SECTION 8
CONSERVATION ELEMENT

1. PURPOSE

The purpose of the Conservation Element is to identify and establish the City of Panama City Beach's role in the protection of natural resources located within its jurisdiction. This element will assist the City in amending the land use and conservation regulations that will preserve the natural resources within the community to the fullest extent possible. The location of areas designated as Conservation on the Future Land Use Map are shown on Exhibit 2.

Rapid development of any community normally has a severe impact on the conservation of the natural resources. Without proper foresight, these natural resources can be destroyed or damaged beyond repair. The City recognizes its responsibility to ensure that through regulations and enforcement of the same, this will not happen within this community.

In order for the City to decide what steps are needed to preserve and protect its natural resources, it first must identify the natural resources within its jurisdictional area. The review of the impact which past growth has had on the community may provide insight into what not to do in the future. Through the efforts of the City and cooperation of other agencies through the intergovernmental coordination process, the preservation of natural resources can be included as a part of future growth.

2. INTRODUCTION

A major contributor to the growth of the City of Panama City Beach is the natural beauty of the area. The white sandy beaches and mild climate are contributing factors to the increase in population. With improper land use, and lack of restrictions for the preservation of these natural resources, a great asset to the City could be lost forever.

Once a natural resource is destroyed, it is virtually impossible to replace. Lack of planning or improper planning is usually the main contributor to the destruction of the environment in which man lives and shares with other forms of life. It is essential that the community at large understands the importance of ensuring that all natural resources are protected to the greatest extent possible.

3. ENVIRONMENTAL SETTING

Panama City Beach is located in the southern portion of Bay County on the Gulf of Mexico. The Gulf contributes to the natural beauty of the area. Pine forests comprise much of the area to the north of the City.

Temperature averages change from 54.4 degrees in January to 81.0 degrees in July, with a mean annual temperature of 68.8 degrees. Due to Panama City Beach's close proximity to the

Gulf of Mexico, which provides warm air currents from the south, the temperature seldom drops below freezing during the winter. The average rainfall for this area is 57.73 inches per year.

4. POLLUTION

Pollution, for the purpose of this Plan, is divided into three separate categories. These categories are air, water and noise pollution. All three categories are monitored by the Florida Department of Environmental Protection.

There are two general source classifications of water pollutants: point and non-point. Point sources include industrial effluent, domestic sewage and septic tank drainage. The major non-point source is stormwater run-off. Pollutants found in stormwater run-off include agricultural wastes, gas, oil, dirt and debris from roadways and parking lots. Erosion of soil is also considered pollution, but there are no known major sources of erosion pollution in the Panama City Beach area.

The major source of air pollution in Panama City Beach is automobile transportation. The air quality in the City of Panama City Beach is generally good. Breezes from the Gulf of Mexico provide ample fresh air to sweep pollutants away before they accumulate.

Noise pollution also affects the health and well-being of the population and the enjoyment of property. Excessive noise for most people means an interruption of enjoyment of life through interference of speech, reading, watching television, sleep, etc. In general, noise pollution is noise that unreasonably disrupts neighboring lifestyles.

The principal sources of noise pollution in the area of the City of Panama City Beach are traffic noise and wave action noise from the Gulf of Mexico. Traffic noise is not a critical problem for the City of Panama City Beach, as most of the residential areas are removed from the major roadways. Wave action noise is naturally occurring and cannot be avoided.

5. BAYS, WETLANDS, AND MARSHES

West Bay and existing wetlands and saltwater marsh are reflected on Exhibits 8 and 9. Exhibit 8 shows the location of grass beds and marsh in the West Bay area. Although the map does not indicate grass beds or marsh within the City limits, large areas do exist in close proximity to the City along the shores of West Bay. According to The St. Andrew Bay Resource Management Association, seagrass coverage in West Bay has declined since 1953 but has begun to increase since 1992.

The association is a non-profit 501(c) 3 citizens' group, whose members are committed to the proper management of St. Andrew Bay and adjoining bays, lakes, tributaries and wetlands. The association operates several monitoring and research programs including Turtle Watch and Bay Watch Water Quality, Seagrass, Living Shorelines, and Scallop Monitoring and Restoration programs.

