

**BALDWIN COUNTY COMPREHENSIVE PLAN
COASTAL MANAGEMENT ELEMENT
DATA, INVENTORY AND ANALYSIS
SEPTEMBER, 2008**

With its abundance of scenic resources, recreational opportunities, waterways and beaches, and natural habitat, coastal Baldwin County and its 13 municipalities will continue to experience rapid growth from migration and natural increases. The historical development pattern has resulted in the destruction of critical wildlife habitat and native vegetation, the lowering of water quality, and the degradation or removal of beach and dune systems. If these resources are to be conserved in the future, development must be carefully and deliberately orchestrated.

The Coastal Management Element is one of the critical parts of the overall Comprehensive Plan that each municipality and the County should prepare for policy rulemaking consistent with State laws and regulations. The purpose of the Element is to plan for and where appropriate restrict development activities where such activities would damage or destroy coastal resources, and protect human life and limit public expenditures in areas that are subject to destruction by natural disaster.

Within the context of the Comprehensive Plan, the Coastal Management Element has a special status. Although it must be integrated into and consistent with all the other Elements of the Plan, the Coastal Management Element not only addresses the protection of coastal resources, it also addresses other related issues of land use, traffic circulation, public access, and public services, facilities, and infrastructure.

Baldwin County and the coastal municipalities have cooperated in the preparation of this Element. Early on, the County and coastal communities recognized that coastal issues and resources should be coordinated with a systems approach. Environmental systems such as estuaries, watershed, or wildlife habitat, and man-made systems like traffic circulation or drainage structures, do not start or stop at political boundaries.

Although the Coastal Management Element is included in the County's Comprehensive Plan, the inventory, analysis, and the goals, objectives and policies (GOPs) have been structured to be broadbased so that each community can choose to adopt all or part of the Element into their individual Comprehensive Plans. Individual municipalities can prepare their goals, objectives, and policies to suit their particular need.

The central concept of the Element is to promote consensus among and between coastal communities so that common problems can be identified and common solutions proposed and implemented. The intent is to emphasize cooperation in implementing and achieving the goals, objectives, and policies. It is not the intent of the County to mandate certain requirements through this element beyond its statutory authority. Rather, the approach taken is to stress intergovernmental coordination and mutual cooperation through the use of interlocal agreements.

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Glossary of Terms:

- (a) Adjacent Wetlands – Those wetland areas bordering, contiguous, neighboring, or hydrologically contiguous to state waters and/or wetland ecosystems.
- (b) Agency – Any unit, department, or office of federal, state, or local government, meaning any subdivisions thereof.
- (c) Alabama Scenic Byway – Any public road on the Alabama State Highway System that is so designated by the Alabama Scenic Byway Advisory Council and Designating Committee pursuant to Alabama SB438. These roadways offer travelers views of cultural, historical, archaeological, recreational, natural, or scenic resources, and provide a relaxed and educational experience. The intrinsic resources of the corridor must be considered of significant value by the surrounding communities. The corridor often includes vistas, rest areas, and other amenities in harmony with the scenic character of the road.
- (d) Alternative Site – A physical geographic location, either on the same parcel of property or another parcel of property in the same vicinity, which could result in a use having fewer adverse impacts on coastal resources.
- (e) Areas of Preservation and Restoration – A special group of Geographic Areas of Particular Concern singled out because of their conservation, recreational, ecological, or aesthetic values.
- (f) Beach – A sandy shoreline area characterized by low relief, generally of gentle slope, and some vegetation. The beach extends from the waterline to a change in physiographic form such as a dune or bluff, a change in sediment type, such as clay from sand, and/or a change in vegetation type. Gulf beaches are those sand beaches of the mainland and islands in Alabama which are subjected to the direct wave action of the Gulf of Mexico.
- (g) Boathouse – A structure, constructed over water, designed or intended to be used for the purpose of docking, storing, and protecting one more watercraft.
- (h) Boatslip – An excavated basin whose length is no greater than twice its width and which is used for the dockage of watercraft.
- (i) Canal – An excavated waterway for the purpose of navigation whose bottom elevation is below mean low water.
- (j) Certificate of Compliance – A document sent to a state agency certifying that the Department has determined the proposed use is in compliance with the Coastal Area Management Program.
- (k) Coastal Area – The waters (and the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder) lying seaward of the continuous 10 foot contour extending seaward to the outer limit of the United States territorial sea. The inland boundaries of the coastal area are described as follows within Baldwin County from the Baldwin County line in the Mobile River to the west and north lines of Baldwin County in the Mobile and Alabama Rivers to the intersection of the westernmost point of Baldwin County where the land surface altitude reaches 10 feet above mean sea level; then, a 10 foot contour in a southwesterly and southern direction along the Alabama

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River, the Mobile River Delta and the east shore of Mobile Bay to the proximity of Bon Secour; then continuing along the 10-foot contour in an easterly and northeasterly direction to the Alabama-Florida state line.

