

# CHAPTER 9: CONSERVATION ELEMENT

## INTRODUCTION

A variety of natural resources are found within the City of Milton that contribute to the social and economic value of the community, and are an important consideration in the planning process. When allowed to function naturally, these resources provide benefits to everyone at no cost; however, when development significantly alters natural resources, the effects are often disastrous and far-reaching. The purpose of this element is to establish guidelines for development that ensure the wise conservation, use, and protection of natural resources.

The Conservation Element identifies and analyzes the natural resources of Milton. Impacts on these resources from human activities are identified and needs for improved management strategies are discussed.

### *Element Overview*

The purpose of the Conservation Element is to provide guidance for the conservation and protection of natural resources within the City. The Element contains goals, objectives, and policies with the intent of protecting the public health, safety and welfare through the retention and protection of environmentally sensitive lands.

## A. GOALS, OBJECTIVES, AND POLICIES

**GOAL 1:** TO PROTECT, MANAGE AND CONSERVE THE NATURAL RESOURCES OF THE CITY OF MILTON TO ENSURE THEIR CONTINUED BEST USE FOR THE CURRENT AND FUTURE CITIZENS OF THE CITY.

**OBJECTIVE 1.1:** THE CITY OF MILTON SHALL CONTINUE TO MAINTAIN AIR QUALITY WITHIN ITS JURISDICTION IN CONFORMANCE WITH STATE AND FEDERAL AIR QUALITY GUIDELINES BY IMPLEMENTING POLICY 1.1.1.

**POLICY 1.1.1:** In order to maintain air quality, all new developments with the potential to emit pollutants into the air will be required to obtain any and all necessary federal and state permits prior to authorization of a development permit by the City of Milton.

**OBJECTIVE 1.2:** THE CITY OF MILTON WILL CONSERVE, APPROPRIATELY USE, AND PROTECT THE QUALITY, QUANTITY AND NATURAL FUNCTIONS OF CURRENT AND PROJECTED WATER SOURCES AND WATERS THAT FLOW INTO RIVERINE, ESTUARINE OR OCEANIC WATERS BY IMPLEMENTING POLICIES 1.2.1 THROUGH 1.2.10.

**POLICY 1.2.1:** In order to protect water sources from adverse land uses, the City will enforce Land Development Regulations criteria for the location of those land uses (such as landfills, wastewater treatment facilities and land uses which handle or store hazardous or toxic waste) with the potential to adversely affect the quality and quantity of identified water sources including water recharge areas and water wells. These criteria include buffer distances, such as 500-foot radius from wellheads to potentially adverse land uses.

**POLICY 1.2.2:** In order to protect and conserve the natural functions of existing natural resources, all new developments with the potential to impact the quantity, quality of natural function of natural resources will be required to obtain the necessary permits from the U.S. Army Corps of Engineers, the Department of Environmental Protection and the Northwest Florida Water Management District prior to authorization of a development permit by the City of Milton.

**POLICY 1.2.3:** In order to provide for emergency water shortages, the City of Milton will implement procedures for emergency water conservation in accordance with the plans of the Northwest Florida Water Management District.

**POLICY 1.2.4:** In order to promote water conservation, the City will require that all new development will comply with the requirements of the Water Conservation Act of 1982 which requires that specific water conservation practices be utilized in all new buildings constructed after September 1983.

**POLICY 1.2.5:** In order to protect the natural function of surface water bodies and maintain or improve water quality, the City will review and consider the conclusions and any recommendations contained in the work products of the Pensacola Bay Surface Water Improvement and Management (SWIM) Program in development of an/or periodic review of Land Development Regulations. The City will continue to be an active member of the Bay Area Resource Council (BARC), formed by interlocal agreement in 1987 and consisting of Santa Rosa and Escambia Counties, and the Cities of Gulf Breeze, Pensacola and Milton. Furthermore, the City will implement the prioritized recommendations identified in the adopted Comprehensive Stormwater Development Plan.

**POLICY 1.2.6:** In order to protect the quality of water resources, prior to authorizing new development and/or redevelopment activity, the City will ensure the availability of sanitary sewer services in currently sewer less areas with soil conditions severely limited for septic tank absorption fields (as defined in the Soil Conservation Service, Soil survey for Santa Rosa County) and the City continues to require conversions from existing septic tank use to sanitary sewer facilities within 150 feet of Blackwater River. Areas with soil conditions that are acceptable for septic tank absorption fields will allow septic tank use provided that 150 foot setbacks from the Blackwater River are met.

**POLICY 1.2.7:** The City will protect the Blackwater River, including its water quality, recreational resources, and aquatic vegetation by protecting the River from encroachment of development activity. This protection will include public acquisition of lands, the prohibition of septic tank systems within 150 feet of the river, and the maintenance of shoreline protection buffers. The width of wetland and shoreline protection buffers may vary depending on such factors as slope, elevation and vegetation transition. The buffers are identified in the City's Land Development Regulations.

**POLICY 1.2.8:** The City shall implement the Northwest Florida Water Management District's Water Supply Planning Region II Regional Water Supply Plan updated in 2006.

**POLICY 1.2.9:** The City shall demonstrate full consideration of the most current NFWMD Regional Water Supply Plan when proposing and/or amending the Water Supply Facilities Work Plan.

**POLICY 1.2.10:** The City of Milton will continue to encourage the use of water conservation efforts in the City to reduce daily water demand.

**OBJECTIVE 1.3:** THE CITY OF MILTON SHALL CONTINUE TO CONSERVE, APPROPRIATELY USE AND PROTECT ITS NATURAL RESOURCES, INCLUDING FISHERIES, WILDLIFE, WILDLIFE HABITAT, MINERALS, SOILS, NATIVE VEGETATIVE COMMUNITIES, AND ENVIRONMENTALLY SENSITIVE LANDS BY IMPLEMENTING POLICIES 1.3.1 THROUGH 1.3.16.

**POLICY 1.3.1:** In order to restrict activities known to affect survival of threatened or endangered species, as a matter of policy, the City of Milton will not issue permits for developments that would destroy or significantly alter any known habitats of endangered or threatened species.

**POLICY 1.3.2:** The City will comply with all state and federal regulations which pertain to protection of endangered, rare, and threatened species, and will consider the protection and conservation of the natural function of areas known to provide habitats for these species when issuing development permits.

**POLICY 1.3.3:** The City of Milton will continue to rely on regulatory programs of state and federal agencies to mitigate the cumulative impacts of development and will implement specific recommendations found within the Santa Rosa County Local Hazard Mitigation Strategy.

**POLICY 1.3.4:** Although no unique vegetative communities have been currently identified within the City of Milton, the City will cooperate with and actively participate on the Interlocal Action Committee to identify means to conserve, appropriately use, or protect unique vegetative communities located adjacent to the City's boundary, such as the development and adoption of an interlocal agreement concerning these issues and review of adjacent development permit applications.

**POLICY 1.3.5:** The City will coordinate with the Florida Fish and Wildlife Conservation Commission to identify any unique vegetative communities and develop strategies for their protection as appropriate.

**POLICY 1.3.6:** In order to protect native vegetative communities, the City will enforce Tree Protection and Landscape Ordinances in conjunction with Land Development Regulations. These ordinances provide that all new development and redevelopment shall preserve and protect native vegetation, including trees, shrubs, and ground cover, and will include provisions requiring landscaped buffer areas between land uses. The protection and use of these native resources will be evaluated as part of the site plan review process.

**POLICY 1.3.7:** Environmentally sensitive lands within the City of Milton are hereby designated as those flood prone areas identified by the Federal Emergency Management Agency on its Flood

Insurance Rate Maps as “A” Zones and any wetlands under the jurisdiction of the U.S. Army Corps of Engineers and/or the Florida Department of Environmental Protection.