Exhibit 9 shows the location of wetlands. Development has, and will generally remain, outside of the wetland areas primarily due to the City's required wetland setback as established in Objective 5 of the Conservation Element.

6. SOILS

The soils in the Panama City Beach area are depicted on Exhibit number 11. These soils are described on the map. The soils of the wetlands and marshes are of the Rutlege-Allenton-Pickney variety.

Soils of the uplands or flat woods consist of the Hurricane Chipley-Albany series or the Pottsburg-Leon-Rutlege variety. The former is usually found in flat or general sloping areas and consist of poorly drained sandy soils. The latter is a poorly drained soil with some organic stained layers.

7. FLOODPLAIN

The Federal Emergency Management Agency (FEMA) was established in 1981 to administer the National Flood Insurance Program (NIFP), and Panama City Beach passed an ordinance adopting this program shortly thereafter. This ordinance established criteria for flood prone areas to conform with FEMA regulations. The flood zones in the City of Panama City Beach area are shown on Exhibit number 12. These areas indicate the 100-year potential flood areas.

8. COMMERCIALLY VALUABLE MINERALS

Historically, large scale development of mineral commodities has not occurred in Bay County with the exception of deposits of sand, gravel and clay. All such excavating activities in Bay County are located outside the City limits.

9. ESTUARINE WATER QUALITY CONDITION

A variety of reports have been made on the condition of water quality of the overall St. Andrew Bay system. The St. Andrew Bay Resource Management Association's St. Andrew Bay Water Quality Report made an assessment of the water quality conditions of the area's waters. The report stated that the water quality of the overall St. Andrew Bay system, which includes West Bay, was fair/good. The report also states that over the past 20 years the water quality of West Bay has improved because of the elimination of the City's wastewater discharge. However, the quality of Grand Lagoon has deteriorated to poor because of increased stormwater run off, septic tanks and the removal of native plants as a result of seawall construction.
Fresh water tributaries entering the system are generally clear and clean, and tidal flushing is poor.

10. ECOLOGICAL COMMUNITIES

The City of Panama City Beach and its surrounding area is located in the North Florida Flatwoods ecological community. The North Florida Flatwoods ecological community is comprised of nearly level land. Water movement is very gradual to the natural drainageways. Wet conditions prevail during the rainy season with the water table on or near the surface. It is easily identified by the flat topography, slash pine and saw palmetto vegetation.

Fire and water are the major stress conditions of this community. Modifications of either condition will change the plant and animal composition. Removal of fire will cause a successional move to a hardwood community. Flatwoods communities are good cellulose producers because of their high net productivity. The original areas of predominantly long leaf pine have been logged. Extensive areas have been replanted to slash pine. Intensive management for pulp production can cause major changes in the vegetation. The result is a low diversity of plants and often adverse changes in types and amounts of some wildlife.

11. COMMON AND ENDANGERED VEGETATION, WILDLIFE AND FISH

Information regarding natural resources was supplied by The Florida Natural Areas Inventory "FNAI", which is a non-profit organization administered by Florida State University. This group is involved in gathering, interpreting, and disseminating information critical to the conservation of Florida's biological diversity. FNAI staff builds and maintains a comprehensive database of the biological resources of Florida, which include element occurrences of rare plants, rare animals, and high-quality natural communities. These occurrences are maintained in a GIS database for mapping and analysis. FNAI staff has expertise in botany, zoology, ecology, land management, environmental planning, GIS, and database management.

FNAI staff has indicated that the City is "located on or very near a significant region of scrub habitat, a natural community in decline that provides important habitat for several rare species within a small area." Special consideration should be taken to avoid and/or mitigate impacts to these natural resources, and to design land uses that are compatible with these resources. FNAI habitat models indicate areas which based on land cover type, offer suitable habitat for one or more rare species that is known to occur in the vicinity. Habitat models have been developed for approximately 300 of the rarest species tracked by the Inventory, including all federally listed species. According to the most recent FNAI, data there is potential for several identified element occurrences of rare species located within the City limits.

