

HORIZON 2025
THE BALDWIN COUNTY COMPREHENSIVE PLAN
CHAPTER 4: CONSERVATION, NATURAL RESOURCES & OPEN SPACE ELEMENT
GOALS, OBJECTIVES & POLICIES
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CHAPTER INTRODUCTION

The Conservation, Natural Resources and Open Space Element provides the framework for the preservation, protection and wise use of the County's natural resources. The intent of this element is to provide a basis for effective decision-making regarding the appropriate use of natural resources when faced by increasing growth and urban development, in addition to the identification and preservation of important ecological systems.

Despite the rapid growth experienced in the County over the last two decades, there remains an abundance of natural resources. However, as growth pressures increase, so does the need for protection and management of these resources. This element undertakes a responsible approach to stewardship of natural resources by recognizing the contribution of these resources to Baldwin County's quality of life.

The goals, objectives, and policies concerning natural resources have been divided into the following categories: environment, waterways, natural open space and wetlands acquisition, waste management, development and environmental protection, resource protection, wetlands management, wildlife protection, stormwater management, groundwater protection, air quality, water quality, and citizen participation.

The environment needs to be examined to ensure stability of the natural resources within Baldwin County. Addressing the issue of protection of waterways within Baldwin County will be discussed. The preservation of the natural open space and wetlands habitats shall be initiated by a strategic plan to acquire environmentally sensitive areas. The management of hazardous waste is a growing concern statewide and nationally. Proposals are included to address the County's progressive role in preventing damage to the environment from the inadequate storage and disposal of these wastes.

Controlling and balancing the rate of development with the intrusion to the environment will have to be closely monitored and examined. Because of the chance of flooding in low-lying and coastal areas, stormwater management standards need to be implemented to protect communities from natural disasters and major flooding events.

Air quality is not considered to be a major problem at the present. However, measures are included to prevent substantial degradation of the County's air quality as growth continues.

Preventing further harm to the water quality of the County's lakes, rivers, and groundwater is high on the agenda of this element. A program to implement comprehensive monitoring and protection of County waters is proposed, along with methods to ensure the continuing natural functions of waterbodies, wetlands and floodplains.

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Protection measures are proposed to conserve important areas of native vegetation through a range of techniques. Perhaps the best protective technique of all will be through the designation of land uses in the Future Land Use Element of the Baldwin County Comprehensive Plan. The best examples of diverse ecological communities are found in undeveloped areas. Once such communities are identified, they can best be protected by directing urban growth away from them. A program of identification will be undertaken, and growth into those areas will be regulated. Wildlife protection is accomplished by preserving habitat critical to the survival of wildlife species.

Future land use designation of areas appropriate for the extraction of mineral resources will serve to protect the economic value of these areas by preventing encroachment of other types of development. At the same time, measures to minimize environmental degradation from the adverse impacts of mining activities are proposed.

These policies are derived from an analysis of the existing conditions within the natural environment of the County, as well as an examination of the other elements of the Growth Management Plan.

The following goals, objectives, and policies have been developed for the use of local policy makers in guiding and directing the decision making process regarding the conservation of natural resources. For purposes of definition, the included goals are a generalized statement of a desired end state toward which objectives and policies are directed. The objectives provide the attainable and measurable ends toward which Baldwin County directs specific efforts. The policies provided are the specific recommended actions that the County will follow in order to achieve the identified objectives.

GOALS, OBJECTIVES AND POLICIES

ENVIRONMENT

GOAL 1: Baldwin County shall continue to plan for the protection, conservation, management, and appropriate use of its natural resources.

Objective 1.1 : Baldwin County will continue to develop and implement a comprehensive environmental management and conservation program, which will ensure that the natural resources of Baldwin County, including state and federally listed animal species are properly, appropriately and effectively identified, managed, and protected.

Policy 1.1.1: Baldwin County shall continue to support established environmental policies by maintaining an appropriately administered and professionally staffed governmental unit capable

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of developing, administering, and providing long-term direction for the protection and management of the County's environmental resources.

Policy 1.1.2: The appropriate County agencies shall continue cooperation with private natural resource conservation and management organizations, as well as regional, state, and federal environmental agencies.

Policy 1.1.3: The appropriate County agencies will work with adjacent and surrounding local governments and state/federal agencies to identify and manage shared natural resources.

Policy 1.1.4: Utilize the Environmental Advisory Board of Baldwin County, affected state and federal agencies, and environmental volunteer organizations as guidance to help steer decision-making on high priority environmental issues.

Policy 1.1.5: The provisions of the proposed Major Roadway Plan of the County shall minimize impacts upon wetlands and protect the environment.

Objective 1.2: Maintain a framework for an integrated, computer based environmental resources GIS and non-GIS data storage, analysis, and graphics system. Annually update the GIS and non-GIS databases based on the previous year's analytical data in order to monitor the status of the County's natural resources and propose potential protection measures when appropriate.

