico scallops, from St. Andrew Bay to Cape San Blas.
37. Burch, Terry. 1981. Significant environmental investigations in the Northwest Florida Water Management District: a bibliography. Northwest Florida Water Management District, Havana, FL, Water Resources Special Report no. 81-2, 56 p.  
Includes published and unpublished reports. Indexed by county and river basin.
38. Burdin, Walter W. 1977. "Surge effects from Hurricane Eloise." Shore & Beach 45(2):3-8.  
[Also published in The Proceedings of the Mississippi Water Resources Conference, Mississippi State Univ., 1976]  
The impact of this hurricane on Panama City Beach.



39. Burgess, Bob. 1990. "Panama City potpourri." Florida Sportsman 22(12):30-35. Fishing the wrecks and reefs off of Panama City. Includes Loran coordinates for selected reefs.
40. Burgess, Robert F. 1977. "Submerged forests." Oceans 10(5):46-49. Discusses the discovery of submerged fossil trees, some dating over 37,000 years old, off of Panama City and in the entrance channel to St. Andrew Bay.
41. Butts, Glenn L. 1989. A benthic macroinvertebrate assessment of Grand Lagoon, Bay County, in vicinity of the Venture Out WWTP discharge. Florida Dept. of Environmental Regulation, Northwest District, Pensacola, FL, 10 p. A survey of invertebrate populations near a wastewater treatment plant discharge. Includes water quality data.
42. Butts, Glenn L., and Laurence W. Donelan. 1983. Hydrolab survey of lower St. Andrews Bay - Panama City, Bay County, August 26, 1983. Florida Dept. of Environmental Regulation, 5 p. + map  
A study of water quality in various locations in the lower bay. Data is given for temperature and dissolved oxygen.
43. Cairns, Duncan J., and Cynthia W. McAnnally. 1990. The surface water improvement and management plan for the Deer Point Lake watershed. Northwest Florida Water Management District, Havana, FL, Various pag.  
This watershed management plan provides a description of the area, including pollution sources, ecology and land uses, along with management plans and projects to protect the watershed.
44. Caldwell, David K. 1959. "Observations on tropical marine fishes from the northeastern Gulf of Mexico." Quarterly Journal of the Florida Academy of Sciences 22(1):69-74.  
Reports on seven tropical fishes that occur during the summer in Panama City and Destin waters.
45. Caldwell, David K., and John C. Briggs. 1957. "Range extensions of western north Atlantic fishes with notes on some soles of the genus Gymnachirus." Bulletin of the Florida State Museum (Biological Sciences) 2(1):1-11.  
Reports on fish collections made in various locations, including Panama City and Destin.
46. Chandler, Charlie R. 1983. Effects of three substrate variables on two artificial reef fish communities. Texas A&M Univ., College Station, TX, 79 p.  
[M.S. Thesis]  
An investigation of the fish populations at artificial reefs offshore of Panama City.

47. Chayes, Charles M. 1989. "Shellfishing--a Bay County tradition." Bay Biz (Winter):7-10.  
Discusses the fishery for shellfish such as oysters, shrimp and crabs.
48. Clemens, Linda A., James B. Dalton, and Russell D. Fendick. 1989. Ambient ground water quality in northwest Florida. Part I: Ground water sampling and analysis. Rev. ed. Northwest Florida Water Management District, Havana, FL, Water Resources Special Report no. 87-1, 232 p.  
This report of the Ambient Ground Water Monitoring Program includes information on Bay County's ground water, obtained by sampling 15 wells for chemical, metal and bacterial content.
49. Collard, Sneed B. 1989. Sorting and identifying macroinvertebrates, St. Andrew Bay. Unpublished, Unpaged.  
[Data sheets from a project contracted by the Florida Dept. of Environmental Regulation]  
Enumerates the species of annelids, molluscs, arthropods and other invertebrates found at 10 stations in St. Andrew Bay.
50. Collard, Sneed B. 1992. Characteristics of seagrass meadows in St. Andrew (Crooked Island) Sound, northern Gulf of Mexico: preliminary findings. University of West Florida, Pensacola, FL, 19 p.  
[Sponsored by the Air Force Office of Scientific Research]  
A survey of the population and distribution of the seagrasses and their fauna. Includes preliminary lists of species.
51. Converse, J. B., & Co.  
[See also: BCM Converse, Inc.]
52. Converse, J. B., & Co. 1976. Bay County, Florida facilities plan, Section 201, PL 92-500, EPA Project no. C120545010. J.B. Converse, Mobile, AL, 2 v.  
[See also: BCM Converse]  
A consultant's study of the wastewater treatment needs and planning for Bay County. Includes environmental, economical, and biological information.
53. Cooley, Nelson R. 1974. "Occurrence of snook on the north shore of the Gulf of Mexico." Florida Scientist 37(2):98-99.  
Discusses the range of snook, including a record from St. Andrew Bay.
54. Cosper, Terry C. 1972. "The identification of tintinnids (Protozoa: Ciliata: Tintinnida) of the St. Andrew Bay system, Florida." Bulletin of Marine Science 22(2):391-418.  
Describes 21 species of these planktonic organisms, and presents a key for their identification. Includes scanning electron photomicrographs.