**POLICY 1.3.8:**In order to protect environmentally sensitive lands, the City will continue to implement the adopted Flood Protection Ordinance which requires the use of FEMA approved construction techniques.

**POLICY 1.3.9:**The City shall protect floodplains, at a minimum, by implementing the following provisions:

1. Uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities will be restricted or prohibited.
2. Uses vulnerable to floods, including facilities which serve such uses must be protected against flood damage at the time of initial construction.
3. The alteration of natural floodplains, stream channels and natural protective barriers, which are involved in the accommodation of floodwaters, will be controlled.
4. Filling, grading, dredging and other development, which may increase erosion of flood damage, will be controlled.
5. The construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands will be prevented or regulated.
6. Public expenditures, within the Category 1 evacuation zones as delineated on the 2010 Statewide Regional Evacuation Study, will be limited to the provision, or support of recreation uses such as parks, walkways and boat ramps; erosion control devices; increased public access and the correction of deficiencies; and to support infrastructure provided, however, that infrastructure sizing is consistent with that needed to support the densities and intensities established by this Plan for those areas within the Category 1 evacuation zones.

**POLICY 1.3.10:** Site plans for new development must identify the location and extent of floodplains and wetlands on a property. As part of the development review process, the National Wetlands Inventory and Flood Insurance Rate Maps will be reviewed to verify the potential presence of wetlands on or near proposed development sites. The City shall not issue a development order or permit for a parcel until all wetlands on that parcel have been identified by the regulatory agencies and located by a Florida registered surveyor.

**POLICY 1.3.11:** Where alteration of floodplains or wetlands is necessary to allow for reasonable use of property, site plans must provide measures to maintain natural hydrology, such as roadway and/or driveway culverts.

**POLICY 1.3.12:** In order to prevent sedimentation of surface water bodies and protect sensitive soils from erosion, the City will continue to control erosion, sedimentation and run-off in compliance with the National Pollutant Discharge Elimination System (NPDES) stormwater permitting program implemented by the Florida Department of Environmental Protection.

**POLICY 1.3.13:** In order to protect sensitive soils from erosion and surface water bodies from sedimentation, the City will require the use of Best Management Practices (BMP's) during construction activity to minimize potential erosion and sedimentation impacts to adjacent surface water bodies.

**POLICY 1.3.14:** Prior to beginning mine operations, all mine operators will submit a plan to the City identifying measures to protect natural resources, plans for mine reclamation and compatibility with adjacent land uses.

**POLICY 1.3.15:** The City will pursue acquisition of appropriate parcels of land through Florida Forever and other funding sources to ensure the protection of environmentally sensitive lands and open space.

**POLICY 1.3.16:** The City will restore or enhance degraded natural areas within publicly-owned conservation lands as appropriate. Such restoration or enhancement may include, but is not limited to, the removal of non-native vegetation, reforestation, relocation of infrastructure or facilities, shoreline restoration, or restoration of natural hydrology.

**OBJECTIVE 1.4:** THE CITY OF MILTON WILL PROTECT NATURAL RESOURCES FROM THE EFFECTS OF HAZARDOUS WASTE BY IMPLEMENTING POLICIES 1.4.1 AND 1.4.2.

**POLICY 1.4.1:** The City of Milton will continue to identify alternatives for the transfer and/or disposal of hazardous waste.

**POLICY 1.4.2:** In cooperation with Santa Rosa County, the City will continue to educate the public concerning the proper storage and disposal of household hazardous waste.

## **B. DATA AND ANALYSIS**

### **1. *Natural Resource Inventory and Analysis***

#### **Surface Water Resources**

The surface water resources of the City of Milton include the Blackwater River and Locklin Lake. The Blackwater River borders Milton on the east. It is a 58 mile river originating north of Bradley, Alabama and discharging south of Milton into the Blackwater Bay. Locklin Lake was formed by the construction of a dam as part of a subdivision development. It is a private lake located near the center of Milton and is linked to the Blackwater River by Collins Mill Creek.

#### **Water Quality**

Water quality information for the Blackwater River was obtained from the Florida Department of Environmental Protection's "1986 Florida Water Quality Assessment, 305(b) Technical Report." The Blackwater River is designated as having "good" overall water quality, meaning that the quality of the water meets its designated use. Two point sources of pollution affect the river. The Milton Sewage Treatment Plant discharges into the river near Blackwater Bay. The Whiting Field Sewage Treatment Plant discharges into Clear Creek, a tributary of the Blackwater River.

Locklin Lake is currently experiencing water quality problems due to eutrophication and siltation. The City has a Stormwater Management Sub-Committee established to address the issue of stormwater runoff entering Locklin Lake. Additionally, the City currently has a Comprehensive Stormwater Development Plan underway that will provide a review of drainage and water quality issues impacting Milton.

### **Surface Water Classification**

The Department of Environmental Protection classifies State waters according to their present and future most beneficial uses. Section 17-3.081 F.A.C. identifies these classifications as:

- Class I – Potable water supplies
- Class II – Shellfish propagation or harvesting
- Class III – Recreation; propagation and maintenance of a healthy, well-balanced population of fish and wildlife.
- Class IV – Agricultural water supplies
- Class V – Navigation, utility, and industrial use

Locklin Lake is classified as a Class III Water. In addition to this classification system, the DEP administers the Outstanding Florida Waters Program which designates a special category of water bodies in the State worthy of special protection. The designation requires that the existing ambient (naturally occurring) water quality be maintained and that the DEP cannot issue permits that would lower the ambient water quality. The Blackwater River has been designated as an Outstanding Florida Water

### **Air**

The Florida Department of Environmental Protection (DEP) has not identified any air quality problems in the Milton area. The DEP previously maintained air quality in the area but discontinued this practice due to continued excellent air quality conditions.

### **Floodplains**

Floodplains are defined here as those areas identified by the Federal Emergency Management Agency (FEMA) on its Flood Insurance Rate Maps as “A” zones. “A” zones are defined as “special flood hazard areas inundated by the 100 year flood.” Floodplains encompass the eastern border of Milton along the Blackwater River. This location makes them vulnerable to the effects of development which could impede their natural functions..

### **Minerals**

The predominant mineral resources in the Milton region are sand, gravel, and petroleum. The “Florida Mining Atlas” identifies only one active mine the immediate Milton area. This is the Galt City Pit, a sand pit located near the south border of the City. Petroleum is produced from the Jay Oil Field in Northwest Santa Rosa County. Although not produced within the City of Milton, this resource is mentioned here due to its impact on the region.

## Soil Erosion Problems

The U.S.D.A Soil Conservation Service has not identified areas experiencing soil erosion problems in the City of Milton. The “1980 Santa Rosa County Soil Survey”, together with the “1987 Soil Survey Legend,” identifies specific soils that are highly erodible. This information is useful in formulating development plans and should be referred to prior to any construction activity.

## Fisheries

The City of Milton is bordered by the lower river segment of the Blackwater River system. Characteristic fish of this area are the Chain pickerel, Largemouth bass, Warmouth, Bluegill, Read-ear sunfish, Coastal shiner, and Brook silverside. Overall fish production in this river segment is less than found in other warm water streams as is indicated by the low numbers of largemouth bass and bream. Table 9.1 lists the fish species known to be in the Blackwater River system. Only one known endangered fish species inhabits the Blackwater River system. This fish, the Black-mouth Shiner, is the rarest freshwater fish in Florida and is endemic to the Blackwater River and, possibly, the Yellow River.