Element Occurrences are areas of land and/or water in which a species or natural community is or was present. The Bureau has created files identifying those areas within or surrounding the city limits of Panama City Beach. This data is accessible on the City's GIS system and will be reviewed as a part of all annexation, rezoning and development order applications.
Exhibit 10 depicts the location of the element occurrences, natural areas and conservation areas.

12. COMMERCIAL FISHING INDUSTRY

The commercial fishing industry in the Bay County area provides most of the seafood utilized by the local restaurants. The commercial harvests for the fishing industry in Bay County, according to the Florida Department of Agriculture and Consumer Services, indicates that 2,434,353 pounds of seafood was landed in 2018. Due to the lack of marinas in the City, the commercial seafood industry has remained outside of the City limits.

13. RECREATIONAL HUNTING AND FISHING

Recreational hunting and fishing in Bay County is an important pastime for many area residents and visitors alike. There are no legal active hunting areas within the City limits.

14. CURRENT AND PROJECTED WATER NEEDS

The City provides potable water service for virtually all land uses from Phillips Inlet to Hathaway Bridge. This system consists of two water treatment facilities with storage and high service pumping stations.

In 1999, the City entered into an interlocal agreement with Bay County to construct a new potable water line from Deer Point Lake via County Road 388 to the City. The system became operational in March, 2002 and eliminated the water wells. The interlocal agreement states that 26.39 million gallons a day (mgd) is available to the City in 2010 with increasing amounts each year up to 33.79 mgd in the year 2020. The current available pumping and transmission capacity is approximately 32.8 mgd and with planned capital improvements the capacity will be increased to 38.5 mgd. The contract with the County has been designed to increase each year by approximately 4% per year in order to continue to have capacity available for growth. Additionally, the City has completed construction of two 7 million gallon tanks at the West Bay Water Treatment Facility and 5, 4 and 2 MG storage tanks at the McElvey Water Treatment Facility providing the City an additional 25 million gallons of working reserve for peak season and fire flow demand.

The daily average water demand from January 1, 2019 through December 31, 2019 was 13.95 MGD on a monthly average with a daily peak usage of 19.99 MGD. The County's available capacity to supply potable water to the City in 2020 is 32.96 mgd, which leaves an excess capacity of 19.01 mgd on a daily average and an excess capacity of 12.97 mgd on daily peak usage. Table 6 shows the historical potable water usage and capacity while Table 7 shows the projected usage and capacity from 2020 to 2030.

The City has also implemented a water reclaimed system that will make highly treated effluent from the wastewater system available for irrigation to new subdivisions and commercial developments. With the implementation of this reclaim system, it is estimated that the 20% of potable water usually used for irrigation in these new subdivisions will be replaced by reclaimed water. The following table show the expected demands and remaining capacity of the potable water system.

TABLE 1
Projected Daily Potable Water Usage (in mgd)

	2020	2025	2030
Total Average Daily Usage:	14.30	16.18	18.30
Total Peak Daily Usage:	20.49	23.18	26.23
Capacity:	33.79	33.79	33.79
Remaining Capacity (Daily Avg)	19.49	17.61	15.49
Remaining Capacity (Peak Daily)	13.30	10.61	7.56

Source: Panama City Beach Water Consumption History and Projections, City of Panama City Beach Utilities Department.

15. GOALS, OBJECTIVES AND POLICIES

GOAL: It is the goal of the City of Panama City Beach to establish and maintain trends that protect and preserve the natural resources of the area.

OBJECTIVE 1: Protect and conserve the natural resources, wildlife and wildlife habitat of the area including factors that affect energy conservation.

POLICY 1.1: Maintain air quality at existing levels or as consistent with the U.S. Environmental Protection Agency. The City shall prohibit development which causes degradation of air quality below existing levels or as established.

POLICY 1.2: The City will update this Plan to include the most recent data from the Florida Natural Areas Inventory once available.