55. Crittenden, Edward. 1958. "A pre-impoundment fishery study of North Bay and associated waters, Bay County, Florida." Proceedings of the Annual Conference, Southeastern Assoc. of Game and Fish Commissioners 11:211-219. A report on a collection of fishes that was made before the construction of the dam in North Bay.
56. Crittenden, Edward, James M. Barkuloo, and J. B. Copeland. 1957. Fish population studies of North Bay and its tributaries. Florida Game and Fresh Water Fish Commission, Lake and Stream Survey, Tallahassee, FL, 75 p. [Included as part of: Florida Game and Fresh Water Fish Commission, Report on North Bay and associated waters, Bay County, Florida.] A fish population survey done prior to the impoundment of Deer Point Lake.
57. Culpepper, Thomas J., and Willis E. Pequegnat. 1969. A taxonomic and ecological study of selected benthonic gammarid crustaceans from the northeastern Gulf of Mexico. Texas A&M Univ. Dept. of Oceanography, College Station, TX, Project 286-6, Ref. no. 69-3T, 102 p. Collections of these amphipods were made off of Panama City.
58. Culter, James K., and S. Mahadevan. 1982. Long-term effects of beach nourishment on the benthic fauna of Panama City Beach, Florida. U.S. Army Corps of Engineers, Coastal Engineering Research Center, Fort Belvoir, VA, Miscellaneous Report no. 82-2, 94 p. [Performed by the Mote Marine Laboratory, Sarasota, FL] Includes hydrographic data, sediment composition, and benthic fauna lists and counts.
59. Dean, Robert G. 1986. Sediment budget principles and applications. University of Florida, Coastal & Oceanographic Engineering Dept., Report no. UFL/COEL-86/019, 51 p. A study of beach profiles and shoreline changes due to the action of waves, currents, tides and sediment supply. Among the localities studied was the entrance channel to St. Andrew Bay.
60. Demski, Leo S., and J. G. Dulka. 1983. "Underwater observations on color patterns and spawning in a synchronous hermaphroditic sea bass." American Zoologist 23(4):881. This study of the reproductive behavior of the belted sandfish was performed in St. Andrew Bay.
61. Desenclos, Jean-Claude A., and others. 1991. "A multistate outbreak of hepatitis A caused by the consumption of raw oysters." American Journal of Public Health 81(10):1268-1272. An account of an outbreak associated with oysters harvested from the Panama City area.

62. Douglas, Barry A. 1989. Prediction of shoreline changes near tidal inlets. University of Florida, Coastal & Oceanographic Engineering Dept., Report no. UFL/COEL-89/024, 131 p.  
Investigates shoreline changes near several tidal inlets along Florida's east and west coasts, including that of St. Andrew Bay.
63. Dowling, George B. 1966. Low frequency shallow water internal waves at Panama City, Florida. U.S. Navy Mine Defense Lab., Panama City, FL, Research Report no. 313, 59 p.  
A study of the physical properties of internal waves, at depths of 60 to 100 ft. in Panama City offshore waters. Includes isotherm temperature data.
64. Doyle, Larry J., and others. 1984. Living with the west Florida shore. Duke Univ. Press, Durham, NC, 222 p.  
[Publication supported by the Florida Coastal Management Office]  
A study of shoreline management and hurricane protection along the west Florida coast, including Panama City Beach.
65. Duffee, Ernest M., Robert A. Baldwin, Douglas L. Lewis, and William B. Warmack. 1984. Soil survey of Bay County, Florida. U.S. Dept. of Agriculture, Soil Conservation Service, Washington, DC, 152 p. + maps  
Comprehensive study Bay County soils. Also includes information regarding habitats, agriculture, forestry, and water management.
66. Durham, Donald L., and Robert O. Reid. 1967. Analysis of tidal current observations over the northeastern shelf of the Gulf of Mexico. Texas A&M Univ., Dept. of Oceanography, Project 286, Ref. no. 67-1T, 117 p.  
Observations on the currents associated with tides off of Panama City.
67. El-Sayed, Sayed Z. 1967. On the biological productivity of the Gulf of Mexico with special reference to the region off Panama City, Florida. Texas A&M Univ., Dept. of Oceanography, Project 382, Ref. no. 67-12-F, 51 p.  
Examines chlorophyll levels, primary productivity, nutrient levels, and phytoplankton standing crop.
68. Environmental Protection Agency.  
[See: U.S. Environmental Protection Agency]
69. Environmental Protection Systems, Inc. 1985. Final report: Lake Powell environmental monitoring study. Environmental Protection Systems, Inc., Pensacola, FL, 267 p.  
[Submitted to the Lake Powell Improvement Corp.]  
Comprehensive study of the biota, ecology, and water quality of this estuary adjacent to St. Andrew Bay.