Policy 1.2.1: Collected and compiled GIS and non-GIS data will be organized by established watershed and sub-basin units in the County.

Policy 1.2.2: With the appropriate Memorandum of Understanding, County environmental resources GIS and non-GIS data may be made available to both public and private entities in order to promote and improve local environmental resource planning and management.

Policy 1.2.3: Baldwin County's computerized environmental resources GIS and non-GIS data storage, analysis, and graphics system shall share information and resources with other regional and local agencies. The County shall cooperate with these other entities when updating its system in order that the benefits of the updated system may be shared with all appropriate agencies and organizations.

WATERWAYS

GOAL 2: Baldwin County shall address the issue of protecting its natural waterways.

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Objective 2.1: Specific initiatives shall be in place to prevent degradation of Baldwin County waterbodies.

Policy 2.1.1: By 2012, complete a comprehensive storm water plan for the County to reduce flooding and maintain water quality.

Policy 2.1.2: The County will develop baseline water quality data in order to monitor water quality by 2012.

Policy 2.1.3: The County will work on methods to decrease the pollution and stormwater runoff in the County waterways to improve water quality and maintain EPA and ADEM standards by 2014.

Policy 2.1.4: The County shall require that any surface water body designated as an “impaired waterbody” by EPA or ADEM be subject to additional land development regulation criteria for all land in drainage basins that is both existing and new development.

Policy 2.1.5: Baldwin County shall introduce a chemical and biological assessment monitoring program that includes temperature, phosphates, nitrates, acidity of water, turbidity, and dissolved oxygen levels for all impaired waterbodies.

Objective 2.2: Protect the natural functions of the 100-year floodplain—flood mitigation, water purification, water supply, and wildlife habitat and movement corridors – consistent with the policies contained herein, so that the flood carrying and flood storage capacity is maintained and public health and safety of the natural ecosystem are protected.

Policy 2.2.1: A comprehensive watershed management program should be established to identify and map the 100-year floodplains in Baldwin County, evaluate the flood-handling capacities of natural drainage systems, maintain and enhance water quality, protect natural ecosystems, develop floodplain management guidelines, and incorporate watershed information into a database system. The hydrologic functions of the 100-year flood prone areas shall be protected by prohibiting the placement of fill within the flood prone area without mitigating for storage and flood carrying capacity.

Policy 2.2.2: Development shall not be allowed in areas of special flood hazard (100-year) flood areas unless the development can demonstrate affirmatively that at a minimum:

1. It will not adversely affect the water quality and flood-carrying capacity and/or flood storage capacity of the area of special flood hazard;
2. It is designed to withstand special flood hazards by elevating the finished floor elevation to a minimum of one foot above the 100-year flood elevation;
3. It does not alter the hydroperiod of natural ecosystems;

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4. It does not pose a threat to public health, safety, and welfare;
5. It is consistent with the policies contained in the Future Land Use Element.

Policy 2.2.3: The County hereby designates those lands within the County's jurisdiction lying within the 100-year floodplain of any waterbody system as an environmentally sensitive area as defined in the Data Inventory & Analysis Section Volume II of the Baldwin County Comprehensive Plan. Within this area, federal and state regulations shall at a minimum be in conformance with and the following provisions shall also apply:

1. The County's Land Development Regulations shall require an undisturbed regulation buffer along the property lines of public lands within the 100-year floodplain of any waterbody for the purposes of visual screening, stormwater treatment and erosion control, public safety, and buffering potentially incompatible land uses.
2. The County shall participate in the acquisition planning process of state and regional agencies for lands and unique natural areas located within the 100-year floodplain of the identified river systems within Baldwin County.
3. The County shall annually monitor the use of County-owned facilities on or within the 100-year floodplain of any waterbody system to ensure that the public use of these facilities does not threaten the facility or adjacent natural resources.
4. The County shall require a minimum undisturbed, vegetated buffer of 50 feet measured from the generally recognized riverbank of any waterbody maintained for all land uses.
5. The County shall provide for the evaluation of properties for unique natural areas within the 100-year floodplain of any waterbody.

Objective 2.3: Baldwin County shall protect the natural functions of floodplains and flood zone areas to maintain flood-carrying and flood-storage capacities, to protect life and property, and to continue to maintain its eligibility in the National Flood Insurance Program.

Policy 2.3.1: Baldwin County shall require compensatory storage for encroachment in floodplains, restricting encroachment in floodways, and requiring habitable structures to be floodproofed.

Policy 2.3.2: Baldwin County shall strengthen floodplain protection requirements for riverine systems by adopting regulations prohibiting floodplain encroachment without compensating storage.

Policy 2.3.3: Baldwin County shall identify and prioritize floodplain areas in need of corrective measures.

NATURAL OPEN SPACE & WETLANDS ACQUISITION

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GOAL 3: Baldwin County shall preserve and protect its natural open space and wetlands habitats by land acquisition and the creation of a greenway system to maintain the unique and irreplaceable values, functions, diversity, and benefit of the natural resources within the unincorporated area.

