

## 6. CONSERVATION ELEMENT

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The purpose of this element is to promote the conservation, use, and protection of locally and regionally significant natural resources.

### **GOAL 6A: PROVIDE THE CIRCUMSTANCES NECESSARY FOR THE CONSERVATION AND PROTECTION OF NATURAL AND PUBLIC HEALTH RELATED RESOURCES.**

**Objective 6.1:** Maintain or exceed ambient air quality to ensure the protection of public health.

Policy 6.1.1: The City shall prohibit development that causes degradation of air quality below existing levels or established State Standards

Policy 6.1.2: The City shall decrease air pollution from auto emissions through provision of non motorized vehicular and pedestrian facilities.

Policy 6.1.3: The City shall support educational opportunities and seminars and dissemination of information from other organizations about mass transit, car-pooling, bikeways, park-and-ride lots, and other alternative transportation modes in order to reduce automobile emission pollution.

**Objective 6.2:** Support the efforts of Bay County to maintain the water quantity and water quality of Deer Point Reservoir.

Policy 6.2.1: The City shall support efforts by Bay County toward the protection and conservation of the Deer Point Reservoir and its sources.

Policy 6.2.2: The City shall, at minimum, follow the preservation policies of the Bay County Deer Point Reservoir Protection Zone (DPRPZ) for lands within the City that lie within the DPRPZ zone. Lands within the City limits inside the DPRPZ are depicted on Map 6.1.

**Objective 6.3:** Evaluate and identify possible sources of stormwater pollution in each drainage basin through the update of the drainage basin plans.

Policy 6.3.1: The City shall identify possible stormwater pollution sources into adjacent water bodies and shall undertake measures to reduce pollutant loads consistent with Chapter 62-25, F.A.C, and this Plan.

Policy 6.3.2: The City shall coordinate with Bay County and adjacent local governments on measures intended to reduce stormwater pollution in estuaries adjacent to the City

Policy 6.3.4 3: The City shall protect the water quality of water bodies within the City by requiring treatment of stormwater, requiring buffers or setbacks in areas adjacent to the shoreline, drainageways, or wetlands, and other similar provisions

**Objective 6.4:** Continue to implement procedures to protect and require the installation of native vegetation

Policy 6.4.1: The City shall enforce standards for protection of native vegetation as part of its Land Development Regulations. Such standards shall include types and size of vegetation to be protected, removal/replacement criteria, construction practices, and other similar provisions.

Policy 6.4.2: The City shall cooperate with Bay County, and adjacent local governments to protect vegetative communities located within more than one jurisdiction through application of provisions within the Land Development Regulations.

**Objective 6.5:** Maintain and enforce procedures to reduce soil erosion and reduce sedimentation into water bodies.

Policy 6.5.1: The City shall maintain in its Land Development Regulations specific standards for soil conservation, in coordination with the Bay County Soil and Water Conservation District.

Policy 6.5.2: All grading, filling, excavation, storage, or disposal of soil and earth materials associated with development activities shall be undertaken so as to reduce the potential for soil erosion and sedimentation of water bodies or drainageways. Erosion control measures shall be required for all such activities.

Policy 6.5.3: As part of the development review process, the developer shall provide an Erosion and Sediment Control Plan which includes:

- (a) Calculations of maximum runoff based on the 25-year critical duration storm event;
- (b) A description of, and specifications for, sediment retention devices;
- (c) A description of, and specifications for, surface runoff and erosion control devices;
- (d) A description of vegetative measures; and
- (e) A map showing the location of all items listed above.

Policy 6.5.4: After commencement of development activity, the developer and/ or the construction manager shall maintain, in good order, all erosion and sediment control measures specified in the Erosion and Sediment Control Plan.

**Objective 6.6:** Implement provisions for conservation and protection of wetlands, fisheries, wildlife, wildlife habitat, and marine habitat in the development review and approval process.

Policy 6.6.1: The City shall evaluate impacts on fisheries, wildlife habitat, and marine habitat as part of its development review and approval process. Development activities that will destroy identified wildlife or marine habitat shall be restricted through use of an enforceable development agreement pursuant to Sections 163.3220-3243, F.S., or appropriate mitigation measures pursuant to Rule 62-312, F.A.C. Development activities that cause destruction of endangered or threatened species shall be prohibited.

