

COASTAL WETLANDS PROTECTION ACT: CASE OF APALACHICOLA-CHATTAHOCHEE-FLINT (ACF) RIVER

Latif Gürkan KAYA

ZKÜ Bartın Orman Fakültesi, Peyzaj Mimarlığı Bölümü, BARTIN

ABSTRACT

Coastal wetlands, being important components of estuarine and coastal systems, stand for all publicly owned lands subject to the ebb and flow of the tide. They are below the watermark of ordinary high tide.

The coastal wetlands contain a vital natural resource system. The coastal wetlands resource system, unless impossible, to reconstruct or rehabilitate once adversely affected by human.

In the USA, the Apalachicola-Chattahoochee-Flint (ACF) river states (i.e. Georgia, Alabama and Florida) have variation in the structure and the function of their wetland program affecting the ACF river basins' wetlands. Although some states have no special wetlands program, they have permits and water quality certification for these areas. Some state programs affect state agencies while local government implements other programs.

Keywords: Coastal wetland, Apalachicola-Chattahoochee-Flint (ACF) river, Wetland Protection Act.

KIYISAL SULAK ALANLAR KORUMA YASASI: APALACHICOLA-CHATTAHOCHEE-FLINT (ACF) NEHRİ ÖRNEĞİ

ÖZET

Kıyısul sulak alanlar, halka ait alanlardır, gel-gittin olduğu kıyısul sistemlerin ve halicin önemli bir parçasıdır. Kıyısul sulak alanların su seviyesi, olağan gel-git seviyesinden düşüktür.

Kıyısul sulak alanlar doğal kaynak sistemleri için oldukça önemlidir. Bu alanların kaynak sistemi, imkansız olmadığı sürece, bir insan tarafından elverişsiz şekilde etkilenirse yeniden oluşturulabilir ya da iyileştirilebilir.

ABD'de, Apalachicola-Chattahoochee-Flint (ACF) nehir eyaletleri (örneğin Georgia, Alabama ve Florida) sulak alan programlarının yapı ve fonksiyonlarında ACF nehir havzalarının sulak alanlarını etkileyen çeşitlilikler bulunmaktadır. Bazı eyaletlerin özel sulak alanlar programı bulunmamasına rağmen, bu alanlar için izin ve su kalitesi sertifikaları bulunmaktadır. Bazı eyalet programları, yerel yönetimler diğer programları uygularken, eyalet kuruluşlarını etkiler.

Anahtar Kelimeler: Kıyısul sulak alan, Apalachicola-Chattahoochee-Flint (ACF) nehri, Sulak Alan Koruma Yasası.

1. INTRODUCTION

The Apalachicola-Chattahoochee-Flint (ACF) River its tributaries and its watershed are a vital and beautiful resource of watershed zones. The ACF River is about 20,400 sq. mile. This number includes the drainage area at the mouth of the Apalachicola River; the New River watershed; and the Apalachicola Bay, Florida and surrounding coastal areas and barrier islands. The Chattahoochee and Flint Rivers merge in Lake Seminole to form the Apalachicola River, which flows through the panhandle of Florida into the Apalachicola Bay, and discharges into the Gulf of Mexico (Elder *et al.*, 1988).

The ACF River corridor is mostly in a natural state and provides sample opportunities for recreating activities such as hiking, jogging, canoeing and fishing. However, the Chattahoochee is also a river in danger. Many of the major tributaries to the river suffer from urban runoff, eroded stream bands and sewer overflows. Several nongovernmental organizations and governmental environmental groups have filed suit in federal court because of elevated levels of pollution that have been blamed on inadequate wastewater and sewer overflows (Elder *et al.*, 1988).

Swamps, marshes and resacas wetlands occur along the margins of the ACF River and throughout the basin of the ACF River. As mentioned by Elder *et al.* (1988), wetlands along the margins of the ACF River are located in areas protected from wave action consisting of the entrance of rivers, gulfs, and behind spits and barriers. Wetlands are unique that their plant communities and species compositions have adapted to high water level fluctuations, wind, and other weather actions. Some coastal wetlands are located along the open coast in shallow water areas in semi-protected zones.

In the ACF River basin, wetlands are valued for contributions to water quality such as marshes, hydrology and flood attenuation such as upper watershed swamps, shoreline protection, primary and secondary production and diversity, and habitats.

2. COASTAL WETLANDS

Coastal wetlands are important components of estuarine and coastal systems. These habitats often have extremely high primary production that fuels both terrestrial and aquatic food webs. In addition, wetlands contribute to estuarine water quality by removing excess nutrients and pollutants originating in the uplands before they reach the estuary. Wetlands offer important habitat for a wide variety of organisms including invertebrates such as crabs and shrimp, fish, birds and others, and provide protection against coastal erosion many estuarine species of commercial importance rely on these habitats for successful completion of their life cycle (Zinn, 1994; Moulton and Jacob, 2003).