Objective 3.1: Baldwin County shall implement a strategic plan to acquire environmentally sensitive areas and regulations to protect these areas.

Policy 3.1.1: By 2015, increase and protect mandated green space and wetlands space of the County by 50% for a total of 1,875 acres.

Policy 3.1.2: The County will continue to implement regulations that require all new development to meet 100-year flood events.

Policy 3.1.3: By 2009, protect a minimum of 500 acres of habitat of species of greatest conservation need with an emphasis on priority areas depicted in the State Wildlife Action Plan.

Policy 3.1.4: Invest in protection of the Long Leaf Pine forestry areas to preserve their existence as a habitat.

Policy 3.1.5: Coordinate with adjacent municipalities to protect ecologic systems in the County.

Objective 3.2: Consider a network of greenways, blueways, bikeway trails, and pedestrian trails within Baldwin County.

Policy 3.2.1: By 2013, institute a countywide greenway program that would involve coordination with all the municipalities, state, and federal agencies within Baldwin County.

Policy 3.2.2: Institute a Greenways Committee within the County to administer an acquisition program for right-of-way, greenway corridors, open space areas, and similar type linear connection.

Policy 3.2.3: Baldwin County shall identify upland areas needed to establish significant greenway and wildlife corridors to connect environmentally sensitive areas. These greenways shall have a width of four hundred feet (400) minimum, to six hundred feet (600’).

Policy 3.2.4: It is the intent of greenways to provide active and passive recreation, non-motorized access, and limited conveyance of utilities.

Objective 3.3: Consider environmental credits to purchase development rights of new and existing development.

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Policy 3.3.1: Baldwin County shall establish a system for issuing credits to new and existing developments during the permitting process in exchange for preservation of the environment.

Policy 3.3.2: Baldwin County shall encourage new development to enter into conservation agreements, with responsible agencies to protect endangered and threatened plant and animal species.

Objective 3.4: Consider the linear linkage between noted watersheds in the County, in particular, the Mobile Delta and Perdido River Corridor.

Policy 3.4.1: Acquire 30% more environmentally sensitive areas, waterfront property, and greenspace for public ownership by 2016, in particular, the Mobile Delta and Perdido River Corridor of the County.

Policy 3.4.2: Implement buffers along all waterbodies, so that water depth and erosion can be protected along watersheds in the County.

Policy 3.4.3: Consider strategies in implementing land donation and conservation easements in the County.

Policy 3.4.3.1: Baldwin County shall encourage voluntary land donations in order to preserve critical open space areas.

Policy 3.4.3.2: Baldwin County shall utilize conservation easements for the purpose of protecting significant natural communities and rare plant or animal sites on privately owned property.

Objective 3.5: Baldwin County will coordinate with the local municipalities in the County, adjacent counties, and other agencies to ensure stable, compatible, and contiguous ecologic systems.

Policy 3.5.1: Baldwin County will work with the Alabama Department of Environmental Management, Department of Conservation and Natural Resources, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, U.S. Department of Interior and the U.S. Army Corp of Engineers to support their conservation efforts for potential tracts of land.

Objective 3.6: Consider other, non-wetland natural areas for open space protection and conservation.

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Policy 3.6.1: The County shall apply stricter enforcement regulations for conservation development areas.

Policy 3.6.2: The County shall protect appropriate natural areas for the public benefit and restore degraded floodplain areas by land acquisition or conservation easement acquisition.

Policy 3.6.3: The County shall protect natural areas by appropriate setbacks, buffer zones, designated wildlife corridors, low density zoning, performance-based standards, and open space requirements.

Policy 3.6.4: The County shall protect natural areas by the use of incentives, tax benefits, and transfer of development rights.

Objective 3.7: Consider protection of uplands adjacent to wetlands and the cumulative effects as growth occurs.

Policy 3.7.1: Baldwin County should consider protecting the Perdido Bay and Mobile Bay watersheds as they have a high concentration of wetlands.

Policy 3.7.2: Baldwin County should consider the promotion of upland systems through such means as the maintenance of natural vegetation in an upland system.

Policy 3.7.3: Through the comprehensive planning process, the Conservation District future land use designation of undeveloped upland areas should be considered when County decision-makers are selecting appropriate land uses for unprotected open space areas.

Objective 3.8: Review existing watershed management plans and other studies by the Alabama Department of Environmental Management and Alabama Department of Conservation and Natural Resources.

Policy 3.8.1: The County shall review such studies as “Alabama’s Comprehensive Wildlife Conservation Strategy”, “Alabama Nonpoint Source Management Program Plan”, “Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management”, “Section 319 Watershed Management Plan”, and “Comprehensive Conservation and Management Plan for the Mobile Bay National Estuary Program”.