Policy 6.6.2: The City shall protect and conserve the natural functions of existing soils, wetlands, marine resources, wildlife habitat, flood zones, and estuaries by enforcing the requirements established in its Land Development Regulations.

Policy 6.6.3: Locally determined environmentally sensitive resources include, but are not limited to, jurisdictional wetlands, seagrass beds, flood zones, and habitat for endangered or threatened species. Development activities which destroy these resources shall be restricted through use of measures specified in the Land Development Regulations, except that:

- (a) Off-site preservation as mitigation for on-site development shall not be permitted for field-verified Significant Wildlife Habitat that is capable of being managed or restored on-site as a high quality natural plant community or communities, except in the case of a public project, such as a road or stormwater facility, for which there is no prudent and feasible alternative, and consistent with Policy 6.6.10.

Policy 6.6.4: No development or construction activity shall be permitted within thirty (30) feet of any jurisdictional moderate or optimal wetland, with exception to the criteria specified in parts (a) through (c) following. Within this area, all native vegetation shall be preserved for a distance of twenty (20) feet landward from the jurisdictional wetland line, except for a cleared corridor not to exceed fifteen (15) feet in width to provide access to the water. Greater buffers may be required if the upland activity adversely impacts beneficial wetlands functions. The buffer requirement may be allowed to coincide with the setback requirements for landscaping requirements. Notwithstanding, the following exceptions shall apply:

- (a) In any case, the buffer requirement shall not exceed the width of the wetland when the wetland is less than twenty feet across. However, the wetland buffer cannot be smaller than that required by any state agency.
- (b) Project design and construction may be allowed in lieu of the required buffer when it can be demonstrated the design and construction provides protection to the wetland that is equal or greater than the vegetated buffer, or restores the

natural flow and function of the wetland. However, the wetland buffer cannot be smaller than that required by any state agency.

- (c) The development or construction activity is in the overriding public interest, as specified in Policy 6.7.10.

Policy 6.6.5: Any area identified as containing state threatened or endangered wildlife habitat shall be further studied to determine the value and extent of such habitat. This habitat analysis shall form the basis of a habitat conservation and preservation plan as defined in the Land Development Regulations. The findings and / or recommendations of the habitat conservation and preservation plan shall be included as condition of the development order, or as part of a statutory development agreement.

Policy 6.6.6: Development activity within designated flood zones as shown on the official Flood Insurance Rate Map (FIRM), as published by the Federal Emergency Management Agency (FEMA), shall be subject to the restrictions and standards of the City's Flood Damage Prevention Ordinance and pertinent Land Development Regulations.

Policy 6.6.7: Channelization or hardening (e.g. paving, piping) of natural stream courses shall be prohibited except in cases of overriding public interest, as defined in Policy 6.7.10.

Policy 6.6.8: Development occurring at the edge of lands designated as Preservation on the Future Land Use Map, or lands located within a conservation easement, shall be designed to protect and minimize the impact of development through the use of natural vegetative buffers.

Policy 6.6.9: Identification of animal species on site shall be referenced from the lists of the Florida Fish and Wildlife Conservation Commission Official List of Endangered and potentially Endangered Flora and Fauna in Florida.

Policy 6.6.10: If endangered flora or fauna is identified on site, a Habitat Management Plan shall be submitted that provides guidance for the management of the habitat; a long-term vision; and continuity and consistency for habitat management. The Habitat Management Plan must be produced as required by Florida Fish and Wildlife Conservation Commission.

Policy 6.6.11: Mining or soil excavation activities shall not occur within 500 feet of the Deer Point Reservoir, or any other Class I, II, or III water body.

**Objective 6.7:** Maintain, conserve, protect, enhance, and appropriately utilize wetlands within the City, recognizing the rights of individual property owners to use their lands in a reasonable manner, as well as the rights of all citizens of the City to the protection of the natural resources of the City, including the natural wetland hydrologic cycles and ecologic systems.

Policy 6.7.1: For the purposes of this Plan, wetlands are those as defined in § 373.019(25), F.S.

Policy 6.7.2: For the purposes of this Plan, wetland quality shall be determined by using the criteria in Rule 62-345, Florida Administrative Code.