Coastal wetlands stand for all publicly owned lands subject to the ebb and flow of the tide. They are below the watermark of ordinary high tide and are all publicly owned accretions above the watermark of ordinary high tide and all publicly owned submerged water-bottoms below the watermark of ordinary high tide (Clark, 1996)

As stated by researchers (i.e. Clark, 1996; Loftus and Smardon, 1996; Moulton and Jacob, 2003), the coastal wetlands contain a vital natural resource system. The estuarine areas are the habitat of many species of marine life and wildlife and, without the food supplied by the marshlands, such marine life and wildlife cannot survive. The estuarine wetlands, among the richest providers of nutrients in the world, provide a nursery for commercially and recreationally important species of shellfish and other wildlife, provide a great buffer against flooding and erosion, and help control and disseminate pollutants. The coastal wetlands provide a natural recreation resource that has become especially linked to the economy of coastal zone and to that of the entire state.

The coastal wetlands resource system, unless impossible, to reconstruct or rehabilitate once adversely affected by human. It is important to conserve this system for the nowadays and future use and enjoyment of all citizens and visitors to this state. In the coastal marshlands, activities and structures should be regulated to ensure. The values and functions of the coastal marshlands are not impaired and to fulfill the responsibilities of each

generation as public trustees of the coastal marshlands for succeeding generations (Moulton and Jacob, 2003; USGS, 2004).

Coastal wetlands appear in a wide-variety of forms, but they all have distinctive plant assemblages because of the wetness of the soil. According to Zinn (1994), many coastal wetlands are flooded daily as the tide rises and falls. The value of coastal wetlands depends on location, size, and relationships with adjacent land and water areas.

According to Zinn (1994) wetland values include:

- habitat for aquatic birds and other animals;
- habitat for rare or endangered species;
- production of fish and shellfish;
- water storage, including limiting the effects of floods;
- water purification;
- recreation;
- timber production;
- food production;
- education and research; and
- open space and aesthetic values.

The coastal wetlands, which are located on coast or adjacent to estuaries, near tidal reaches of rivers, are the largest area of wetlands in area extending the entire length of the coastline. These wetlands are habitat for various fish and shell fish which maintain an abundant population that promote recreational use and commercial harvesting, leading to economic benefits for both. Coastal wetlands are also a stopover, feeding, and breeding area for migratory waterfowl, including snow geese, Canada geese, and whooping cranes, in addition to providing habitat for non-migratory wildlife such as the mottled duck. There are at least nine different types of wetland habitats located along the coast: fresh marsh, intermediate marsh, brackish marsh, salt marsh, swamps, resacas, coastal potholes, tidal flats and submerged aquatic vegetation (Moulton and Jacob, 2003).

3. TYPES OF COASTAL WETLANDS

For illustrations and further information on the different types of coastal wetlands (EPA, 2001; Moulton and Jacob, 2003):

- Fresh Marsh, found inland on the mainland and on barrier islands, has a constant supply of fresh water from rivers, groundwater, and/or rainfall. This type of marsh supports a variety of species of fish, birds, and fur-bearing animals as well as shrimp and crayfish.
- Intermediate Marsh has salinity levels between fresh and brackish marshes.
- Brackish Marsh is a transitional zone between salt and fresh marshes.
- Salt Marsh areas are usually flat, bordering bays on barrier islands, peninsulas, and mainland shores. These areas are saturated and drained by tides, and plants and animals have learned to adjust to the fluctuation in water levels, salinity, and temperature.
- Swamps are characterized by woody vegetation and soil inundated by water during a majority of the year.
- Resacas are former streambeds of rivers, and due to frequent flooding and drying, isolated ponds or oxbows are created.
- Coastal Potholes are small, circular bodies of water with surrounding emergent vegetation, and generally contain freshwater. Many shorebirds, songbirds, migrating waterfowl, and waders are common to this type of habitat.
- Tidal Flats are inter-tidal zones exposed to and flooded by tides and support minimal vegetation. However, this wetland is an important habitat and feeding ground for coastal shorebirds, fish and invertebrates such as crabs, oysters, clams, shrimp and mussels.

- Submerged Aquatic Vegetation regions are permanently inundated areas of the bay-estuary-lagoon system in shallow sub-tidal areas less than six feet deep. This type of coastal wetland is home to common vegetation such as shoal-grass, widgeon grass, manatee grass and clover-grass.

4. COASTAL WETLAND PROTECTION ACT (CWPA)

Coastal Wetlands Protection Act is a part of the Section 305 of the Coastal Wetlands Planning, Protection and Restoration Act (Title III, P. L. 101-646) that authorizes the Director of the U.S. Fish and Wildlife Service to grant funds to coastal states to carry out coastal wetlands conservation projects (Loftus and Smardon, 1996).