Policy 3.8.2: Work with the Coastal Alabama Clean Water partnership to identify impaired water bodies and prepare a basin management action plan to improve water quality.

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Objective 3.9: Protect the quality and quantity of all jurisdictional waters, recognize the ongoing study efforts, and ensure that the current water quality in the County is improved through the year 2010.

Policy 3.9.1: Encourage alternatives to shoreline hardening practices. Where practical, shoreline planting and enhancement projects shall be encouraged for developments proposing shoreline hardening. Require effective vegetative buffer zones for all new construction adjacent to watercourses, wetlands, and bays.

Policy 3.9.2: Support the efforts and consider recommendations from intergovernmental organizations concerning Baldwin County's watersheds.

WASTE MANAGEMENT

GOAL 4: Baldwin County will focus on the need to enforce illegal dumping and controls for new development in regards to waste management.

Objective 4.1: Baldwin County shall implement regulations and standards to prevent illegal dumping.

Policy 4.1.1: Design enforcement mechanism and fines/ citations for illegal dumping and other environmental issues with inter-jurisdictional coordination by 2009.

Policy 4.1.2: Enforce illegal dumping in the unincorporated areas of the County.

Policy 4.1.3: Emphasis on County inspectors to fine cited offender of illegal dumping.

Policy 4.1.4: A new recycling program should be considered to make the County more environmentally friendly.

Policy 4.1.5: A waste recycling standard should be in place for Baldwin County. The standards should include:

1. Construction waste from a building site must be taken to a recycling facility approved by the county or state.
2. Construction waste reduction and reuse plan must be written and followed by builder.
3. Builders should be encouraged to donate unwanted building materials to non-profit building organization.
4. Provide a built in recycle center option for homebuyers.
5. Provide a composting system option in yards for homebuyers.

DEVELOPMENT & ENVIRONMENTAL PROTECTION

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GOAL 5: The County shall place more emphasis on environmental protection in Baldwin County.

Objective 5.1: The County shall introduce monitoring programs that protect the environment from the intrusion of development.

Policy 5.1.1: By 2010, institute a monitoring program for all land and commercial developments, so that the environment of Baldwin County is protected from the effects of intrusion by new and existing development. The following sub-policies are provided for this monitoring program:

Policy 5.1.1.1: Incorporate the improvement of the natural environment into the County's planning efforts and capital development projects. For instance, plan for transportation systems that control impacts on air quality, as well as on water pollution and the consumption of fossil fuels.

Policy 5.1.1.2: Control the impacts of noise, odor, light, graffiti, junk cars, trash, and refuse in order to protect human health and the livability of the urban environment.

Policy 5.1.1.3: Work with private and public sector partners to reduce greenhouse gas emissions from private and public sources to limit the impacts on the County's water supply, electrical energy supply, ecosystems, public health, and economy.

Policy 5.1.1.4: In the operations of County government, strive to reduce the use of resources and toxics, prevent pollution, reuse existing resources such as historic structures, control waste, and protect natural areas and biodiversity.

Policy 5.1.1.5: To improve the County's environmental performance, set targets, use innovative approaches, encourage employees to control wastes, and coordinate with other governmental entities.

Policy 5.1.1.6: In order to assess the County's success in moving toward a sustainable urban environment, the County should identify and establish goals for key indicators of such factors as human health, economy, population, energy use, sprawl, natural systems, and pollution.

Policy 5.1.2: By 2016, the County shall acquire environmentally sensitive areas (as defined in the definitions of the Data Inventory and Analysis Section), waterfront property, and green space for public ownership.

Policy 5.1.3: The County shall research options for land donation and environmental easements.

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Policy 5.1.4: The County shall strengthen environmental regulatory controls, especially for wetland and watershed protection.

Policy 5.1.5: By 2012, the County shall examine the critically threatened watersheds within the County. The following criteria should be applied to identify, evaluate, and remediate these watersheds:

1. Location of steep slopes.
2. Location of streams, wetlands, and their buffers.
3. Location in 100-year Floodplain.
4. Location of threatened or endangered species.
5. Location of agricultural and forest land intended for resource protection or conservation.
6. Location of other areas in need of special protection.

Policy 5.1.6: Baldwin County should adopt regulations that require all new development to meet 100-year flood events.

Policy 5.1.7: The County shall encourage the use of slow-release nitrogen and phosphorus agents in fertilizer use.

Objective 5.2: Baldwin County shall examine methods to minimize wetland impacts and mitigation within watersheds.

Policy 5.2.1: Consider environmental credits for wetland mitigation (i.e., transfer of development rights).

Policy 5.2.2: Examine the potential of wetland mitigation banking for other parts of Baldwin County.

Policy 5.2.3: Implement a program sponsored by the County to create mitigation banks in the local areas of Baldwin County.

Policy 5.2.4: When conducting mitigation banking, ensure that the credits stay within the County, and not be reallocated to other local governments or adjacent counties.