70. Environmental Science and Engineering, Inc. 1974. 316 variance study program, phase I--Literature survey and personal contacts for Lansing-Smith Station. ESE, Gainesville, FL, 2 v.  
[Prepared for Gulf Power Co., Pensacola, FL]  
A description of the plant and a survey of its effects upon the local environment. Includes lists of species, with their abundance and temperature tolerances. Vol. 2 is a compilation of published and unpublished reports.
71. Environmental Science and Engineering, Inc. 1977. An assessment of water quality in Bay County, Florida. ESE, Gainesville, FL, 185 p.; summary, 19 p.  
[Prepared for the Florida Dept. of Environmental Regulation]  
Assessment of the water quality of various locations in St. Andrew Bay, including its bayous and creeks.
72. Fable, William A., Jr., Harold A. Brusher, Lee Trent, and Joe Finnegan. Jr. 1981. "Possible temperature effects on charter boat catches of king mackerel and other coastal pelagic species in northwest Florida." Marine Fisheries Review 43(8):21-26.  
This study correlates temperature with catches in Panama City, Destin, and Orange Beach, AL.
73. Feuillede, C., Wayne A. Kinney, and Donald R. DelBalzo. 1990. "Shallow-water matched-field localization off Panama City, Florida." Journal of the Acoustical Society of America 88(1):423-433.  
Results of an underwater acoustic experiment, performed in Panama City offshore waters.
74. Finucane, John H., Harold A. Brusher, and L. Alan Collins. 1980. "Spawning of bluefish, Pomatomus saltator, in the northeastern Gulf of Mexico." Northeast Gulf Science 4(1):57-59.  
A study of the reproduction of bluefish taken from the Panama City area.
75. Florida Dept. of Environmental Regulation.  
[See also publications by: Butts; Florida State Environmental Quality Lab.; Hand; Kobylinski; Livingston; McCaffrey; Wieckowicz; Young]
76. Florida Dept. of Environmental Regulation, Biological Section. 1981. Bioassays of Southwest Forest Industries/Arizona Chemicals Company complex, Panama City. Florida DER, Tallahassee, FL, 22 p.  
A report of environmental monitoring at this site.
77. Florida Dept. of Environmental Regulation, Biological Section. 1982. Bioassays of Arizona Chemical Company stormwater retention area overflow ditch and saltwater ditch outfall to St. Andrew Bay, Panama City, Bay County, Florida. Florida DER, Tallahassee, FL, 16 p.  
A report of environmental monitoring at this site.

78. Florida Dept. of Environmental Regulation, Biology Section. 1983, 1985, 1987, 1988, 1989. Bioassays of Bay County Wastewater Treatment Plant, Panama City, Florida. Florida DER, Tallahassee, var. p.  
A series of reports in which samples of effluent from the treatment plant's aeration lagoon were evaluated for their effects on test organisms.
79. Florida Dept. of Environmental Regulation, Biology Section. 1984. Bioassays of the Majette Landfill sludge pond and pond overflow samples, Panama City, Bay County, Florida. Florida DER, Tallahassee, 15 p.  
A sample collected from the sludge pond was evaluated for its effect on test organisms. Includes chemical analysis data.
80. Florida Dept. of Environmental Regulation, Biology Section. 1985, 1987, 1989. Bioassays of Panama City Beach Sewage Treatment Plant, Panama City Beach, Bay County, Florida. Florida DER, Tallahassee, var. p.  
The effluent of this facility was evaluated for its effect on test organisms. These reports include water quality data.
81. Florida Dept. of Environmental Regulation, Biology Section. 1985, 1987. Bioassays of the St. Andrews Wastewater Treatment Plant, Panama City, Bay County, Florida. Florida DER, Tallahassee, FL, var. p.  
Two reports of environmental monitoring at this site.
82. Florida Dept. of Environmental Regulation, Biology Section. 1986, 1989. Bioassays of the Lynn Haven Wastewater Treatment Plant, Bay County, Florida. Florida DER, Tallahassee, var. p.  
The effluent of this facility was evaluated for its effect on test organisms. These two reports include water quality data.
83. Florida Dept. of Environmental Regulation, Biology Section. 1988, 1989, 1992. Bioassays of the Naval Coastal Systems Center Wastewater Treatment Plant, Panama City Beach, Bay County, Florida. Florida DER, Tallahassee, var. p.  
Samples from this facility were evaluated for their effects on test organisms. These reports include water quality and metal analysis.
84. Florida Dept. of Environmental Regulation, Biology Section. 1990, 1991. Bioassays of Bay County Wastewater Treatment Plant aeration lagoon, Military Point, Tyndall AFB, Bay County, Florida. Florida DER, Tallahassee, var. p.  
In these two reports, water from this facility was evaluated for its effect on test organisms.
85. Florida Dept. of Environmental Regulation, Biology Section. 1991. Bioassays of Stone Container Corporation, Panama City, Bay County, Florida. Florida DER, Tallahassee, 11 p.  
Effluent samples were evaluated for their effects on test organisms.