Policy 6.7.3: The City recognizes an important public interest in wetlands that perform physical and ecological functions, including:

1. Natural storage and conveyance of rainwater;
2. Wetlands vegetation filter sediment, organic matter, and chemicals, and assimilate nutrients and natural or man-made pollutants;
3. Temporary storage of surface waters during times of flood, regulating flood elevations and timing, velocity, and rate of flood discharges;
4. Temporary storage of floodwaters reduces erosion and facilitates settling of suspended sediment, filtering, and detaining sediment to prevent pollution of lakes, streams, and estuaries;
5. When adjacent to lakes, rivers, and estuaries, wetlands prevent erosion and provide habitat and spawning ground for fish and shellfish;
6. Depending on their condition and functional value, isolated wetlands provide important wildlife habitat; and
7. Recreational areas for activities including fishing, hunting, camping, photography, boating, and nature observation.

Policy 6.7.4: The developer of a site containing wetlands shall be required to identify the quality of all wetlands as specified in Policy 6.7.2 if impacts are proposed to the wetland community.

Policy 6.7.5: Dredge and fill permits shall be required prior to any issuance of a development order, if necessary. A Notice of Intent to issue such permit is acceptable to schedule a public hearing for the consideration of the approval of a development order.

Policy 6.7.6: Land uses, such as heavy industrial uses, that are incompatible with the protection of wetlands and wetland functions shall be directed away from wetlands.

Policy 6.7.7: The City shall prohibit the subdivision of land after December 31, 2010 that would create new lots lacking sufficient buildable area, as defined by setback requirements and other development criteria in the Land Development Regulations, due

to adjacent moderate or optimal wetlands or floodplains. All subdivision plats shall show the wetland jurisdictional line and the wetland setback line.

Policy 6.6.8: No building permit shall be issued for lots subdivided after December 31, 2010 that does not provide sufficient buildable area to maintain required setbacks and buffers from moderate or optimal wetlands.

Policy 6.7.9: Where moderate and optimal wetlands exist on a parcel, the wetland area may only be used in the density calculation of the parcel if the wetlands are preserved and development occurs on the uplands outside the required buffer.

Policy 6.7.10: Development activities in wetlands which are qualified as optimal shall be prohibited unless it is determined by the City that the activity is in the overriding public interest. Activities which support such purposes shall include the following:

- (a) Public Hazard. Such an activity is necessary to prevent or eliminate a public hazard or prevent a danger to public safety or health and satisfies the following criteria:
  - (i) A public hazard or danger exists;
  - (ii) The proposed activity would eliminate or prevent the hazard;
  - (iii) The proposed activity represents the best way to accomplish the desired end with minimal impact on the wetland; and
  - (iv) Elimination of the hazard unavoidably impacts the wetland.
- (b) Public Roads and Utilities. Public roads and utilities may be allowed in optimal quality wetlands only where an overriding public interest is shown, and only unavoidable impacts upon such wetlands will be permitted. When possible, road crossings will occur at the narrowest point of the optimal quality wetland and be designed so that water flow and wildlife movement are not interrupted.
- (c) Resource-based recreational facilities such as trails, boardwalks, piers, and water access and are approved by the appropriate permitting agency.

All encroachments into the 30-foot buffer shall be those that do not adversely affect the predevelopment hydrology of the wetland including water quality or quantity.

Policy 6.7.11 Development activities in wetlands that are qualified as moderate shall be minimized. Moderate wetlands shall be integrated into the stormwater plan of the City and be protected as natural open space and a wildlife buffer to urban development, unless mitigated for as the result of a Florida DEP permit.

Policy 6.7.12: Development activities in wetlands qualified as moderate shall be designed or oriented to utilize the following development requirements in an effort to minimize impacts upon the wetland:

- (a) Clustering and Density Transfer. Whenever possible, all adverse impacts upon the functional value of moderate quality wetlands shall be avoided by limiting development activities to upland areas of a lot or minimized by clustering, density reduction, or reconfigured development plans.
- (b) Design Considerations. Design considerations, such as elevating structures in whole or in part to minimize the building footprint, may be required when such considerations will prevent loss of moderate quality wetlands and the function of the wetland.
- (c) Enhancement. Development plans may provide for the enhancement of the natural wetland function through recognized means and systems supported by accepted engineering or other professional evaluations. Enhancement of degraded wetlands may be utilized to meet the mitigation requirements established herein. The City reserves the right to conduct an independent post-development evaluation of the enhancement systems at the cost of the developer to ensure the function of the wetland, including the stormwater detainment and recharge function, has not been adversely impacted. If, upon such post-development evaluation, a loss of function is found and the developer is unable to present data or reports which prove the function has been improved to its natural condition prior to degradation, the City may impose additional mitigation requirements upon the developer or owner.