Policy 5.2.5: The County should consider protection of isolated wetlands, including grady ponds, where present.

Policy 5.2.6: The County should institute riparian buffer zones along critically identified watersheds. These vegetated zones are adjacent to streams and wetlands that represent a best management practice for controlling nitrogen entering water bodies. Riparian buffers should be

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used in conjunction with a comprehensive watershed management plan that includes control and reduction of point and non-point sources of nitrogen from atmospheric, terrestrial, and aquatic inputs.

Objective 5.3: Baldwin County shall protect identified wetland areas and existing wildlife habitats by implementing the following policies:

Policy 5.3.1: Baldwin County shall continue to adopt regulations which protect and conserve wetlands. The Baldwin County Wetland Conservation Plan shall be a model for the adoption of the wetland regulations. Such regulations shall include criteria for identifying the significance of wetlands. The current Wetland Protection Overlay District within the Baldwin County Zoning Regulations shall be used as a model for wetlands protection in the County.

Objective 5.4: Baldwin County shall protect environmentally sensitive lands by the use of land use designations on the Future Land Use Map and described within the Future Land Use Element.

Policy 5.4.1: Baldwin County shall designate conservation and open space lands with the Conservation District future land use designation.

Policy 5.4.2: The Conservation District designation will consist of lands unsuitable for development due to topography, hydrology, vegetation, or wildlife habitat.

Policy 5.4.3: The Conservation District designation protects environmentally sensitive areas, natural water bodies, and other unique or sensitive natural resources.

Policy 5.4.4: Unique or sensitive natural resources will include, but not be limited to, groundwater, floodplains, wetlands, streams, steep slopes, woodlands, wildlife habitats, beach dune areas, certain agricultural and forest lands, and areas depicted in the State Wildlife Action Plan.

Policy 5.4.5: Uses in the Conservation District will include, but not be limited to, natural preserves, reserves, upland areas, and recreation and camping areas.

RESOURCE PROTECTION

GOAL 6: To manage the county's wetland and upland ecosystems so as to maintain and enhance native habitats, diversity of floral and faunal species, water quality, and natural surface water characteristics.

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Objective 6.1: The County will continue to implement a resource management program that ensures the long-term protection and enhancement of the natural upland and wetland habitats through the retention of interconnected, functioning, and maintainable hydroecological systems where the remaining wetlands and uplands function as a productive unit resembling the original landscape.

Policy 6.1.1: The Baldwin County Natural Resource Management Program will be responsible for the following:

1. Identifying upland and wetland habitats and systems most suitable for protection, enhancement, reclamation, or conservation.
2. Recommending standards to the Baldwin County Commission for approval of development and conservation that will protect and integrate wetlands and significant areas of rare and unique habitat.
3. Preparing standards for wetland mitigation and rare and unique upland mitigation.
4. Explore a Sensitive Lands Acquisition Program.
 - a. A comprehensive inventory of environmentally sensitive lands will be maintained and expanded as new data becomes available.
 - b. Environmentally sensitive lands will include:
 - i. Wetlands.
 - ii. Important plant communities.
 - iii. Critical habitat for listed wildlife species.
 - iv. Environmentally sensitive coastal planning area.
 - v. Natural waterways.
 - vi. Important water resources.
 - vii. Storm and flood hazard areas.
 - viii. Rare and unique uplands.
5. Compiling, maintaining, and updating the County's mapping of:
 - a. Plant communities.
 - b. Listed species habitat and sitings.
 - c. Water resources including: watersheds, floodplains, wetlands, aquifers, and surface water features.
6. Provide a progress report to the Baldwin County Commission on the Resource Management Program at least every three years. The report should address the adequacy of the program and include land development regulations to protect and enhance these natural systems.
7. Providing on an as-needed basis, a report to the Baldwin County Commission on the status of wetlands and rare and unique uplands.

Policy 6.1.2: Perform water resource planning in Baldwin County to identify the surface water and ground water requirements in freshwater and saltwater habitats for agricultural uses, potable

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water demands, water demand processes, and surface water for energy generation based upon the adopted future land use for the designated area of the County.

WETLANDS MANAGEMENT

GOAL 7: To maintain and enforce a management program for development in wetlands that is cost-effective; complements federal and state permitting processes; and protects the fragile ecological characteristics of wetland systems.

Objective 7.1: The natural functions of wetlands and wetland systems will be protected and conserved through the enforcement of the County’s wetland protection regulations and goals, objectives, and policies in this Comprehensive Plan. “Wetlands” shall include all of those lands, whether shown on the Future Land Use Map or not, that are identified as wetlands in accordance with the Baldwin County’s Wetland Conservation Plan (BCWCP).

Policy 7.1.1: Development in wetlands should be limited to low density residential uses and uses of a recreational, open space, or conservation nature that are compatible with wetland functions. The maximum density allowed within identified wetlands is one dwelling unit per 10 acres, except that lots of record will be allowed one single-family residence irrespective of zoning.