POLICY 1.3: Since 2011 the City and the Northwest Florida Water Management District have been removing non-native vegetation and restoring over 3,600 acres of recreational/conservation land.

POLICY 1.4: The City will pursue reasonable strategies to promote energy conservation as opportunities occur.

OBJECTIVE 2: Maintain the quality and quantity of water sources.

POLICY 2.1: The City shall support efforts by Bay County toward the protection and conservation of the Deer Point Lake water source, which is under County jurisdiction.

OBJECTIVE 3: Evaluate and identify possible sources of stormwater pollution in each drainage basin.

POLICY 3.1: Through the implementation of the Stormwater Master Plan, the City shall identify possible stormwater pollution sources into adjacent water bodies and shall undertake measures to reduce pollutant loads consistent with Chapter, 62-330 FAC.

POLICY 3.2: The City shall coordinate with Bay County on measures intended to reduce stormwater pollution.

POLICY 3.3: The City shall reserve approval of Development Permits until stormwater discharge permits are obtained by developers, pursuant to Chapter, 62-330 FAC.

POLICY 3.4: The City shall protect the water quality of water bodies within the City by including requirements for treatment of stormwater, requiring buffers or setbacks in areas adjacent to the shoreline, drainageways, or wetlands and other similar provisions included in the Land Development Regulations.

OBJECTIVE 4: In conjunction with the implementation of the Land Development Regulations, continue to implement and revise as necessary, procedures to reduce soil erosion and reduce sedimentation into water bodies.

POLICY 4.1: The City shall identify in its Land Development Regulations specific standards for soil conservation, in coordination with the Bay County Soil and Water Conservation District.

POLICY 4.2: At a minimum, land clearing or development activities which cause direct soil erosion or sedimentation of water bodies shall be undertaken to reduce soil erosion and sedimentation.

OBJECTIVE 5: Through implementation of the Land Development Regulations, the City shall include provisions for conservation and protection of fisheries, wildlife habitat and marine habitat in the development review and approval process. The City will continue to protect and conserve wetlands, seagrasses and shorelines.

POLICY 5.1: The City shall evaluate impacts on fisheries, wildlife habitat and marine habitat as part of its development review and approval process. Development activities which will destroy identified wildlife or marine habitat shall be restricted through use of an enforceable development agreement, pursuant to 163.3220-.3243, F.S. Development activities which cause destruction of endangered or threatened species shall be prohibited.

POLICY 5.2: The City shall protect and conserve the natural functions of existing soils, wetlands, marine resources, wildlife habitat, flood zones, and estuaries by using the following guidelines to establish standards in its Land Development Regulations.

POLICY 5.3: Soils: 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.

As part of the development review process, a developer shall include, but not be limited to the following:

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;

E. A map showing the location of all items listed in (a) through (d) in this paragraph.

A developer may propose the use of any erosion and sediment control techniques provided such techniques represent the best management practices and are certified by a registered professional engineer.

Once development activity begins the developer shall maintain in good order all erosion and sediment control measures specified in the Erosion and Sediment Control Plan regardless of whether the development project is completed or not.

POLICY 5.4: Wetlands and seagrass areas within the City shall be deemed environmentally sensitive, in recognition of their many natural functions and values, and shall be protected from incompatible land uses. The City shall afford protection to all these resources including prohibition of any portion of a septic tank system or other alternative individual household domestic waste treatment systems (hereafter referred to as septic tanks) within a wetland or seagrass area.

POLICY 5.5: The definition of wetlands to be used for regulatory purposes by the City shall be as defined in subsection 373.019(27), F.S., and as further described by the delineation methodology in Section 373.421(1), F.S.

POLICY 5.6: The location of wetlands on a development site shall be accurately identified at the time of site development review. The City shall not issue a development order or permit for a parcel until all wetlands on that parcel have been identified.