Policy 6.7.13: Development activities in minimal quality wetlands will be permitted provided each of the following has been met by the applicant.

- (a) Development activities in wetlands of minimal quality that are contiguous to optimal or moderate quality wetlands shall be minimized in order to restore or enhance such wetlands' function and avoid impacts to adjoining wetland communities; and
- (b) Wetland loss shall be mitigated pursuant to the Florida Department of Environmental Protection.

Policy 6.7.14: Mitigation of the loss of wetland function as a result of non-exempt development activity within identified wetlands shall be calculated based upon the following factors, listed in the stated order of priority, unless otherwise required by the Florida Department of Environmental Protection:

- (a) Avoiding the impact altogether by not taking certain action or part of an action;

- (b) Minimizing impacts by limiting the degree or magnitude of the proposed action or its implementation;
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment; and
- (d) Compensating for the impact by replacing or providing substitute resources or environments through creation of new wetlands, restoration and enhancement of existing wetlands, or re-establishment of wetlands whose function has been lost by development.

Policy 6.7.15: Where wetlands of optimal or moderate scoring are altered by development, a proposed mitigation plan shall include, at a minimum, the following:

- (a) A description of the wetland and buffer to be created or restored, including, but not limited to, the type and functions of the wetland, proposed mitigation ratios, species formerly present, present, or to be planted, plant density, anticipated source of plants, soils, and hydrologic regime;
- (b) A plan for monitoring the success of a created or restored wetland;
- (c) A detailed written estimate of the cost of the mitigation, including costs associated with earth moving, planting, consultant fees, and monitoring;
- (d) A detailed plan describing the monitoring, and the methods for the control and maintenance of exotic or nuisance vegetation, including the party who will ultimately be responsible for such monitoring and maintenance, and the financial arrangement or set asides for such purposes;
- (e) Monitoring and replacement to assure a survival rate of 80% wetland vegetation for a minimum of three (3) years;
- (f) An upland habitat of an appropriate adjacent buffer on mitigated sites;

Policy 6.7.16: The acceptable mitigation plan shall be reasonable and technically feasible. Any mitigation plan approved by a state or federal agency shall be accepted by the City.

Policy 6.7.17: Where a wetland has been restored or created according to an approved mitigation plan, the owner or developer shall submit an application to the City to amend the land use category of the wetland to the Preservation category, and grant a conservation easement or other enforceable legal document to the City. This easement shall include the wetland and all required buffer areas to protect the wetland from future development.



Policy 6.7.18: The mitigation ratio for restored wetlands (or created wetlands) shall be determined based upon the functional value of the wetland being impacted and the functional value of the proposed mitigation. Mitigation proposals which coordinate the wetland into the stormwater master plan of the City will be valued more highly than isolated wetland mitigation proposals. In determining replacement acreage ratios for restored (or created) wetlands, the City shall consider, but not be limited to, the following factors:

- (a) The length of the time that can be expected to elapse before the functions of an impacted wetland have been restored or offset;
- (b) The type of wetland to be created and the likelihood of successfully creating that type of wetland;
- (c) The value assigned to the impacted wetland, and the uniqueness of the wetland within the City;
- (d) The presence or absence of exotic or nuisance vegetation within the wetland and the adverse effect those plants have upon the wetlands beneficial function, if any;
- (e) Whether the mitigation plan proposes to change the function of the wetland from one type to another;
- (f) The amount and quality of upland habitat preserved as conservation areas or buffer;
- (g) Whether the applicant chooses to allocate funds to the City's Environmental Improvement Fund as provided below; and

Policy 6.7.19: When off-site mitigation is proposed, the mitigation shall be performed in areas designated by the City for this purpose, and may include areas to be utilized for passive recreational parks without adverse impact upon beneficial function of the area unless otherwise determined by the Florida Department of Environmental Protection.