Policy 7.1.2: The County’s Wetland Protection Program will be consistent with the following:

1. Baldwin County will not permit development within identified wetlands without the appropriate state or federal agency permit or authorization.
2. Baldwin County will identify violations of state regulations and permit conditions through its code enforcement procedures.
3. Every reasonable effort will be required to avoid or minimize adverse impacts on wetlands through the clustering of development and other site planning techniques.
4. Where sufficient uplands exist for a development, the fill of wetlands will not be allowed.

Policy 7.1.3: The County’s Natural Resource Division will review and update as necessary, the Baldwin County wetland protection regulations.

Objective 7.2: Baldwin County will maintain and routinely update an inventory of natural plant communities and will protect at various suitable locations remnant tracts of all important and representative natural plant communities occurring within Baldwin County.

Policy 7.2.1: Baldwin County shall coordinate with state and regional agencies to exchange updated natural resource information.

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Policy 7.2.2: The County shall continue to provide regulations and incentives to prevent incompatible development in and around environmentally sensitive lands.

Policy 7.2.3: The County will prevent water management and development projects, such as retention/detention ponds, from altering or disrupting the natural function of significant natural systems.

Policy 7.2.4: The County will encourage the protection of viable tracts of sensitive or high-quality natural plant communities within developments.

Policy 7.2.5: Maintain regulations to control the clearing of natural vegetation, including tree removal and clearing of understory, prior to the development of property or its conversion to agricultural uses.

Policy 7.2.6: Avoid needless destruction of upland plant communities through consideration during the site plan review process of alternative layouts of permitted uses.

Policy 7.2.7: Promote the long-term maintenance of natural systems through such instruments as conservation easements, transfer of development rights, restrictive zoning, or land acquisition.

Policy 7.2.8: Development adjacent to aquatic and other nature preserves, wildlife refuges or recreation areas must protect the natural character and public benefit of these areas including, but not limited to, scenic values for the benefit of future generations.

Policy 7.2.9: Prohibit the planting of invasive exotic plants through landscaping requirements for land development projects. Prohibited invasive exotic plant species shall be specified in the County's land development regulations.

WILDLIFE PROTECTION

GOAL 8: To protect critical and endangered species located within Baldwin County.

Objective 8.1: To foster more education and protection rules on the wildlife-to-man interface relationship within Baldwin County.

Policy 8.1.1: Utilize such reports as the Cumulative Impact Assessment for the Alabama Beach Mouse completed by the US Fish and Wildlife Service.

Policy 8.1.2: Baldwin County shall utilize the findings of the Alabama's Comprehensive Wildlife Conservation Strategy as a guideline to protect such species as: the Loggerhead Sea Turtle, Plovers, Alabama and Perdido Key Beach Mouse, the Flatwoods and Southern Dusky

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Salamander, Gopher and River Frog, Eastern Indigo Snake, Southern Hognose and Black Pine Snake, the Henlow's and Bachman's Sparrow, American Kestrel, Rafinesque's Big-eared and Indiana Bat, American Black Bear, Gray Myotis, and Red-cockaded Woodpecker. Some other species not mentioned in the Strategy Report that should be monitored due to their Federal listing are: the American Bald Eagle, Wood Stork, Gulf and Alabama Sturgeon, Gopher Tortoise, Atlantic Green and Kemp's Sea Turtle, the Inflated Heelsplitter Mussel, the Heavy Pigtoed Mussel, Northern Bobwhite Quail, the Alabama Canebrake Pitcher Plant, Panhandle Lily and the American Chaffseed.

Policy 8.1.3: Baldwin County shall identify, classify, and designate critical wildlife areas and institute land development regulations to help protect these areas.

Objective 8.2: Maintain and enhance the fish and wildlife diversity and distribution within Baldwin County for the benefit of a balanced ecological system.

Policy 8.2.1: Encourage upland preservation in and around preserved wetlands to provide habitat diversity, enhance wildlife edge effect, and promote wildlife conservation.

STORMWATER MANAGEMENT

Goal 9: To implement stormwater management standards.

Objective 9.1: By 2013, implement a stormwater management system for Baldwin County.

Policy 9.1.1: Institute a County program to ensure proper evacuation measures are in place when flooding occurs with waterfront and beachfront property owners and occupants.

Policy 9.1.2: Baldwin County should coordinate the land clearing process between existing wetlands and the velocity of water flows along watersheds in the County. The following sub-policies are provided for the land clearing process:

Policy 9.1.2.1: No land clearing should be allowed for construction before the installation of sediment control facilities onsite.

Policy 9.1.2.2: Erosion and sedimentation controls shall be provided on all land development and building projects to prevent up to the maximum extent possible, the transport of the sediment from the project site resulting from clearing and grading or other land disturbing activities so as not to infiltrate adjacent wetlands and critical watersheds.