- (l) Coastal Connection Scenic Byway – A corridor composed of 130 miles of roadway starting from the west in Grand Bay, Mobile County and ending in the east at Daphne, Baldwin County. The Byway runs through several historically and ecologically significant destinations along Alabama’s Gulf Coast. The roadway consists of SR 188, CR 59, SR 193, SR 180, SR 182, SR 161, Foley Beach Expressway, US 98, and SR 98.
- (m) Coastal Resources – Valuable human, natural, cultural, or historical assets within the coastal area, such as water quality, air quality, wetlands, and submersed grassbeds, beaches and dunes, wildlife habitats, biological resources, and water resources.
- (n) Coastal Waters – Those waters, adjacent to the shoreline, which contain a measurable, quantity or percentage of sea water, including but not limited to, sounds, bays, lagoons, bayous, ponds, and estuaries
- (o) Consistency Certification – A document submitted by an applicant for federal license, federal permit, or activity described in an Outer Continental Shelf Lands Plan stating that a use proposed to be undertaken is consistent with the management program and complies with all relevant rules and regulations.
- (p) Consistency Determination – A document sent to the Department by any federal agency stating that a use proposed to be undertaken by that federal agency is consistent with the management program and complies with all relevant rules and regulations.
- (q) Construction Control Line (CCL) – A line of demarcation that controls where construction can occur along the coastal areas of Alabama.
- (r) Crestline – A line running more or less parallel with the shoreline interconnecting the peaks of the primary dune system.
- (s) Cultural Resource – Any district, building, site, object, or other material in American history, architecture, archaeology, or culture which is of national, state, or local significance.
- (t) Department – Alabama Department of Environmental Management, established by the Alabama Environmental Management Act, Code of Alabama 1975, Alabama Statutes Chapter 22, Section 22A, Subsection 1 to 13.
- (u) Departmental Approval – Any local permitting program or the issuance of any Department permit.
- (v) Department Review – Procedure by which the Department reviews uses subject to management for the purpose of determining whether or not to do any of the following: issue or deny a certificate of compliance; concur with or object to any person or agency’s consistency certification; agree or disagree with an agency’s consistency determination; issue a consistency approval or objection; issue or deny a Department permit; or approve or disapprove a local permitting program.
- (w) Discharge – Addition, introduction, leakage, spillage, or emitting of any sewer, industrial wastes, pollutant, or other wastes into waters of the state.

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- (x) Ditch – An excavation designed for the purpose of stormwater drainage whose bottom elevation is at or above zero National Geodetic Vertical Datum.
- (y) Dredging – Excavation of any materials from lands underlying coastal waters or wetlands.
- (z) Dune Walkover – A raised walkway constructed for the purpose of protecting the beach and dune system between mean high tide and the construction control line from damage that may result from anticipated pedestrian traffic to the beach and which is no more than six feet in width, constructed without roofs or walls, elevated at least one foot above the dune, and extends seaward of the seaward vegetation line.
- (aa) Endangered Species – Any species, including subspecies and varieties, that are in danger of extinction throughout all or a significant portion of their range in Alabama.
- (bb) Energy Facility – Any equipment or facility which will be used in the exploration for, or the development, production, conversion, storage, transfer, processing, or transportation of, any energy resource.
- (cc) Estuary – That part of a river or stream or other body of water having unimpaired connection with the open sea, where the sea water is measurably diluted with fresh water derived from land drainage.
- (dd) Estuarine sanctuary or estuarine research reserve – A research area which may include any part or all of an estuary, adjoining transitional areas and adjacent uplands, constituting to the extent feasible a natural unit, set aside to provide scientists and students the opportunity to examine, over a period of time, the ecological relationships within the area.
- (ee) Existing Structure – A structure that was constructed prior to October 9, 1985, and for which all required state, local, and federal authorizations were obtained prior to October 9, 1985.
- (ff) Federal Consistency – The provisions as stated in Code of Federal Register Part 930.
- (gg) Federal Development Project – A federal activity involving the planning, construction, modification, or removal of public works, facilities, or other structures, and the acquisition, utilization, or disposal of land or water resources.
- (hh) Federal permit – Authorization, certification, approval, or other form of permission, and any renewal thereof, which any federal agency is empowered to issue to an applicant.
- (ii) Fill – Any solids, dredged material, sludge, or other material the placement of which has the effect of purpose of raising the elevation of wetlands or lands underlying coastal waters.
- (jj) Footprint – Ground area covered by a structure when viewed from the top or plan view.