Policy 6.7.20: The City shall establish an Environmental Improvement Fund to address the following:

- (a) The City shall assess a mitigation fee in lieu of mitigation where wetlands are proposed to be altered by development;
- (b) All mitigation fees shall be deposited in a fund, known as the Environmental Improvement Fund, the purpose of which shall be to purchase, improve, create, restore, and replace natural habitat within the City, and which may be used in concert with other funding sources for the purposes set forth herein.

- (c) The City shall designate and attempt to purchase or acquire lands identified as wetlands of optimal or moderate quality, or other lands which are linked to the stormwater master plan system of the City, in order to restore or preserve the beneficial function of such lands. These lands will provide suitable areas for off-site mitigation of the impacts of wetland alterations.

Policy 6.7.21: The provisions hereof relating to mitigation shall not serve to create any rights in favor of a landowner regarding development of his property.

**Objective 6.8:** Development activities that involve handling and storage of hazardous wastes shall be managed in a manner which will reduce threats to natural resources.

Policy 6.8.1: Police and Fire Departments shall coordinate with the Bay County Department of Emergency Management in the event of a hazardous materials emergency.

Policy 6.8.2: The City shall require that all stationary above-ground and underground petroleum storage tanks conform to the provisions of Chapters 62-761 and 762 F.A.C, and that permits be obtained from DEP prior to installation or removal of such tanks.

Policy 6.8.3: The City shall require that all small quantity generators of hazardous waste register with Bay County Department of Emergency Management.

**Objective 6.9:** Use proactive measures to reduce the average per capita water consumption.

Policy 6.9.1: The City shall require the use of re-use water lines and reclaimed water in the Panama City North Planning Area. The Panama City North Planning Area is depicted on Map 1.2.

Policy 6.9.2: Where feasible, the City shall promote the use of reclaimed water over potable water for irrigation and landscaping.

Policy 6.9.3: By 2035, the City shall use 1.8 MGD of reclaimed water.

Policy 6.9.3: The City shall continue its joint efforts with Bay County, Lynn Haven, and the Northwest Florida Water Management District to provide up to 5.25 MGD of reclaimed water to the Gulf Power Lansing Smith Facility by 2035.

Policy 6.9.4: The City shall require the use of non-potable water for the use of irrigation and landscaping maintenance where re-use lines are available.

Policy 6.9.5: As part of the Land Development Regulations, the City shall adopt requirements for the use of native or other plant materials which have low water requirements.

Policy 6.9.6: The City shall continue efforts through rate structure, education, and loss control studies that have allowed the City to reduce daily per capita water consumption.

Policy 6.9.7: Inform developers about water conservation measures and techniques as part of the development review process.

Policy 6.9.8: Provide available water conservation literature to all potable water customers.

Policy 6.9.9: Continue water audit and loss control programs to reduce real water losses from eleven (11) percent typical of older systems, to below ten (10) percent.

Policy 6.9.10: Continue efforts to promote Florida Friendly irrigation and xeriscape practices, to provide reduction in landscape irrigation demand of up to twenty-seven (27) percent.

Policy 6.9.11: As specified in § 553.14, F.S., require the use of water conservation plumbing fixtures and equipment.

**Objective 6.10:** Encourage sustainable development practices.

Policy 6.10.1 The City shall encourage alternative energy sources such as solar power in the construction of non-residential use structures.