**Table 1.1:**  
**Fish Species of the Blackwater River System**

<b>Common Name</b>	<b>Scientific Name</b>
Southern brook lamprey,	<i>Ichthyomyzon gagei</i>
Bull shark,	<i>Charcharhinus leucas</i>
Atlantic sturgeon,	<i>A. oxyrhynchus</i>
Spotted gar,	<i>Lepisosteus oculatus</i>
Longnose gar,	<i>L. osseus</i>
Bowfin,	<i>Amia calva</i>
American eel,	<i>Anguilla rostrata</i>
Speckled worm eel,	<i>Myrophis punctatus</i>
Skipjack herring,	<i>A. chrysochloris</i>
Gulf menhaden,	<i>Brevoortia patronus</i>
Gizzard shad,	<i>Dorosoma cepedianum</i>
Threadfin shad,	<i>D. petenense</i>
Bay anchovy,	<i>A. mitchilli</i>

Redfin pickerel,	<i>Esox americanus</i>
Chain pickerel,	<i>E. niger</i>
Golden shiner,	<i>Notemigonus crysoleucas</i>
Ironcolor shiner,	<i>N. chalybaeus</i>
Pugnose minnow,	<i>N. emiliae</i>
Sailfin shiner,	<i>N. hypselopterus</i>
Longnose shiner,	<i>N. longirostris</i>
Taillight shiner,	<i>N. maculatus</i>
Coastal shiner,	<i>N. petersoni</i>
Flagfin shiner,	<i>N. signipinnis</i>
Weed shiner,	<i>N. texanus</i>
Blacktail shiner,	<i>N. venustus</i>
Bluenose shiner,	<i>N. welaka</i>
Blackmouth shiner,	<i>Notropis</i> sp.
Creek chub,	<i>Semotilus atromaculatus</i>
Lake chubsucker,	<i>Erimyzon sucetta</i>
Sharpfin chubsucker,	<i>E. tenuis</i>
Spotted sucker,	<i>Minytrema mlanops</i>
Blacktail redhorse,	<i>M. poecilurum</i>
White catfish,	<i>I. catus</i>
Yellow bullhead,	<i>I. natalis</i>
Brown bullhead,	<i>I. nebulosus</i>
Channel catfish,	<i>I. punctatus</i>
Black madtom,	<i>Noturus funebris</i>
Tadpole madtom,	<i>N. gyrinus</i>

Speckled madtom,	<i>N. leptacanthus</i>
Hardhead catfish	<i>Arius felis</i>
Gafftopsail catfish	<i>Bagre marinus</i>
Pirate perch	<i>Aphredoderus sayanus</i>
Atlantic needlefish	<i>Strongylura marina</i>
Golden topminnow	<i>Fundulus chrysotus</i>
Banded topminnow	<i>F. cingulatus</i>
Marsh killifish	<i>F. confluentus</i>
Starhead topminnow	<i>F. escambiae</i>
Blackspotted topminnow	<i>F. olivaceus</i>
Longnose killifish	<i>F. similis</i>
Pygmy killifish	<i>Leptolucania ommata</i>
Rainwater killifish	<i>L. parva</i>
Mosquitofish	<i>Gambusia affinis</i>
Sailfin molly	<i>Poecilia latipinna</i>
Brook silverside	<i>Labidesthes sicculus</i>
Inland silverside	<i>Menidia beryllina</i>
Gulf pipefish	<i>S. scovelli</i>
Striped bass	<i>M. saxatilis</i>
Shadow bass	<i>Ambloplites ariommus</i>
Flier	<i>Centrarchus macropterus</i>
Everglades pygmy sunfish	<i>Elassoma evergladei</i>
Banded pygmy sunfish	<i>E. zonatum</i>
Bluespotted sunfish	<i>E. gloriosus</i>
Redbreast sunfish	<i>Lepomis auritus</i>

Warmouth	L. gulosus
Bluegill	L. macrochirus
Dollar sunfish	L. marginatus
Longear sunfish	L. megalotis
Readear sunfish	L. microlophus
Spotted sunfish	L. punctatus
Spotted bass	M. punctulatus
Largemouth bass	M. salmoides
Black crappie	P. nigromaculatus
Florida sand darter	A. bifascia
Choctawhatchee darter	Etheostoma davisoni
Brown darter	E. edwini
Swamp darter	E. fusiforme
Speckled darter	E. stigmaeum
Gulf darter	E. swaini
Orangeside darter	E. (Ulocentra) sp.
Blackbanded darter	P. nigrofasciata
Crevalle jack	Caranx hippos
Leatherjacket	Oligoplites saurus
Spotfin mojarra	Eucinostomus argenteus
Sheepshead	Archosargus probatocephalus
Pinfish	Lagodon rhomboides
Silver perch	Bairdiella chrysoura
Sand seatrout	Cynoscion arenarius
Spotted seatrout	C. nebolosus

Spot	<i>Leiostomus xanthurus</i>
Atlantic croaker	<i>Micropogonias undulatus</i>
Black drum	<i>Pogonias cromis</i>
Red drum	<i>Sciaenops ocellata</i>
Striped mullet	<i>Mugil cephalus</i>
Spinycheek sleeper	<i>E. pisonis</i>
Darter goby	<i>Gobionellus boleosoma</i>
Naked goby	<i>Gobiosoma bosci</i>
Clown goby	<i>Microgobius gulosus</i>
Harvestfish	<i>Peprilus alepidotus</i>
Bighead searobin	<i>P. tribulus</i>
Southern flounder	<i>P. lethostigma</i>
Hogchoker	<i>Trinectes maculatus</i>

### **Vegetative Communities**

The City of Milton has developed within the vegetative community known as Longleaf Pine – Turkey Oak Hills. Guess which types of trees are the most dominant types of trees? Table 9.2 lists plant species that are characteristic of the community. Note that the majority of land area within the City of Milton is developed; therefore, much of the naturally occurring vegetative community has been altered. Areas of unaltered vegetation are found along the Blackwater River, in local conservation areas, public parks, and undeveloped lots.

### **Wildlife**

Animals are commonly referred to in terms of the vegetative communities to which they have adapted. Wildlife that is characteristic of the Longleaf Pine-Turkey Oak Hills vegetative community are listed in Table 9.2. Development within vegetative communities will drive out all but the most adaptive forms of wildlife. Wildlife, that can be found within the City of Milton include the fox squirrel, the fence lizard, the scrub jay, and Bachman’s sparrow.

### **Marine Habitats**

There are no marine habitats within the City of Milton.

**Table 9.2:**  
**Species Characteristic of or Known to Occur in Long Leaf Pine-**  
**Turkey Oak Hills Vegetative Communities**

<b>SPECIES TYPE</b>	<b>SCIENTIFIC NAME</b>	<b>COMMON NAME</b>	
<b>TREES</b>	PINUS PALUSTRIS	LONGLEAF PINE	
	QUERCUS LEAVIS	TURKEY OAK	
<b>SHRUBS</b>	ASIMINA PARVIFLORA	DWARF PAWPAW	
	GAYLUSSACIA DUMOSA	DWARF HUCKLEBERRY	
	LICANIA MICHAUXII	GOPHER APPLE	
	QUERCUS PUMILA	RUNNER OAK	
	CENTROSEMA VIRGINIANUM	BUTTERFLY PEA	
<b>HERBACEOUS</b>	ASCLEPIAS HUMISTRATA	SANDHILL MILKWEED	
	ASTER SPP.	ASTER	
	BAPTISIA SPP.	WILD INDIGO	
	CASSIA FESCICULATA	PARTRIDGE PEA	
	CLITORIA MARIANA	BUTTERFLY PEA	
	CROTALARIOA SPECTABILIS	SHOWY CROTALARIA	
	DESMODIUM STRICTUM	PINELAND BEGGARWEED	
	ELEPHANTOPUS SPP.	ELEPHANT'S FOOT	
	HETEROTHECA GRAMINIFOLIA	GRASSLEAF GOLDENASTER	
	PTERIDUM AQUILINUM	BRACKEN FERN	
	<b>GRASSES</b>	PANICUM ANCEPS RHIZOMATUM	HAIRY PANICUM
		PANICUM SPP.	LOW PANICUM
		SORGHASTRUM NUTANS	INDIANGRASS
		SPOROBOLUS CURTISSII	CURTIS DROPSEED
		SPOROBOLUS JUNCEUS	PINEWOODS DROPSEED