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- (kk) Functional value – A wetland’s ability or potential to provide one or more of the following:
 - 1. Stormwater retention and storage
 - 2. Nutrient export and primary productivity
 - 3. Purification and filtration of water
 - 4. Shoreline protection and erosion control
 - 5. Wildlife or fisheries habitat
 - 6. Groundwater recharge
- (ll) Habitable structure – Any structure which by virtue of its design, size, or appurtenances, is suitable for occupation as a residence on a temporary or permanent basis, or any similar structure used for commercial purposes.
- (mm) Hydrologically contiguous – Continuously or recurrently connected to state waters by other surface water or drainage as evidenced by water marks on land or vegetation, channels, or water eroded paths, including areas separated from state surface waters by a berm, causeway, or similar feature and which have a surface elevation at or below the normal high water line of the adjacent water body.
- (nn) Interagency coordination – Formal and informal consultation between the Department and any federal, state, or local agency proposing to issue a license or permit for any use in the coastal area.
- (oo) Interagency review process – Review of a proposed project between what the agency staff and the Department staff to identify information gaps and other relevant aspects of the project.
- (pp) Marina – Any commercial facility which is capable of offering permanent or transient docking or mooring space for 10 or more boats and is capable of providing one or more of the following services: dry boat storage, boat fueling facilities, haulout facilities, repair services, nautical supplies, or any facility which is capable of providing mooring space for 20 or more boats ancillary to developments such as apartments, condominiums, hotels, or other planned unit developments.
- (qq) Outer continental shelf plan – Any plan for exploration or development of , or production from, any area, which has been leased under the Outer Continental Shelf Lands Act.
- (rr) Primary dune system – A ridge or series of ridges of unconsolidated and usually mobile sands lying landward of the upper limit of Gulf beaches which serves as the principal defense against storm wave attack.
- (ss) Special management area – Those specific areas within coastal Alabama that may require special management and regulatory emphasis due to their unique or special values, characteristics, or significance.
- (tt) Submersed grassbeds – areas within the coastal area which support rooted vegetation that are not normally emerged even at low tide but remain covered within coastal waters.
- (uu) Toxic pollutants – Those pollutants, or combinations of pollutants, including diseased-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organisms, either directly form the environment or indirectly

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through food chains, will, on the basis of the information available to the Department, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations, in such organisms or their offspring.

- (vv) Wetlands – Those areas delineated pursuant to the technical criteria described in the Federal Delineation Manual that is currently being used by the Corps of Engineers and/or any updated manual that may be used in the future.
- (ww) Water dependent use – Those uses which must, under normal operating conditions, be located on or in immediately adjacent to coastal waters in order to be physically and economically practicable.

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List of Abbreviations:

Organization or Rule/Policy/Law/Code	Abbreviations
Alabama Department of Conservation and Natural Resources—Marine Resources Division	ADCNR-MRD
Alabama Department of Conservation and Natural Resources—State Lands Division Coastal Section	ADCNR
Alabama Department of Environmental Management	ADEM
Alabama Coastal Foundation	ACF
Alabama Forest Resource Center	AFRC
Alabama Gulf Coast Convention and Visitors Bureau	AGCCVB
Alabama Port Mitigation Bank	APMB
Alabama Power Company	APC
Baldwin County Commission	BCC
Bon Secour National Wildlife Refuge	BSNWR
Clean Water Act of 1987	CWA
Coastal and Estuarine Land Protection Program	CELP
Coastal Land Trust, Inc.	CLT
Dauphin Island Bird Sanctuaries, Inc.	DIBS
Emergency Operations Center	EOC
EPA Gulf of Mexico Program	GOMP
Geologic Survey of Alabama	GSA
Memorandum of Agreement	MOA
Memorandum of Understanding	MOU
Mississippi Alabama Sea Grant Consortium	MASGC
Mobile Bay Sierra Club	MBSC
Mobile Baywatch/Baykeeper	MBB
National Oceanic Aeronautics Administration	NOAA
National Coastal Wetlands Program	NCWP
National Environmental Policy Act	NEPA
National Fish and Wildlife Foundation	NFWF
National Resource Conservation Service	NRCS
North American Wetlands Conservation Act	NAWCA
Partners for Environmental Progress	PEP
South Alabama Regional Planning Commission	SARPC
Southeastern Natural Resources Incorporated	SNRI
The Nature Conservancy	TNCAL
Trust for Public Lands	TPL
US Fish and Wildlife Service	USFWS
Weeks Bay Foundation	WBF
Weeks Bay National Estuarine Research Reserve	WBNERR
Wetland Protection Overlay District	WPOD
Wetland Reserve Program	WRP
United States Army Corp of Engineers	USACOE
United States Fish and Wildlife Service	USFWS