POLICY 5.7: Buffers will be created between development and wetlands, surface water bodies and upland areas adjacent to these resources. The purpose of the buffer is to protect natural resources from the activities and impacts of development. The buffer shall function to:

A. Provide protection to the water bodies, wetlands and adjacent upland natural resources used by wildlife in association with the water bodies, and wetlands, from intrusive activities and impacts of development. The negative impacts of the uses upon each other must be minimized or, preferably, eliminated by the buffer such that the long-term existence and viability of the natural resources, including wildlife populations, are not threatened by such impacts and activities. In other words, incompatibility between the uses is eliminated or minimized and the uses may be considered compatible (which means a condition in which land uses or conditions can co-exist in relative proximity to each other in a stable fashion over time such that no use or condition is unduly negatively impacted directly or indirectly by another use or condition).

B. Types of buffers: The buffer may be a landscaped natural barrier; a natural barrier; or, where the natural barrier has been altered or no longer exists because of past lawful activities, a landscaped or natural barrier supplemented with fencing or other manmade barriers, so long as the function of the buffer and intent of this policy are fulfilled. Fencing can be used to supplement the buffer requirements but may not be used as a replacement to the buffering requirements.

POLICY 5.8: The City shall protect and conserve the natural functions of wetlands and water bodies through wetland and shoreline protection buffers. High quality wetlands shall be buffered from development by uplands or low quality wetlands. Except at permitted road crossings, upland or low quality wetland buffers adjacent to high quality wetlands shall be an average of 50 feet wide, with a minimum 30-foot width for each individual project area. All buffers, whether upland or wetland, will be preserved and maintained in a natural condition, except for the construction of boardwalks for dock access, roads, utilities, recreational crossings, on-grade trails, similar crossings, and an attendant ten (10) foot wide cleared path through the buffer for purposes of providing access to such encroachments. Buffers may be enhanced or restored to a more natural condition. Application of fertilizers, herbicides and pesticides is prohibited within all buffer areas. As used herein, “low quality wetlands” shall mean all jurisdictional areas defined by FDEP, which are in silviculture, including ditches and typically including hydric pine

plantations. "High quality wetlands" shall mean all other jurisdictional areas, typically including cypress domes, strands, bay and gallberry swamps, harvested cypress swamp areas, titi monocultures, and hypericum bogs. Properties within the Ecosystem Management Agreement and the Regional General Permit shall provide a wetland setback as required by that agreement and permit. The number of such encroachments shall be minimized by co-location of utilities, roads, and other crossings. The wetlands protection buffer shall begin at the Florida Department of Environmental Protection jurisdictional line. The buffer zones shall consist of preserved native vegetation, including canopy, understory and ground cover. If there is no native vegetation on the site, a planted vegetated buffer shall be required as part of the site development.

POLICY 5.8.1: The property legally described in Ordinance 1125 and consisting of approximately 1,414.05 acres shall be subject to all of the applicable regulations of the City of Panama City Beach, all other governing agencies, and the following provisions of the Regional General Permit (RGP), SAJ-86 and Ecosystem Management Area Permit (EMA), 03-0258023-009-EA:

> High quality wetlands shall be buffered from development by uplands or low quality wetlands. Except at permitted road crossings, upland or low quality wetland buffers adjacent to high quality wetlands shall be an average of 50 feet wide, with a minimum 30-foot width for each individual project area. All buffers, whether upland or wetland, will be preserved and maintained in a natural condition, except for the construction of boardwalks for dock access and on-grade trails. Buffers may be enhanced or restored to a more natural condition. Application of fertilizers, herbicides and pesticides is prohibited within all buffer areas. As used herein, "low quality wetlands" shall mean all jurisdictional areas defined by FDEP, which are in silviculture, including ditches and typically including hydric pine plantations. "High quality wetlands" shall mean all other jurisdictional areas, typically including cypress domes, strands, bay and gallberry swamps, harvested cypress swamp areas, titi monocultures, and hypericum bogs.