<b>AMPHIBIANS</b>	RANA AREOLATA AESOPUS	FLORIDA GOPHER FROG
<b>BIRDS</b>	BUBO VIRGINIANUS	GREAT HORNED OWL
	CAPRIMULGUS CAROLINENSIS	CHUCK-WILL'S WIDOW
	CHORDEILES MINOR	NIGHTHAWK
	COLAPTES AURATUS	FLICKER
	COLINUS VIRGINIANUS	BOBWHITE QUAIL
	COLUMBIGALLINA PASSERINA	GROUND DOVE
	CYANOCITTA CRISTATA	BLUE JAY
	DRYOCOPUS PILEATUS	PILEATED WOODPECKER
	MELANERPES CAROLINUS	RED BELLIED WOODPECKER
	MELANERPES ERYTHOCEPHALUS	RED HEADED WOODPECKER
	MELEAGRIS GALLOPAVO	TURKEY
	MIMUS POLYGLOTTOS	EASTERN MOCKINGBIRD
	MYIARCHUS CRINITUS	CRESTED FLYCATCHER
	SAYORNIS PHOEBE	EASTERN PHOEBE
	SITTA CAROLINENSIS	WHITE-BREASTED
	SITTA PUSILLA	BROWNHEADED NUTHATCH
	TURDUS MIGRATORIUS	ROBIN
	TYRANNUS TYRANNUS	EASTERN KINGBIRD
	ZENAIDA MACROURA	MOURNING DOVE
<b>MAMMALS</b>	CANIS LATRANS	COYOTE
	GEOMYS FLORIDANA	SOUTHEASTERN POCKET GOPHER
	LASIURUS BOREALIS	RED BAT
	LASIURUS CINEREUS	HOARY BAT
	MEPHITIS MEPHITIS	STRIPED SKUNK

	ODOCOILEUS VIRGINIANUS	WHITETAIL DEER
	SCIURUS NIGER	FOX SQUIRREL
	SPILOGALE PUTORIUS	SPOTTED SKUNK
	SUS SCROFA	FERAL PIG
	EPTESICUS FUSCUS	BIG BROWN BAT
	PLECOTUS RAFINESQUII	SOUTHEASTERN BIG EAR BAT
	NYCTICEIUS HUMERALIS	EVENING BAT
	MYOTIS AUSTRORIPAVIUS	SOUTHEASTERN BAT
	PIPISTRELLUS SUBFLAVUS	EASTERN PIPISTREL BAT
	LASIURUS INTERMEDIUS	YELLOW BAT
	LASIURUS SEMINOLUS	SEMINOLE BAT
	TADARIDA BRASILIENSIS	MEXICAN FREETAILED BAT
<b>REPTILES</b>	COLUBER FLAGELLUM	EASTERN COACHWHIP
	GOPHERUS POLYPHEMUS	GOPHER TORTOISE
	HETERODON PLATYRHINOS	EASTERN HOGNOSE SNAKE
	HETERODON SIMUS	SOUTHERN HOGNOSE SNAKE
	LAMPROPELTIS DOLIATA	SCARLET KING SNAKE
	PITUOPHIS MALANOLEUCUS	FLORIDA PINE SNAKE
	SCELOPORUS UNDULATUS	SOUTHERN FENCE LIZARD

"26 Ecological Communities of Florida," U.S.D.A., Soil Conservation Service, 1985 "201 Facilities Plan for South Escambia and Santa Rosa Counties," Flood and Associates, Inc.; Consoer, Townsend and Associates; Baskerville-Donovan Engineers, Inc.; Tom Jus and Associates Consulting Engineers and Theta Analysis Inc. Environmental Consultants 1978 Lt. Ken Watson, Florida Game and Fresh Water Fish Commission, Interview 6/11/87

### Endangered Species

Recognizing the value of the diversity of Florida's fish, wildlife and plants, the State of Florida adopted the "Florida Endangered Species Act of 1977" and the "Preservation of Native Flora of Florida Act." These acts prohibit the destruction or harm of any species identified by the Florida Fish and Wildlife Conservation Commission, the Department of Natural Resources, the Department of Agriculture, or the U.S. Department of the Interior as being endangered or threatened.

Endangered species are those species which are so few in number that they are in imminent danger of extinction. Threatened species are those species that are likely to become endangered in the foreseeable future. A third designation, Species of Special Concern, applies to those species that are in danger of becoming threatened, already meet certain criteria for designation as a threatened species, have not sufficiently recovered from a past population depletion, or whose decline would result in significant adverse effects to other species. In addition to these designations, the Florida Department of Agriculture includes a Commercially Exploited category and the U.S. Fish and Wildlife Service includes a series of designations for those species under review for federal listing. Table 9.3 identifies the endangered and threatened plants, animals, and species of special concern that are characteristic of, or known to occur in the Longleaf Pine – Turkey Oak Hills Vegetative community.

**Table 9.3:**  
**Long Leaf Pine-Turkey Oak Hills Vegetative Community Endangered and Threatened Plants and Animals and Species of Special Concern**