86. Florida Dept. of Environmental Regulation, Biology Section. 1992. Bioassays of Stone Container Corporation groundwater monitoring wells, Panama City, Bay County, Florida. Florida DER, Tallahassee, FL, 12 p. + data sheets. Samples of groundwater from monitoring wells at this facility were evaluated for their effects on test organisms. Includes chemical and metal analysis.
87. Florida Dept. of Environmental Regulation, Biology Section. 1992. Biological water quality of the Deer Point Lake drainage basin, Bay County, Florida. Florida DER, Tallahassee, FL, 89 p.  
[Performed in cooperation with the Northwest Florida Water Management District]  
Results of a broad-based study of the water quality and biological community health of the lake and its tributaries. Includes chemical data and lists of species.
88. Florida Dept. of Natural Resources.  
[See also publications by: Barnett; Futch; Gunter; Heath; Hughes; Kobylinski; Musgrove; Schmidt; Toler]
89. Florida Dept. of Natural Resources, Bureau of Submerged Lands and Preserves. 1991. St. Andrews State Park Aquatic Preserve management plan, adopted May 14, 1991. Florida DNR, Tallahassee, FL, 86 p.  
Includes a comprehensive description of the park and its fauna, flora and habitats, and measures taken to preserve them.
90. Florida Dept. of Natural Resources, Coastal Coordinating Council. 1973. Marine environmental studies of Florida's gulf coast: summary and selected bibliography. Florida DNR, Tallahassee, FL, 20 p.  
Publications are listed by geographic region.
91. Florida Dept. of Natural Resources, Division of Recreation and Parks. 1976. Vertebrates identified in St. Andrews State Recreation Area. Florida DNR, 12 p.  
Includes birds, mammals, reptiles and amphibians.
92. Florida Dept. of Natural Resources, Marine Resources Division. 1977. Shellfish harvesting area atlas. Florida Dept. of Natural Resources, Tallahassee, FL, unpagged.  
A series of county maps showing shellfish harvesting areas. Includes three maps of Bay County waters.
93. Florida Game and Fresh Water Fish Commission.  
[See also publications by: Crittenden; Hardin; Krummrich; Woodward; Young, N.]

94. Florida Game and Fresh Water Fish Commission, Lake and Stream Survey. 1957. Report on North Bay and associated waters, Bay County, Florida. Florida GFWFC, Tallahassee, FL, 75 p. + append.  
A pre-impoundment survey of North Bay. Includes information on water quality, hydrology, and fish populations.
95. Florida Sea Grant College Program.  
[See publication by: Pybas]
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## INDEX

The subject headings in this index indicate the subject content of the entire work. For example, if a publication deals only or mostly with salinity, it is given the subject heading "Salinity". If it includes a variety of hydrographic parameters, including salinity, it will be headed "Hydrography". The subject heading "Water quality" includes such parameters as dissolved oxygen, bacteria counts, pH, temperature, salinity, visibility, etc. Therefore, if you do not find the subject you are looking for, or the entries seem few in number, you may want to look under the next broader category.

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Addendum to NOAA Technical Memorandum NMFS-SEFSC-320:

Shortly after this publication went to press, two important works regarding St. Andrew Bay were published. Please add this page to the Technical Memorandum.

Hydroqual, Inc., and Barry A. Vittor & Assoc. 1993. Environmental studies in St. Andrew Bay, Florida. Bay County Utilities Dept., Panama City, FL, 4 v. [Replaces ref. no. 199]

A thorough examination of the bay's ecology and water quality. The most comprehensive study to date. Includes information regarding water quality parameters, hydrography, seagrasses, benthic invertebrates, and sediments.

Law Environmental, Inc. 1993. Final report: A thermal plume characterization and environmental assessment: Warren Bayou and West Bay, St. Andrew Bay Lansing Smith Electric Generating Plant, Panama City, Florida. Law Environmental Inc., Kennesaw, GA, 46 p. + appends. [Performed for Gulf Power Co.]

A study of the effects of the Lansing Smith Plant's thermal discharge upon the aquatic life in the receiving waters of the bay. Includes data regarding the hydrography of the thermal plume, water quality, the seagrass communities, sediments, and benthic invertebrates. Comparisons are made between this study and previous studies on this discharge.