POLICY 5.9:1. All development not exempt from the requirements of Chapter 3, Stormwater Management of the Land Development Code, shall provide for flood attenuation as follows:

(a) At a minimum, facilities shall be provided to attenuate a 25-year frequency storm event of critical duration so that the post development stormwater peak discharge rate shall not be greater than the predevelopment peak discharge rate. In addition, development which cannot demonstrate a positive, direct discharge into a receiving wetland or a public easement or right-of-way, each with sufficient capacity to accept stormwater runoff from a 100-year frequency storm event of critical duration without adversely affecting other development or property, shall attenuate a 100-year frequency storm event of critical duration. The critical duration shall be defined as the storm event that when routed through the proposed facility results in the greatest post-development discharge rate. The FDOT 1-hour, 2-hour, 4-hour, 8-hour and 24-hour rainfall distribution shall be used to determine the critical duration. Off-site contributions shall be exempt from the foregoing attenuation requirements, provided that they are conveyed through the site and discharged at the

same location as prior to development. The analysis of pre-development run-off shall presume the site to be in a natural and undeveloped condition, except that the analysis of pre-development run-off for a public roadway redevelopment project shall use the current site conditions. A public roadway redevelopment project is a roadway project proposed by a governmental entity, or a non-governmental entity if the roadway project is required as an off-site improvement by a development order or permit, that involves the redevelopment of an existing roadway classified as a principal or minor arterial or an urban or rural collector.

(b) For those developments located within the basin of a regional stormwater plan, the stormwater facility shall consider the critical duration for the regional stormwater plan basin. The post-development discharge for the stormwater facility shall not exceed the pre-development rate for the event equal in duration to the critical event for the regional stormwater plan basin.

(c) All stormwater discharge facilities shall have sediment controls and skimming devices.

(d) Off-site discharge flows shall be limited to non-erosion velocities.

2. All development not exempt from the requirements of Chapter 3, Stormwater Management of the Land Development Code, shall provide for stormwater treatment as follows:

(a) At a minimum, the first one-half inch of stormwater runoff shall be retained within drainage areas less than one hundred (100) acres. For areas one hundred (100) acres or more, the runoff from one inch (1") of rainfall shall be retained with the runoff coefficient being no less than 0.5. The total volume retained must percolate within seventy-two (72) hours.

(b) The retention and detention of a greater amount of stormwater may be acquired in areas of special concern as designated by the City.

(c) Except as described in paragraph b, all drainage and stormwater management systems shall comply with requirements of the Northwest Florida Water Management District as set forth in Chapter 62-346, FAC.

(d) All stormwater discharge facilities shall have sediment controls and skimming devices.

(e) Off-site discharge flows shall be limited to non-erosion velocities.

(f) Drainage and stormwater management systems which directly discharge to surface waters within Ecosystem Management Areas or Outstanding Florida Waters (OFW) shall include an additional fifty percent (50%) of treatment criteria specified in Section 62-25.035(1)(b) or Section 62-25.040 or Section 62-25.042, FAC (OFW standards).

POLICY 5.10: Where sufficient uplands exist to locate the proposed development in the upland portion of the site, the City may allow the transfer of development at

the future land use densities established on the Future Land Use Map from the wetlands to the upland portion of the site. The transfer of density may occur provided all other plan provisions are satisfied regarding, but not limited to, upland and floodplain resource protection, compatibility of adjacent land use, stormwater management, and setbacks. Transfer of development densities shall also satisfy the minimum lot size of the zoning district in which the lot is located.

POLICY 5.11: For lots existing prior to adoption of this plan, where sufficient uplands do not exist to avoid a taking, development in the wetlands shall be restricted to allow residential density use at the density of one dwelling unit per five acres. In the event a parcel is less than five acres, a single family dwelling will be allowed on each parcel which existed prior to the adoption of this Plan. Single family dwelling development on existing parcels which are permitted pursuant to this policy that cannot meet the buffer requirements may be reduced proportionately with the parcel dimensions.

POLICY 5.12: Prior to construction in jurisdictional areas, all necessary permits must have been issued by the Florida Department of Environmental Protection and/or the U.S. Army Corps of Engineers, as required by the agency or agencies having jurisdiction.