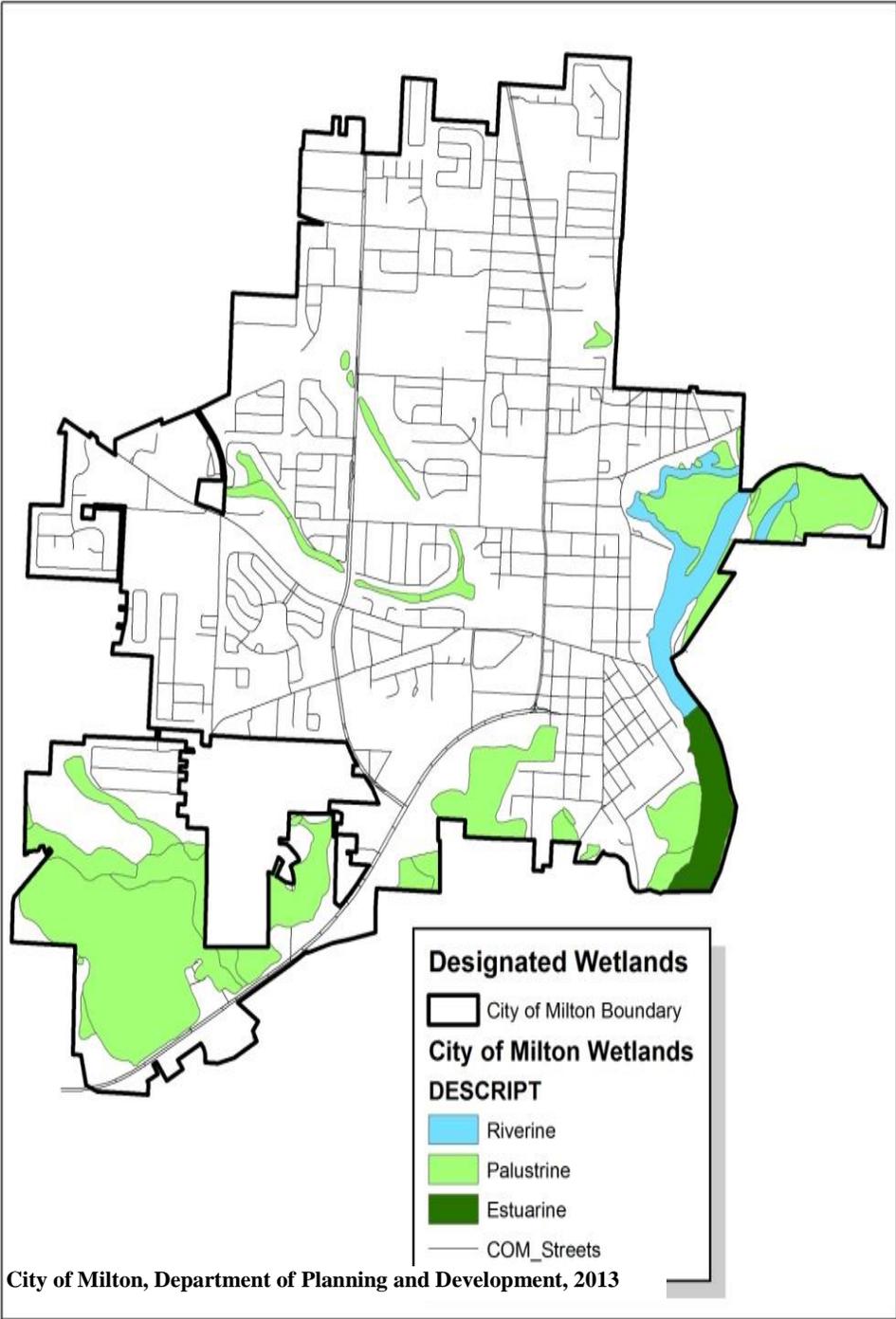
<b>SPECIES TYPE</b>	<b>SCIENTIFIC NAME</b>	<b>COMMON NAME</b>
MAMMALS	PUMA CONCOLOR CORYI *	FLORIDA PANTHER
	PODOMYS FLORIDANUS	FLORIDA MOUSE
BIRDS	FALCO SPARVERIUS PAULUS	SOUTHEASTERN AMERICAN KESTREL
	PICOIDES BOREALIS	RED-COCKADED WOODPECKER
REPTILES	PLESTIODON EGREGIUS LIVIDUS	BLUE-TAILED MOLE SKINK
	DRYMARCHON COUPERI	EASTERN INDIGO SNAKE
	LAMPROPELTIS EXTENUATUM	SHORT-TAILED SNAKE
	GOPHERUS POLYPHEMUS	GOPHER TORTOISE
PLANTS	WAREA AMPLEXIFOLIA	CLASPING WAREA
	CLITORIA FRAGRANS	PIGEON WING
	PITYOPSIS FLEXUOSA	BENT GOLDEN ASTER

University of Florida, IFAS Extension, West Florida Research and Education Center

## **Wetlands**

According to the Florida Department of Environmental Protection wetlands map, the City of Milton contains approximately 48 acres of estuarine wetlands, which are comprised of the intertidal and sub-tidal zones of the Blackwater River, 571 acres of palustrine wetlands, which are described as areas that are “semi-permanently, seasonally, or temporarily flooded and/or saturated, and 72 acres of riverine wetlands which are composed of the areas constantly inundated by the waters of the Blackwater River. Figure 9.1 illustrates the location of designated wetlands within the City of Milton.

**Figure 9.1:**  
**Designated Wetland Areas within the City of Milton**



## **C. COMMERCIAL, RECREATION AND CONSERVATION USES**

There are few direct commercial uses of natural resources in the City of Milton. Groundwater is used for commercial purposes and a sand pit is mined outside the City limits. In addition, natural resources provide indirect commercial uses. This is especially true along the Blackwater River where development and redevelopment efforts are centered on the aesthetic value of this resource.

Recreation uses of natural resources in Milton center on its water resources. The Adrian Carpenter's Park is located on the Blackwater River and provides access for boating and fishing. Riverwalk Park, located in downtown Milton, is a linear riverfront park. This facility is currently being extended through the use of state grant funds.

Land areas within the City limits currently designated for conservation use include the following two conservation corridors. The Rails to Trails corridor is part of a state-wide program converting abandoned rail corridors to conservation or passive recreation use. The Collins Mill Creek corridor is an undeveloped utility corridor linking Locklin Lake with the Blackwater River along Collins Mill Creek. Additionally, the publicly-owned land located south of Collins Mill Creek adjacent to the Blackwater River and the parcel located just south of the City Sewage Treatment Plant adjacent to the River, provides a total of approximately 24 undeveloped acres of conservation land within the City of Milton. Conservation areas are further protected through the various federal, state and local regulatory programs. These programs are listed in Table 9.4.

In surrounding Santa Rosa County, substantial conservation areas are located in the immediate vicinity of Milton. They include the Blackwater River State Forest and Wildlife Management Areas, and the Eglin Wildlife Management Area. Additionally, the Gulf Island National Seashore (Naval Live Oaks) is located nearby in southern Santa Rosa County.

## **D. POLLUTION PROBLEMS**

Milton's most significant pollution problem is the water quality of Locklin Lake. Problems with the lake include eutrophication and siltation stemming from non-point pollution sources. Improved stormwater management is needed to restore and protect this body of water.

Leaking underground petroleum storage tanks are a threat to the potable water supply of Milton. An underground storage tank, with a leak as small as a quarter of an inch, can leak a gallon per hour depending on soil conditions. One gallon of gasoline can contaminate one million gallons of water to an undrinkable level. The Department of Environmental Protection (DEP) has in the past identified 13 leaking underground petroleum storage tanks in Milton.

A potential hazardous waste problem exists with the generation of small quantities of wastes by various businesses within the City. Examples of these wastes include waste oil, dry cleaning filters and photo processing chemicals. The Water Quality Assurance Act of 1983 requires each county to identify potential small quantity hazardous waste generators within their jurisdiction and to annually verify the hazardous waste management practices of at least 20-percent of those identified. The West Florida Regional Planning Council is currently performing this assessment for Milton.

## **E. POTENTIAL FOR CONSERVATION, USE AND PROTECTION**

A basic framework for the conservation, use and protection of natural resources is provided by the system of existing regulatory programs established by the State, Federal and local agencies for this purpose. Table 9.4 identifies in general terms the type of program, the administrative agency, the statutory authority, the purpose of the program and the types of activities regulated. The conservation of water resources is further promoted through adherence to the Water Conservation Act of 1982. This Act requires specific water conservation practices to be utilized in all new buildings constructed after September 1, 1983. Additionally, the City has plans to adopt procedures for emergency conservation of water resources in accordance with the plans of the Northwest Florida Water Management District.

The City is a participant of the Pensacola Bay Surface Water Improvement and Management (SWIM) Program administered by the Northwest Florida Water Management District. This project involves data collection and analysis on a basin-wide basis. The City will consider the conclusions and any recommendations contained in the SWIM work products in development of their revised Land Development Regulations.

In order to ensure intergovernmental coordination and protection among adjacent municipalities, the City actively participates on the Interlocal Action Committee which provides representation from all jurisdictions in Santa Rosa County, including Eglin A.F.B., State Forest and Wildlife Management Areas, local governments, etc. This committee will provide a forum to consider developments having impacts on more than one jurisdiction, including such topics as the protection of unique vegetative communities.