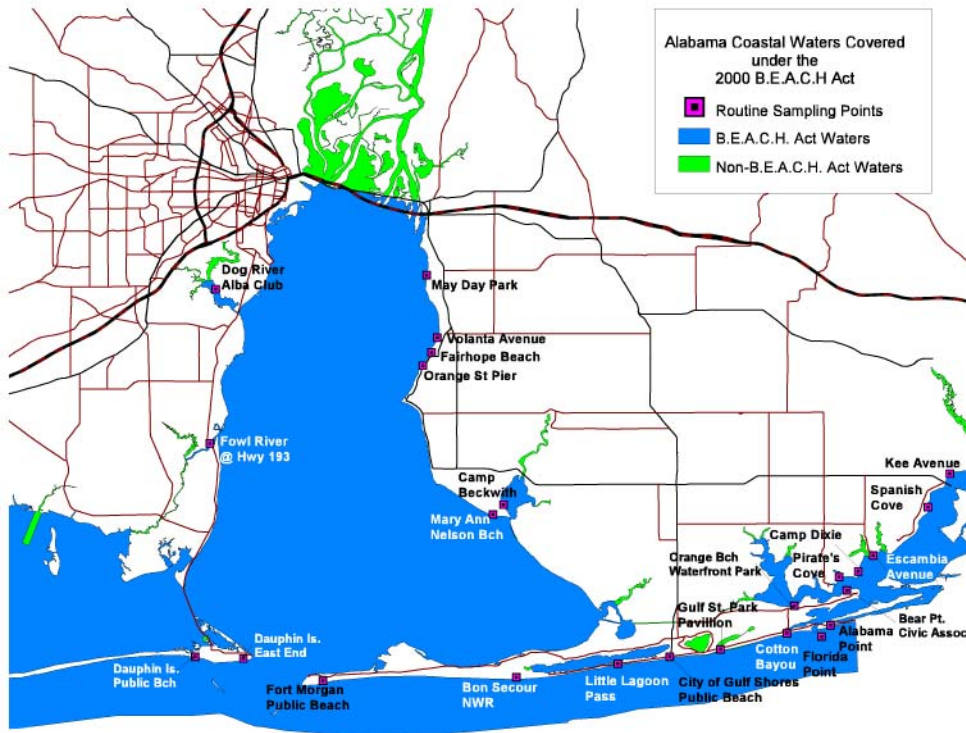
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List of Sources:

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- Lee County Conservation and Coastal Management Element. Lee County: 2004.
- Weeks Bay National Estuarine Research Reserve Management Plan. NOAA: 2007.
- Alabama Department of Environmental Management. Coastal Area Management Plan Division 335-8.
- Groundwater Discharge and Nitrate Flux to the Gulf of Mexico. Groundwater. Vol. 42, No. 3, pp. 401-417.
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- Cumulative Impact Assessment for the Alabama Beach Mouse. USFWS: 2003.
- Coastal Connection Scenic Byway Corridor Management Plan. Alabama Association of Regional Councils: 2008.
- Baldwin County Hurricane Evacuation Route Analysis. Baldwin County: 2008.

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Alabama Department of Environmental Management (ADEM)/ Alabama Department of Public Health (ADPH)



Coastal Alabama Beach Monitoring Program

Alabama's coastal beaches are a major tourist attraction as well as a lifestyle staple for Alabama residents. Alabama has approximately 50 miles of Gulf Beach and an estimated 65 to 70 miles of bay beaches where the adjacent waters are classified for swimming under the State's Water Use Classification System. Bacterial contamination in Alabama's coastal recreational waters can originate from sources, including shoreline development, wastewater collection and treatment facilities, septic tanks, urban runoff, disposal of human waste from boats, bathers themselves, commercial and domestic animals and natural animal sources such as wildlife. People who swim and recreate in waters contaminated with such bacterial pollution are at an increased risk of becoming ill. Pathogens associated with this type of pollution can cause ear, eye, skin and respiratory infections, gastrointestinal illness, and more serious diseases such as meningitis and hepatitis.