POLICY 5.13: When development or redevelopment cannot occur without degrading wetlands, the impact shall be mitigated pursuant to FDEP and/or U.S. Army Corps of Engineers and/or the Northwest Florida Water Management District permitting regulations.

POLICY 5.14: Uses and activities allowed in the wetland and shoreline protection buffers are as follows:

A. Minor maintenance or emergency repair to existing structures
or improved areas;

C. B . Walkways, piers and docks elevated on pilings, limited to four feet in width, in conjunction with a permit from the Florida Department of Environmental Protection. Hook-and-line fishing, hunting and creation and maintenance of temporary blinds; and,

D. Special water-dependent uses shall be allowed waterward of the wetlands and shoreline protection zones as follows:
1. Bulkheads and seawalls shall be permitted only to stabilize previously disturbed shorelines or to replace deteriorated existing bulkheads and seawalls. Riprap or similar material shall be placed at the toe of all replaced bulkheads and seawalls;

2. Installation of buoys, aids to navigation and signs; and

3. Performance of maintenance dredging.

E. Design standards for the special water-dependent uses shall include allowance for movement of aquatic life, maintenance of flood channel capacity and stability of disturbed or altered shoreline embankments.

F. Compensatory wetland mitigation at a minimum ratio of replacement to destroyed wetlands as permitted by any of the following: U.S. Army Corps of Engineers, the Florida Department of Environmental Protection, or the Northwest Florida Water Management District.

POLICY 5.15: A Conservation Land use designation is established for designated water bodies and seagrass beds. Permitted uses allowed in the Conservation Land Use category are limited to resource-based passive recreation and open space uses such as walkways, piers and docks elevated on pilings and no more than four (4) feet in width.

POLICY 5.16: Performance standards to minimize the impacts to wetlands are as follows:

Dredging or filling of wetlands shall be allowed only where it is demonstrated to be necessary to the public interest, and the applicant has demonstrated that such activity will not negatively impact water quality, oyster beds, natural functions, or endangered species habitat. Receipt of a permit from the U.S. Army Corps of Engineers and/or the FDEP and/or the Northwest Florida Water Management District authorizing all dredge and fill activities shall constitute demonstration of compliance with these standards for purposes of this section.

A. Clearing or removal of native vegetation only be permitted when necessary to permit allowable encroachments identified in Policy 5.8 of this Section. Such clearing or removal shall be the minimum area necessary to construct such improvements. Buildings must be built as required by the Building Code, FDEP, and/or the USACOE.

B. Septic tanks, drainfields, and greywater systems shall be located outside of the wetland and not within 75 feet of the wetland.

C. Development is designed and located in such a manner that

there are no impacts to the following:

1. The habitat, abundance, diversity, and food sources of fish, wildlife and listed species.

2. The water quality of the wetland.

3. The flood storage and flood conveyance capabilities of the wetland.

4. Any historic resources, including those listed on the Master Site File List of the Florida Department of State.

POLICY 5.17: Marine Habitat

A. Living Marine Resources: No development activities may be undertaken in areas containing marine seagrass beds or fisheries nursery areas when such development activity can reasonably be expected to damage or destroy seagrass beds unless:

1. Valid permits are obtained from jurisdictional agencies prior to development approval by the City; and

2. Equivalent mitigation of destroyed or damaged seagrass beds is undertaken by the developer.

B. Estuarine Shoreline: No development or construction activity, except access to piers or structures permitted by State authority upon sovereignty submerged lands, shall be permitted within thirty (30) feet landward of the mean high tide line of any estuarine water body that has not been reconstructed for beach renourishment. Within this restricted area, all natural shoreline vegetation shall be preserved for a distance of twenty (20) feet landward from the mean high tide line, except for a cleared corridor not to exceed fifteen (15) feet in width to provide access to the water.

POLICY 5.18: Wildlife Habitat: Development shall not be permitted which will significantly damage or destroy the habitat of species listed as endangered or threatened as specified in the "Official Lists of Endangered Fauna and Flora in Florida", published by the Florida Fish and Wildlife Commission.