The Blackwater River is an Outstanding Florida Water. Protection of this resource will provide protection for the one known endangered fish species which inhabits the Blackwater River System, the Blackmouth Shiner. In order to protect the water quality of the Blackwater River and other water resources, the City will ensure the availability of sanitary sewer services in currently sewer less areas with soil conditions that are severely limited for septic tank absorption fields (as defined in the Soil Conservation Service, Soil Survey for Santa Rosa County) prior to authorizing new development and/or redevelopment activity. Furthermore, the City will require conversions from existing septic tank use to sanitary sewer facilities within 150 feet of the Blackwater River. In areas with soil conditions that are acceptable for septic tank absorption fields, the City will allow septic tank use provided that 150 foot setbacks from the Blackwater River are met.

In order to protect the Blackwater River from encroachment by development activity, the revised Land Development Regulations will require at a minimum that the existing development setback requirements from the Blackwater River are met or exceeded. These setback standards are contained in the existing Zoning Ordinance.

Areas of concern that will require additional effort by the City include stormwater management, hazardous waste disposal, and tree protection. Stormwater management issues are currently being addressed by the City, both in terms of quantity and water quality, through the development of a Comprehensive Stormwater Development Plan. The City is committed to implementing the Plan's recommendations to ensure the protection of the City's surface waters from non-point source pollution. Additionally, the City will require the use of Best Management Practices (BMP's) during construction activity to protect sensitive soils from erosion and prevent sedimentation of surface water bodies. Techniques that can be used include the emplacement of silt fencing, turbidity curtains, hay bales, and so on. Contingencies for the transfer and disposal of hazardous wastes need to be developed to protect human health and natural

resources. The third area of concern, tree protection, is currently being considered by the City. A Tree Protection and Landscape Ordinance has been developed in conjunction with revised Land Development Regulations, and will include requirements such as providing vegetative buffer zones, where possible, between conflicting land uses and restrictions on tree removal. This ordinance also contains a mitigation schedule for all protected and heritage trees that will provide additional protection to trees within the city limits. These ordinances will serve to buffer the impacts of noise and lights, in addition to providing for wildlife habitat, preserving native vegetative communities and maintaining air quality.

## **F. CURRENT AND PROJECTED WATER NEEDS AND SOURCES**

### **1. *Potable Water Users***

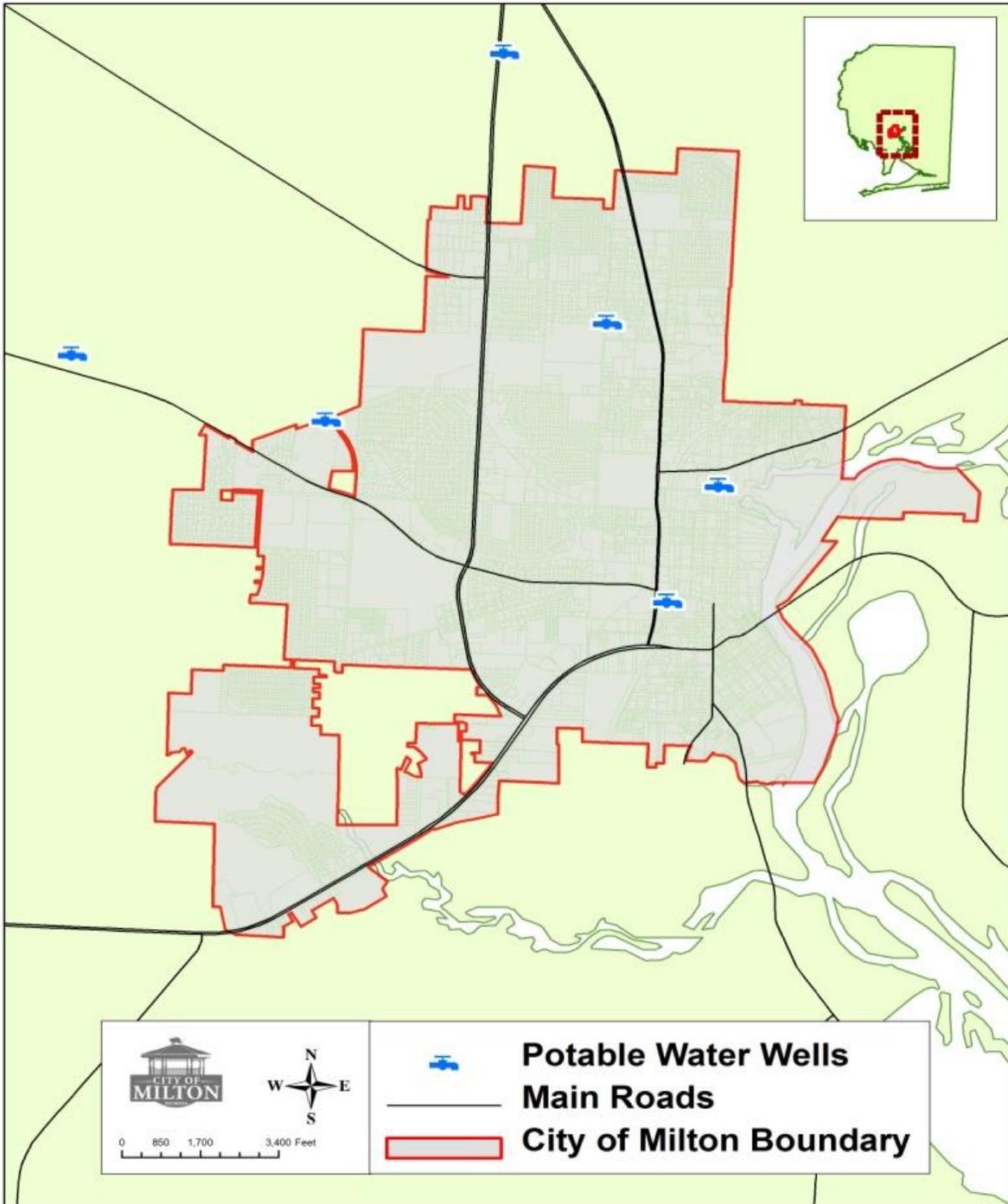
The City of Milton is the owner and operator of the potable water supply for the City. Within the systems' franchise area, there are presently over 6,900 water system customers who on the average consume less than 65.0 million gallons per month or between 1.7 million and 2.64 million gallons per day (MGD). The design capacity of the system is currently 6.624 MGD but will be increased to 8.064 upon completion of well project. The water source for the City is the Sand and Gravel Aquifer.

The location of potable water wells are indicated on the Potable Water Well Locations Map (Figure 9.2). Water quality information related to the Sand and Gravel Aquifer is contained in the Natural Groundwater Aquifer Recharge Sub-Element. The figures contained in the above mentioned sub-elements indicate capacity surpluses throughout the planning period; therefore, the provision of potable water is not expected to be a problem for the City in the near future. The City will continue to work with the NFWFMD to insure permitted daily amounts coincide with average daily usage.

### **2. *Industrial Water Users***

Data provided by the Northwest Florida Water Management District indicates that no Consumptive Use Permits for industrial water uses have been issued within the City of Milton. Based on historical trends and conditions depicted on the Future Land Use Map, it is not anticipated that future industrial wastewater users requiring a consumptive use permit will locate within the City.