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Policy 9.1.2.3: The design of an adequate sediment pond or sediment trap shall be provided prior to sediment discharge from the site.

Policy 9.1.3: The County shall incorporate adequate methods of sufficient grading when new development occurs so as to control and configure correct water flows for Baldwin County's Stormwater Management System.

GROUNDWATER PROTECTION

GOAL 10: Baldwin County shall preserve and protect the groundwater basins from contamination and foreign infiltration.

Objective 10.1: The County shall look at strategies to protect and conserve surface and groundwater resources.

Policy 10.1.1: Land use development activities in important groundwater recharge areas shall be consistent with water resources protection.

Policy 10.1.2: Baldwin County will coordinate with other governmental and private entities to protect groundwater resources.

Policy 10.1.3: The County will work with the Alabama Department of Environmental Management, local municipalities, state and federal agencies, and other entities to protect the quality of Little Lagoon, Shelby Lakes, Middle Lake, Oyster Bay, Bon Secour Bay, Weeks Bay, Bon Secour River, Intracoastal Waterway, Byrnes Lake, Mobile Bay, Perdido River, Mobile River, Tensaw River, Wolf Bay, Fish River, and other notable waterbodies designated by the County.

Objective 10.2: Protect groundwater resources consistent, at a minimum, with federal and state standards in effect at the time of adoption of the Comprehensive Plan so that the quality of groundwater is not degraded through human influence such that the health, safety, and welfare of the public is threatened, or such that the viability and functional values of other natural resources are threatened. Adopted growth management policies to safeguard the quality and quantity of potable water supplies in Baldwin County, including surficial, intermediate, and aquifer systems, of which are used in some areas of Baldwin County for potable water supply.

Policy 10.2.1: The County, in cooperation with the adjacent local governments, shall evaluate current and future public water supply needs from potential adverse effects from incompatible land uses and activities.

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Policy 10.2.2: It shall be the owner's responsibility to properly deactivate any abandoned installations or facilities, with contaminants properly disposed, so as not to contaminate the groundwater supply in the County.

Policy 10.2.3: The owners of property containing existing installations or facilities that have the potential for significant contamination of groundwater shall be responsible for retrofitting or replacing those installations or facilities with leak detection, secondary containment, and environmental monitoring.

Policy 10.2.4: Old garbage disposal areas, illegal dumps, other waste sites where groundwater contamination has been determined to exist, and such other sites that may potentially contain contaminants that threaten groundwater resources shall be identified and the County will coordinate with the appropriate environmental agencies to evaluate and implement the appropriate cleanup activities.

Policy 10.2.5: Disposal of effluents of wastewater treatment processes shall be accomplished by environmentally sound procedures consistent with the Alabama Department of Environmental Management (ADEM) regulations which may include land applications, deep well injection, reuse, or wetlands disposal.

Policy 10.2.6: The County shall look at alternatives for irrigation purposes. Reclaimed water from wastewater treatment plants should be considered as an alternative to the typical methods of irrigation.

AIR QUALITY

Goal 11: Baldwin County shall conserve, protect, and enhance the County's air quality to ensure that this resource is preserved for the benefit of present and future generations.

Objective 11.1: Baldwin County shall continue to implement State and Federal mandated programs to maintain or improve air quality, continue to monitor and protect air quality, and ensure that the County continues to meet or exceed all applicable local, state, and federal air quality standards.

Policy 11.1.1: Baldwin County shall begin to implement an air monitoring program and follow the air quality standards of the Alabama Department of Environmental Management and the US Environmental Protection Agency by the year 2010.

Policy 11.1.2: Baldwin County shall promote and educate the public, through public seminars, dissemination of information and media presentations, about mass transit, car-pooling, bikeways,

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park and ride lots, and other alternative transportation modes in order to reduce automobile emission pollution.

Policy 11.1.3: Baldwin County shall enforce regulations, and other practices such as land clearing which have an adverse impact on air quality in Baldwin County.

Policy 11.1.4: Baldwin County shall investigate and promote, through incentives and education, the use of alternatives to open burning such as mulching, composting, leaving the existing vegetation where possible, air curtain incinerators, and best available control technology to curtail the amount of potential pollutants to the County's air quality.

Objective 11.2: Baldwin County shall conserve energy and reduce greenhouse gas emissions.

Policy 11.2.1: The County shall encourage developers through incentives to incorporate "Smart Growth" strategies in new development and redevelopment projects in order to reduce greenhouse gas emissions. At a minimum, new development projects shall expand transportation choices, conserve green spaces, and be designed to place less demand on energy production and infrastructure.