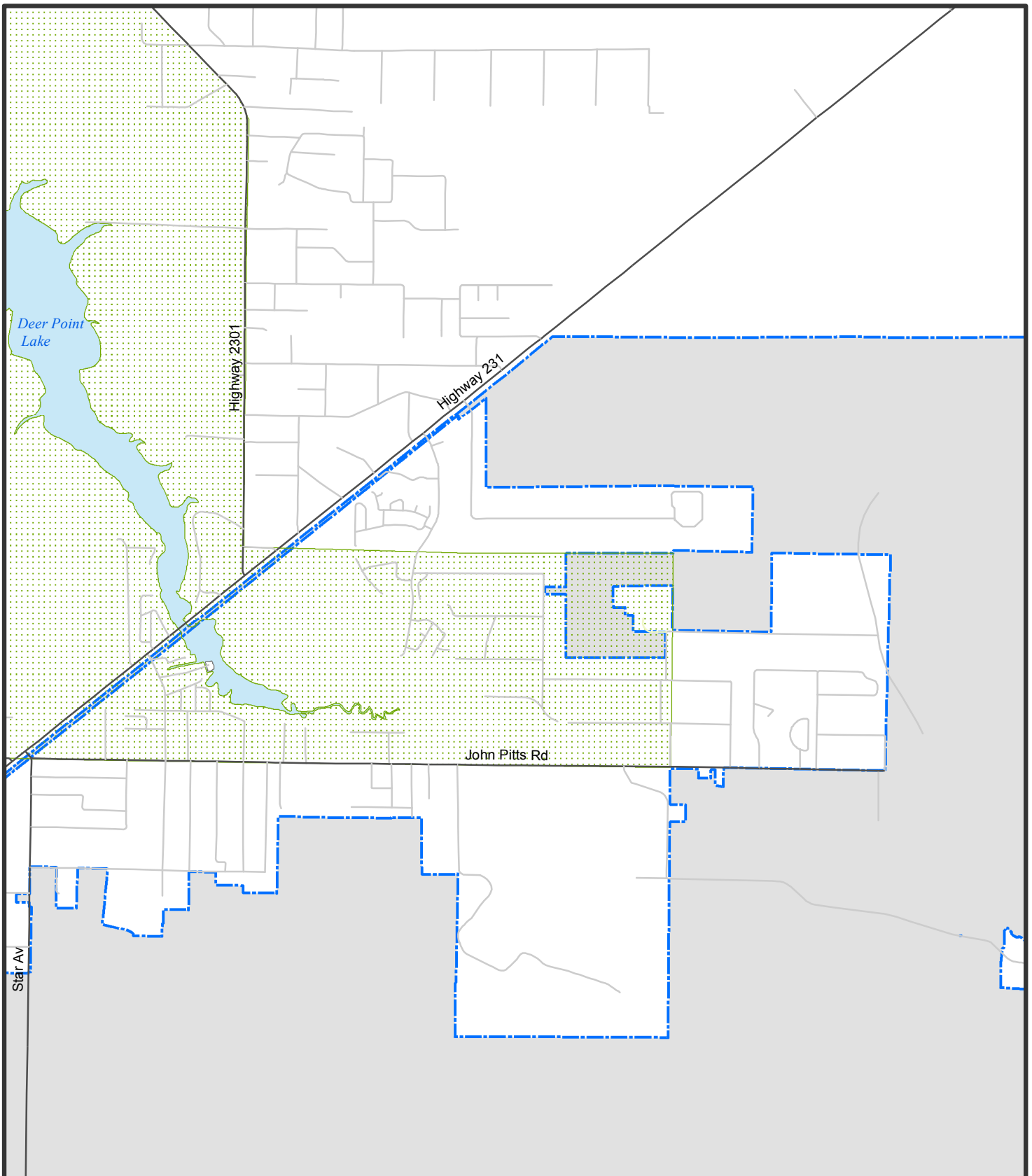
Policy 6.10.2: In order to promote the preservation of wetland communities, habitat, and sustainable development, the City shall provide allowance of decreased lot size requirements from the assigned zoning limitations when wetland communities or habitat areas are preserved in the form of cluster development practices. When cluster development is utilized, non-developed areas shall be designated as “Preservation” on the Future Land Use Map, and a conservation easement shall be granted to a third party.

Policy 6.10.3: Structures that are LEED certified or are certified as a Florida Green Home by an agent of the Florida Green Building Coalition shall receive expedited development order processing.

Policy 6.10.4: Projects that are LEED certified or are certified by the Florida Green Building Coalition with a Green Development Standard designation shall receive expedited development order processing.

Policy 6.10.5: Projects certified by the Florida Green Building Coalition with a Green Development Standard designation, or as a LEED project, shall be eligible for density and intensity bonuses. These bonus standards may increase up to 10% over the maximum limit of this Comprehensive Plan Future Land Use Element.

Policy 6.10.6: In order to reduce impervious surfaces, which contribute to heat islands and stormwater runoff, the City shall create maximum parking requirements in the Land Development Regulations for non-residential uses.