The developer of any areas identified as containing wildlife habitat shall be responsible for the conduct of an analysis to determine the value and extent of such habitat. This habitat analysis shall form the basis of habitat conservation and preservation measures to be established either as

a condition of development approval or in an enforceable development agreement, pursuant to Chapter163.3220-3243, F.S.

POLICY 5.19: Locally determined environmentally sensitive resources are considered to be habitat for endangered or threatened species. Development activities which destroy these resources shall be regulated pursuant to the provisions outlined and implemented in the Land Development Regulations as outlined in this Plan.

POLICY 5.20: Development within the 100 year floodplain will be required to provide 1:1 ratio for compensating flood storage where flood storage areas are displaced.

POLICY 5:21: Development in the 100 year floodplain will not be allowed to use septic tanks or grey water discharges within the 100 year floodplain.

OBJECTIVE 6: Protect Floodplains and floodways by establishing construction standards which minimize the impact of man-made structures.

POLICY 6.1: All development activity undertaken within designated A-zones as shown on the official Flood Insurance Rate Map for Panama City Beach, Florida published by the Federal Emergency Management Agency shall be subject to the restrictions and standards of the City's Floodplain Management Ordinance which are contained in Chapter 3 of the City's Land Development Code of.

POLICY 6.2: Floodplain management standards shall minimize public and private losses due to flood conditions in specific areas by provisions designed to:

a. restrict uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in increased flood heights or velocities:

b. require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction:

c. control the alteration of natural flood plains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters:

d. control filling, grading, dredging, and other development which may increase erosion or flood damage: and,

e. regulate the construction of flood barriers which will unnaturally

divert flood waters or which may increase flood hazards to other lands.

OBJECTIVE 7: Continue to implement, and amend when necessary, procedures that require development activities which involve handling and storage of hazardous wastes are managed in a manner which will reduce threats to natural resources.

POLICY 7.1: Police and Fire Departments shall coordinate with the Bay County Department of Emergency Management as prescribed in the Comprehensive Emergency Management Plan for Hazardous Materials (dated 2-15-89 and approved 8-15-89) in the event of a hazardous materials emergency.

POLICY 7.2: The City shall require that all stationary above-ground and underground petroleum storage tanks conform to the provisions of Chapter 62.761 and 62.762, FAC, and that permits be obtained from FDEP prior to installation or removal of such tanks.

POLICY 7.3: The City shall require that all small quantity generators of hazardous waste register with the Bay County Department of Emergency Management, as specified under Chapter 403.7234 and Chapter 403.7236, F.S.

OBJECTIVE 8: Annexations and land uses in the Lake Powell Protection Zone shall be located and designed to maintain or improve the water quality and bio-diversity in the Lake Powell Outstanding Florida Water (OFW).

POLICY 8.1**:** Restrict the use of individual household septic tank systems or other alternative individual household domestic waste treatment systems (hereafter referred to as septic tanks) around Lake Powell and areas that discharge into Lake Powell. This restriction shall prohibit the location of septic tanks within the first 100 feet of the shoreline of Lake Powell as defined by mean high water and shall further prohibit the location of septic tanks in the second 100 feet of the shoreline as defined by mean high water in areas where, by virtue of topography, soil type, or groundwater type, the location of septic tanks may not be suited. On all properties located adjacent to tributaries of the Lake, there shall be a 100 foot setback landward from the Department of Environmental Protection wetlands jurisdictional line within which no portion of any septic tank may be located.

POLICY 8.2**:** Those areas located within 200 feet of the shoreline of Lake Powell, as defined by the mean high water line, shall be designated as the Lake Powell Protection Zone. Within this zone, maximum density shall be two (2) dwelling units per acre, and land use shall be limited to single-family dwellings in which 60% of each building site must be of porous materials. Twenty-five (25%) of each building site must be composed of native vegetation and septic tanks may be placed only in adequate soils as identified in 64E-6, F.A.C. and as identified in this plan.

POLICY 8.3**:** General permits for dredge and fill activities shall be restricted consistent with . 403.814, F.S.