Policy 11.2.2: The County should support the efforts of the U.S. Environmental Protection Agency in reducing greenhouse gas emissions by supporting the following recommendations from Alabama's State Action Plan ("Policy Planning to Reduce Greenhouse Gas Emissions in Alabama"):

1. Improve management of existing forest and other open space in order to increase carbon sequestration by requiring developers to adhere to the standards included in the U.S. Climate Change Action Plan. These activities include: reduce depletion and accelerate tree planting in non-industrial private forests, and promote recycling and pollution prevention in the pulp and paper industry. Implementation should be coordinated with the State Forestry Commission.
2. Increase building efficiency by encouraging developers to adhere to standards for energy efficiency technologies and products used in the construction and retrofit of commercial buildings. Implementation should be coordinated with the Alabama Department of Economic and Community Affairs/ Science, Energy, and Technology Division, and the U.S. Climate Change Action Plan.
3. Provide developers with information on incentives for using alternative energy and energy technologies such as renewables and cogeneration.
4. Coordinate with various utility providers in the County to promote energy efficiency to customers, and to stress improved efficiency as a standard requirement for future new deregulated energy facilities.

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5. Ensure that the County's transportation fleet contains a certain percentage of alternative fuel vehicles (AFVs).
6. Increase transportation system efficiency by supporting programs/ initiatives that provide alternatives such as: rail and water transport, public transit systems, and commuter options (such as car/van pooling, telecommuting, restricted traffic lanes, and park and ride lots).
7. Reduce fuel consumption by using a computerized transportation system to increase the flow of traffic and coordinate traffic lights on local streets and highways.
8. Reduce waste by developing and implementing a countywide recycling and waste reduction program. Implementation should be coordinated with the Alabama Department of Economic and Community Affairs and/or the Alabama Department of Environmental Management.

Policy 11.2.3: The County shall establish and implement an Emissions Trading (or cap and trade) plan to reduce greenhouse gas emissions, namely carbon dioxide (CO₂). The plan shall provide a framework for businesses to trade or bank unused allowances, or for polluters that exceed their limit to buy or borrow leftover allowances from other sectors or auction. Once adopted, such a cap and trade system shall specify applicable land use activities and sectors, establish emission allowances, establish a goal year, and require allowance amounts to decrease over time.

Policy 11.2.4: During the planning period, Vehicle Miles Traveled (VMT) in the County shall be reduced. The County shall implement a combination of land use policies that encourage increased density, clustering development in transit corridors, and alternative methods of transportation (such as bicycle, pedestrian, and mass transit) to reduce VMT in the County.

Policy 11.2.5: By 2015, create an alternative fuels program that will reduce the County Commissions dependency of fossil fuels by 2 percent.

Policy 11.2.6: Baldwin County will identify organizations that provide marketing incentives for energy efficient construction and design practices.

WATER QUALITY

GOAL 12: Baldwin County shall address the need to protect the water quality from pollution and contamination.

Objective 12.1: Baldwin County shall begin to identify major sources of surface water pollution in Baldwin County and coordinate the development and implementation of pollution abatement methods and programs with local governments, State, and Federal agencies.

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Policy 12.1.1: Baldwin County shall strive to maintain acceptable water quality standards for surface water bodies, ensuring an aquatic environment that meets or exceeds State and Federal Standards.

Policy 12.1.2: Baldwin County will protect shoreline vegetation by restricting the removal of native vegetation. Baldwin County will restrict vegetation removal through implementation of the Land Development Code requirements to that which is necessary for access and reasonable use.

Policy 12.1.3: Baldwin County will begin to improve design standards, monitoring, construction, and maintenance requirements for stormwater retention/detention systems, and shall ensure compliance of these requirements to prevent degradation of the receiving surface water bodies.

Policy 12.1.4: Baldwin County shall, through the analysis of specific water quality parameters on an ongoing basis, identify and prioritize lakes and rivers that are in need of improvement.

Policy 12.1.5: Baldwin County will prohibit the location of petroleum businesses where they will negatively affect the quality of surface waters and the surficial and Alabama Aquifers.

Policy 12.1.6: The County shall control non-native (exotic) invasive aquatic plants in its waterways to promote good water quality and positive recreational benefits to its citizens and visitors.

Policy 12.1.7: Baldwin County should institute water conservation standards that include:

1. Drought tolerant landscaping.
2. Provide information in model home about xeriscaping benefits and water conservation practices.
3. Mulching areas where existing bedding exists.

CITIZEN PARTICIPATION

GOAL 13: Baldwin County should address the need for more citizen participation in regards to conservation and natural resources.

Objective 13.1: Baldwin County shall set standards to encourage and increase the level of interest for environmental awareness and preservation.

Policy 13.1.1: By 2010, 70% of all graduating seniors in Baldwin County Public Schools will have participated in environmental programs and community projects (environmental classes and clubs).

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Policy 13.1.2: By 2014, increase citizen awareness of environmental issues of Baldwin County with 35% of citizens reporting they are better informed of environmental issues related to: pollution, littering, recycling, value of our environment, and storm water issues.

Policy 13.1.3: Baldwin County should increase the efficiency and effectiveness of the Coastal Scenic Byway Program through communication between individuals and agency planning efforts.