**Figure 9.1:  
City of Milton Potable Water Wells**



City of Milton, Department of Planning and Development

**Table 9.4:  
Regulatory Programs for the Protection of Natural Resources**

<b>PROGRAM</b>	<b>ADMINISTERING AGENCY</b>	<b>STATUTORY AUTHORITY</b>	<b>PURPOSE OF PROGRAM</b>	<b>TYPE OF ACTIVITIES REGULATED</b>
Dredge & Fill	DEP	DEP and DNR - Chapters 161, 253, 258, and 403 F.S.	DEP - to maintain and/or improve the quality of waters in the state and to preserve and protect Florida's wetlands	All dredge and fill activities
	DNR			
	COE			
		DEP - Rules 17-3, 17-4, 17-12, and 17-45 F.A.C.		
		DNR - Rule 16B-24 F.A.C.	DNR - manage and protect state lands and control beach erosion	
		COE - River and Harbor Act of 1899; Clean Water Act of 1977; Marine Protection, Research, and Sanctuaries Act of 1972; Federal Fish and Wildlife Coordination Act of 1958; National Environmental Policy Act of 1969; Title 32, Section 209.320-209.330 C.F.R.	COE - restore integrity of nation's waters and maintain navigability of waterways	
Developments of Regional Impact	OEA, Bureau of Land and Water Management	Section 380.06 F.S. Rules 9B-16, 9B-20, and 27F-2 F.A.C.	To facilitate orderly and well-planned developments by establishing a review procedure for developments that would impact more than one county	Any development that would impact more than one county

<b>PROGRAM</b>	<b>ADMINISTERING AGENCY</b>	<b>STATUTORY AUTHORITY</b>	<b>PURPOSE OF PROGRAM</b>	<b>TYPE OF ACTIVITIES REGULATED</b>
Solid Waste	DEP	Chapter 302 F.S.; Rule 17-7 F.A.C.	To plan for and regulate solid and hazardous waste disposal activities	All resource and recovery management facilities
Groundwater	DEP	Chapters 403 & 373 F.S.; Chapters 17-3, 17-4, & 17-22 F.A.C.	To protect and conserve the quality of water in the state	All pollution sources
Water Pollution Sources	DEP	Chapter 403 F.S.; Rules 17-3, 17-4, 17-6 F.A.C. & Chapters 17-25 & 17-28 F.A.C.	To protect and conserve the quality of water in the state	Any discharges expected to be a source of pollution including stormwater, industrial, and domestic waste discharge.
Water Wells and Artificial Recharge	NWFWMD	Section 372.309 F.S.; Rules 40A-3 & 40A-5 F.A.C.	To ensure proper utilization of groundwater resources	Construction, alteration or abandonment of any well
Management and Storage of Surface Water	NWFWMD	Section 373.413 F.S.; Rule 40A F.A.C.	Prevent floods, soil erosion and excess drainage, preserve natural resources, prevent harm to water resources	Certain dam, impoundment, or reservoir work

<b>PROGRAM</b>	<b>ADMINISTERING AGENCY</b>	<b>STATUTORY AUTHORITY</b>	<b>PURPOSE OF PROGRAM</b>	<b>TYPE OF ACTIVITIES REGULATED</b>
Consumptive Use of Water	NFWWMD	Section 373.216 F.S.; Rule 40A F.A.C	Proper utilization of surface and groundwaters	Certain water wells based on location
Water Well Use and Drilling	DEP	DEP - Section 373.306 F.S.; Rule 17-21 F.A.C.	Control, conserve and protect groundwater resources of the state	Certain groundwater, monitoring, and injection wells
	NFWWMD			
		NFWWMD - Rule 17-21 F.A.C.		
National Pollution Discharge Elimination System	EPA	EPA - Section 402, Public Law 92-500 and Section 401, Public Law 92-500	To protect and conserve the quality of waters in the U.S.	Any facility which discharges wastes into waters of the U.S.
Individual Sewage Disposal Facilities	HRS	HRS - Section 381-272 F.S.; Rule 10D-6 F.A.C.	HRS - To supervise and cooperate with municipal and county officials in enforcing the state health laws, rules, and regulations promulgated by HRS and to ensure consistency with local health regulations and ordinances.	HRS - Certain individuals sewage disposal facilities with less than 5000 GPD total estimated daily flow.

<b>PROGRAM</b>	<b>ADMINISTERING AGENCY</b>	<b>STATUTORY AUTHORITY</b>	<b>PURPOSE OF PROGRAM</b>	<b>TYPE OF ACTIVITIES REGULATED</b>
Air Quality	DEP	Section 403.087, F.S.; Rules 17-2 & 17.4 F.A.C.	To protect and enhance the air quality of the state	Construction, modifications, expansion, and operation of any facility or development that will emit pollutants into the air
Hazardous Waste	DEP	Ch. 17-30 F.A.C.; Ch. 403 F.S.	To ensure that hazardous waste is transported, disposed of, stored, and treated in a manner adequate to protect human health, safety, and welfare of the environment	Certain hazardous waste facilities
Endangered and Threatened Species	FFWCC	FGFWFC & DNR - Sec. 372	To protect threatened and endangered species from harm or destruction	Any activity which would harm or destroy threatened or endangered species
	DNR DACS	F.S.; Title 39 F.A.C.		
	USFS	DACS & USFWS - Section		
		581 F.S.; Endangered		
		Species Act of 1973		

<b>PROGRAM</b>	<b>ADMINISTERING AGENCY</b>	<b>STATUTORY AUTHORITY</b>	<b>PURPOSE OF PROGRAM</b>	<b>TYPE OF ACTIVITIES REGULATED</b>
Floodplain Management	City of Milton	FEMA Flood Insurance Act of 1968; Flood Disaster Protection Act of 1973; Milton - Ordinance No. 782	To regulate development in floodplains to protect public safety and minimize damage due to flooding To conserve, control and encourage development of oil and gas resources in the state	Any development within areas designated as subject to flooding on the FEMA Flood Hazard Boundary maps
Oil and Gas Wells	DNR	Sections 377.01 - 377.40 F.S.; Rules 16C-1 through 16C-6 F.A.C.	To provide a mechanism for the reclamation and restoration of lands disturbed by mining by taxing mine owners to create a land reclamation trust fund	Various elements related to oil and gas development
Reclamation of Mined Lands	DNR	Ch. 211, part II, F.S.; Ch. 378, F.S.		Any person engaged in mining of solid materials for commercial use
Open Burning	DEP	DEP - Rule 17-5 F.A.C.	To reduce pollution caused by open burning	All open burning practices
	DOF	Sec. 403.061 F.S.		
	DACS	DACS - Rule 5I-2 F.A.C.		
		Ch. 75-22, Sec. 8,		
		Laws of FL		

<b>PROGRAM</b>	<b>ADMINISTERING AGENCY</b>	<b>STATUTORY AUTHORITY</b>	<b>PURPOSE OF PROGRAM</b>	<b>TYPE OF ACTIVITIES REGULATED</b>
		Ch. 590 F.S.		
		DOF - Rule 17-5 F.A.C.		
State Lands	DNR	Ch. 253 F.S. Also Ch. 197, 258, 259, 270, 285, 370; Rules 16Q-2, 16Q-3m 16-Q10, 16Q-11, 16Q-15, 16Q-16, 16Q-18, 16Q-20, 16Q-21	To administer all state lands	Land development activities that occur in or otherwise affect state-owned lands
Petroleum Storage Tanks	DEP	Ch. 17-61 F.A.C.; Ch. 376.303 F.S.	To regulate underground and above ground pollutant storage facilities to protect ground and surface water resources from contamination	Facilities which receive, store, or use petroleum products in excess of 1,000 gallons in any one calendar month or more than 10,000 gallons in any calendar year
Zoning Ordinance	City of Milton	Ordinance Number 747	To provide guidelines for development which include the protection of natural resources	All development within the City of Milton
Erosion, Sedimentation, and Runoff Ordinance	City of Milton	Ordinance Number 606	To protect natural resources by minimizing erosion, sedimentation, and runoff from development	All development within the City of Milton unless specifically exempted
Abbreviations:	DEP - Department of Environmental Protection			