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In June 1999, Alabama Department of Environmental Management (ADEM), in cooperation with the Alabama Department of Public Health (ADPH), initiated a program to routinely monitor bacteria levels at five select swimming beaches on the Gulf Coast. The effort was later expanded to include six additional sites along the Gulf Coast and Mobile Bay. In October of 2000 the federal Beaches Environmental Assessment and Coastal Health (BEACH) Act was signed into law. This act mandates the monitoring and assessing of coastal recreational waters and the prompt notification of the public when applicable water quality standards are not being met. The act also authorizes EPA to award grants to help governments implement monitoring and notification programs consistent with published EPA guidance and criteria. The ADEM was designated as the State's lead agency and was awarded grant money to carry out this program. Through the BEACH Act, the ADEM and the ADPH have greatly expanded and enhanced monitoring and notification efforts for Alabama's public recreational waters. The goal of this program is to increase public awareness and provide valuable water quality information to help the public make more informed decisions concerning their recreational use of Alabama's natural coastal waters.

This program now involves the routine collection of water samples from 25 high use and/or potentially high risk public recreational sites from Perdido Bay to Dauphin Island. The selection of sites and the frequency of sampling are determined using a risk based evaluation and ranking process. This process considers a number of factors for a given site, most importantly the amount of use and the amount of risk. Depending on the site, samples are collected twice per week, once per week or once every other week during the swimming season (June through September) and once per month during the cooler months. These samples are analyzed for the indicator bacteria Enterococci. Enterococci bacteria are endemic to the guts of warm blooded creatures. These bacteria, by themselves, are not considered harmful to humans but often occur in the presence of potential human pathogens. The indicator bacteria used and the threshold concentration, which triggers an advisory, are based on recommendations provided by the EPA in the documents *Ambient Water Quality Criteria for Bacteria* (1986) and *Water Quality Standards Handbook, second addition* (1983).

How this site works:



The associated map of Coastal Alabama (Water Quality Summary) indicates the locations of the monitoring sites. Click on the location name of interest on either the map or the list of monitoring sites below for the most recent advisory status and bacteriological testing results. A three tiered color coded water quality status system is used to help the public make a more informed decision concerning water quality and risk of illness associated with swimming. A green status means that, based on the most recent test, water quality is acceptable. Enterococci levels were at or below the EPA threshold of 104 colonies per 100 ml of water. A yellow status means the most recent test results for a given site exceeded the EPA threshold of 104 Enterococci colonies per 100 ml of water. There may be an increased risk of illness associated with swimming in such water. Because elevated bacteria levels are often transient and usually fall quickly, these sites

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undergo immediate retesting. The yellow status will be revised to red or green based on the results of the retest. A red status means that repeat testing of a site has again revealed bacteria levels over the EPA threshold of 104 Enterococci colonies per 100 ml of water. There may be an increased risk of illness associated with swimming in such water. Because elevated bacteria levels have persisted, a public health advisory has been issued. Because bacteriological testing requires a 24 hour incubation period, it should be emphasized that even the most recent data (and thus the reported water quality status) are at least 24 hours old, and may not reflect current water quality conditions at these sites.

Coastal Scenic Byway Corridor Management Plan

The purpose of this project is to develop a Corridor Management Plan for the Coastal Scenic Byway that is consistent with the requirements laid out in the Alabama Scenic Byway Program Manual. The Corridor Management Plan is key to the Designated Phase of the Scenic Byway and it focuses on “protecting, enhancing, and managing the resources identified in the eligibility application for both present and future conditions.” At the conclusion of the corridor phasing, the Alabama Scenic Advisory Council will determine whether or not the Corridor Management Plan provides a framework for adequate protection of intrinsic resources; identifies a sustainable Action Plan; and, documents broad based community support for the Byway. If the Plan meets these standards, along with others, it will be recommended for implementation. The goal of the Coastal Scenic Byway Program is to provide a guide for the preservation and enhancement of this roadway corridor and its intrinsic resources. This document was produced by the HNTB Corporation for the Alabama Association of Regional Councils in February of 2008.

Baldwin County Hurricane Evacuation Route Analysis

A study was completed in January of 2008 to address evacuation operations and clearing time requirements for the existing 2007 roadway infrastructure and future year 2030 scenarios incorporating various combinations of proposed roadway improvements in Baldwin County. Post, Buckley, Schuh, and Jernigan, an international consulting firm, was retained to perform the necessary work by the Office of Emergency Management of Baldwin County.

Public Input:

Citizens who attended the two Public Workshops (Sept. 25th and 26th, 2007) ranked their list of County issues and comments by order of importance at the end of the each evening. Below are the results for this element, listed in order of importance:

Coastal Element

1. Coastal Hazards Implementation System – e.g., Emergency Evacuation Routes
2. Coastal Fisheries Protection
3. Wolf Bay Watch Organization
4. Avoid Over-Pavement
5. Provide Public Ramps to waterways