## Deer Point Reservoir Protection Zone

City of Panama City



Map  
6.1

Comprehensive Plan 2035

Date: November 2010

Source: City of Panama City

### Legend



Deer Point Reservoir Protection Zone

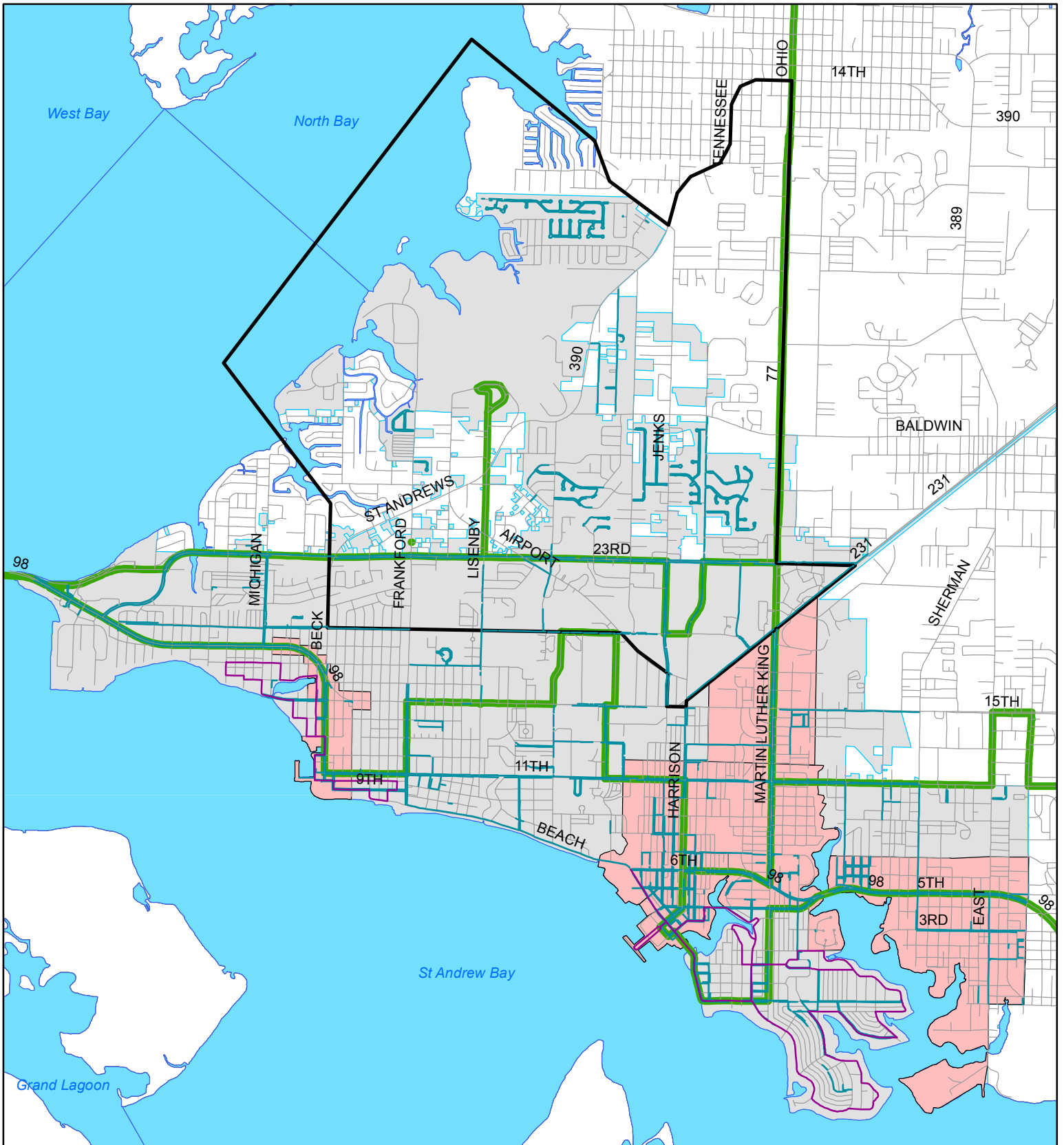


Deer Point Reservoir



Panama City City Limits





## Energy Conservation Areas

### City of Panama City



Map  
6.2

Comprehensive Plan 2035  
Source: City of Panama City  
Date: November 2010

#### Legend

-  Bike Routes
-  Roads
-  Sidewalks
-  Forest Park Mobility District
-  Community Redevelopment Areas
-  Panama City City Limits
-  Transit Routes