	DNR - Department of Natural Resources			
	COE - U.S. Army Corps of Engineers			
	DCA - Department of Community Affairs			
	DOF - Division of Forestry			
	DACS - Department of Agriculture and Consumer Service			
	FFWCC - Florida Fish and Wildlife Conservation Commission			
	USFS - U.S. Fish and Wildlife Service			
	FEMA - Federal Emergency Management Agency			
	NFWFMD - Northwest Florida Water Management District			
"State of Florida Regulatory and Review Procedures Manual Development," Department of Environmental Regulation, November 1984. "Laws and Regulations Affecting Endangered and Potentially Endangered Species in Florida", Florida Game and Freshwater Fish				

## G. ELEMENT ASSESSMENT

Overall, the Element's goal, objectives, and policies are being achieved. The following successes have been achieved through implementation of the objectives and policies of this element:

**OBJECTIVE 1.1:** The City continues to meet or surpass the minimum ambient air quality standards set by the Florida Department of Environmental Protection (FDEP) and Rule 62-204.240, F.A.C. According to the FDEP, ambient air quality standards are in the good to moderate range, with eight hour ozone concentration averages between 58 and 66 parts per billion. The City's highest months to date for 2013 were March and April with a maximum eight hour average of 66 parts per billion, which is 24 parts per billion lower than the maximum allowed.

**OBJECTIVE 1.2:** The City continues to maintain the ambient water quality of surface water within the City. It requires development to prepare a drainage plan that is based on the City's stormwater management regulations. In addition, the City continues to utilize standards which meet or exceed the City's minimum standards for surface water quality.

The City continues to protect the sand and gravel aquifer through the implementation of their Land Development Regulations (LDR) annexations and joint management of sensitive well field acreage with Santa Rosa County. The LDR requires well field protection zone permits, specific development review criteria that examine the potential developmental impacts to wetlands, and employs water well spacing and withdrawal procedures that enhance conservation.

The City continues to promote and implement existing water conservation programs. In addition, the City is below the maximum water withdrawal allowed by their consumptive use permit (CUP) issued by the NFWFMD.

The City continues to protect against local soil erosion through the enforcement of several chapters and articles in the City's LDR, including *Section V-6.5: Erosion and Sedimentation Controls*, which requires a soil erosion control plan as part of a preconstruction submittal package. Additional soil erosion protection regulations reside in the environmental preservation regulations of the City's LDR.

**OBJECTIVE 1.3:** The City continues to maintain and protect the natural functions of the 100-year floodplains of the Blackwater River, and its tributaries. The City achieves this protection through general shoreline development standards found within the City's LDR.

To continue protecting wetlands, the City's LDR, through *Article I. Wetlands Protection*, establishes permit requirements, protection standards, and mitigation criteria outlined in *Policies 2.2.1 – 2.2.8*.

The City continues to maintain its Tree City USA status, and has done so for the last 15 years by continuing to maintain the urban forest. The City's LDR furthers the protection and use of native vegetation species on sites under development review by providing specific lists of landscape materials that are required to be used. These specific landscape materials have a moderate to high drought tolerance.

The City has been successful at preserving natural communities by identifying specific plant and animal species in the appendices of the LDR. In addition, *Article IV* of the LDR lists species protection requirements.

In a continuing effort to protect resource-based recreation areas from adverse impacts of adjacent development, the City has been successful at implementing regulations in the LDR for marina siting, recreation impact fees, and has established the RC-1 zoning district to conserve important natural and historic resources in the City's low-lying areas.

The City continues to protect and conserve area resources. This is accomplished through a solid waste collection program. However, in order to enhance the promotion of energy conservation in accordance with the city's comprehensive plan, and in support of State policy, the City could include specific language in the LDR to identify the types of renewable energy resources that could play a greater role in the City's energy portfolio.

**OBJECTIVE 1.4:** The City continues to implement its hazardous waste management program in cooperation with Santa Rosa County and in accordance with the provisions of the Solid Waste Sub-Element of the Public Facilities Element.

## **H. ELEMENT ASSESSMENT RELATED TO MAJOR ISSUES**

An assessment of the Conservation Element's objectives has been completed to identify how their achievement relates to the major issues identified by the City.

### **1. *Dominant Land Use Pattern. (Major Issue #1)***

The overall achievement of the Conservation Element will have an impact on the City's ability to determine what the dominant land use pattern should be for the remaining vacant land because the composition may consist of natural features that the City would like to protect. The City should focus on determining which vacant lands would be better served by a conservation or environmental zoning designation in order to maintain consistency with the overall goals, objectives, and policies of the Conservation Element which is to conserve, protect, and manage the natural environmental resources of the City.

### **2. *Neighborhood Preservation and Redevelopment of Older Areas. (Major Issue #2)***

The achievement of the objectives within the Conservation Element is not related to this issue.

### **3. *Housing Needs. (Major Issue # 3)***

The overall achievement of the Conservation Element is not related to this issue.

#### **4. *Balancing Development and Environmental Resource Protection. (Major Issue # 4)***

The overall achievement of the Conservation Element will have an impact on the City's ability to balance development, environmental resources and habitat protection. The City could incorporate specific policy language, design guidelines and other mechanisms within the Comprehensive Plan that would encourage the use of low impact development standards. Requirements and design guidelines should consist of site planning processes that identify critical and sensitive natural resources from which site specific development standards can be adopted and a proper building envelope can be determined to minimize environmental impacts.

#### **5. *Recreation Facilities Mix. (Major Issue #5)***

The overall achievement of the Conservation Element will have an impact on the City's determination of the best mix of recreation facilities. The purpose and intent of the Conservation Element is to conserve, protect, and enhance the City's natural environmental features. A principle way this is achieved is through the floodplain conservation zoning designation which is aimed at protecting the 100-floodplains of the Blackwater River, and their tributaries along with other natural features such as wetlands, soils, and surface waters. Another way is through the purchase or annexation of environmentally sensitive lands. Some of these areas are ideal locations for passive recreational use. Some of this acreage may present an opportunity for the City to increase their net amount of passive recreation facilities.

#### **6 . *Traffic Congestion and Multi-Modal Transportation. (Major Issue #6)***

The achievement of the objectives within the Conservation Element is not related to this issue.

#### **7. *Disaster Planning, Mitigation, and Recovery. (Major Issue #7)***

The overall achievement of the Conservation Element will have an impact on the City's assessment of its disaster planning, mitigation, and recovery plan. Natural disasters, such as hurricanes and fires, can have a significant impact on public safety and place a large financial burden on the City to rebuild public facilities that have been destroyed. The goals, objectives, and policies of the Conservation Element can impact the direction of growth and development away from hazardous areas, such as the 100-year floodplain of the Blackwater River and its tributaries as well as low-lying wetlands and aquifer recharge basins that are more prone to flooding during heavy rainfall and storm surges associated with tropical hurricanes. Additionally, the City should examine silviculture best management practices to formulate or modify objectives of the Conservation Element that would aid in fire prevention.

## **I. ELEMENT ASSESSMENT RELATED TO REQUIRED SPECIAL TOPICS**

### **1. *Public School Coordination***

The achievement of the Conservation Element's goals, objectives, and policies is not related to this special topic.

### **2. *Water Supply Planning***

The objective achievement within the Conservation Element will impact the assessment of whether the City has been successful in identifying alternative water supply projects and traditional water supply projects. The NFWMD has adopted its water supply plan update. The plan details current ongoing projects and scheduled activities.