Coastal Wetlands Protection Act (CWPA)

“is declared to be the public policy of the state to favor the preservation of the natural state of the coastal wetlands and their ecosystems and to prevent the despoliation and destruction of them, except where a specific alteration of specific coastal wetlands would serve a higher public interest in compliance with the public purposes of the public trust in which coastal wetlands are held.” (Loftus and Smardon, 1996; U.S. Fish and Wildlife Service, 2007)

The CWPA, which provides the Coastal Resources Divisions with the authority to protect tidal wetlands, manages certain activities and structures in areas and requires permits for other activities and structures. In cases where the proposed activity involves construction on state-owned tidal water bottoms, a Revocable License issued by the Coastal Resources Division may be required (Loftus and Smardon, 1996).

The challenges in saving and protecting wetlands include the following (Clark, 1996; Loftus and Smardon, 1996):

- minimize the loss of wetlands,
- make wetlands more productive,
- extend the life of the wetlands and try to reverse some of the things that are happening,
- realize that saving the coastline would take a lot of money and hard work, but we are saving people, culture, wildlife, jobs and industries, and
- take action and protect wetlands.

The CWPA (Loftus and Smardon, 1996):

- protects tidal wetlands,
- requires permit for structures, dredging, filing,
- establishes Coastal Wetlands Protection Committee, and
- recognizes the wetlands of state as vital natural resources.

A Coastal Wetlands Protection Act Permit is required for any project that involves removing, filling, dredging, draining or otherwise altering any marshlands. Once a permitted project is constructed, it can be declared without a permit as long as maintenance does not alter natural vegetation or topography of the site. According to Loftus and Smardon (1996), the projects will be permitted; however, if the projects do not harm or alter the natural flow of navigational waters; do not increase erosion, shoaling channels or create stagnant pools; and do not interfere with conservation of marine life, wildlife or other resources. Public notice procedures, local zoning regulations and notification of adjacent property owners may also apply.

5. WETLANDS PROTECTION PROGRAMS

5.1. Organizations of Programs

The stewardship and the conservation of the ACF River coastal wetlands is a comprehensive endeavor involving privately-owned lands, as well as lands owned by the federal, state and local governments. According to Clark (1996), depending upon a number of factors, a wide range of tools is available to control the use wetlands. Loftus and Smardon (1996) allocate these tools fall into four broad categories:

1. Regulatory mechanisms

Both the federal and state governments influence lands use decisions affecting wetlands along the length of the wetlands' shoreline through legislation and policy. It is important to note that while levels of government have wetland policies and it has legislation specifically directed to the protection of wetlands. In the section of federal and state policies, the regulatory mechanisms will be described.

2. Tax incentives

As mentioned by Loftus and Smardon (1996), tax incentives provide that an important means of encouraging land owners to conserve and/or manage the natural resources on their lands. Taxes saving that result from participation in these programs are not always large; however, they can be significant, particularly for large areas. They generally provide a form of compensation that recognizes the value to society of the long-term stewardship of these natural resources.

3. Stewardship initiatives

A stewardship initiative is that the terms mean different things to different people. Each term can be used to describe a range of activities. Some stewardship techniques are available that can be acquisition, dedication, agreements, co-management, tax incentives, allocation, extension, demonstration, etc.

4. Special program/partnership

Wetland protection has focused on regulatory and legalistic approaches. Where land use planning to protect wetlands has been adopted, appeals to developed wetlands and legal challenges have been prominent. In the USA, there are some programs and legal activities about helping to protect wetlands such as 'Clean Water Act 1972'.

Strategies for the protection of the ACF River coastal wetlands are described in the following sections.

5.2. Wetland Protection: United States Federal Wetland Programs and Regulations

The primary tools of protecting wetlands in Section 404 of the Clean Water Act Amendments of 1972. Section 404 is a regulation of dredge and fills materials. It establishes the U.S. Army Corps Engineers (ACOE) as lead agency (under Environmental Protection Agency-EPA) regarding dredge and fills activities in all waters of the United States (US). The ACOE defines waters of the US to include waters that

“have been used in the past, are currently used, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide (and) all interstate waters, including interstate wetlands. Interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce.” (U.S. Fish and Wildlife Service, 2007)

However, no regulatory process is created to implement the wetlands part of this.

Although the ACOE reviews wetland permits on a case-by-case basis due to the regulation of the uniqueness of each wetland, and the different impacts that may result from different development activities, areas can be identified as unsuitable for filling under the joint EPA and the ACOE Advanced Identification program, and if so designated, be protected outside of the permit system.

Other federal and state program is Section 401 of the Clean Water Act that is for generally state water quality certification. Each state must certify to the EPA that proposed actions (by state, local and private interests) would not exceed water pollution limits set by this Act (Loftus and Smardon, 1996; U.S. Fish and Wildlife Service, 2007).

According to Loftus and Smardon (1996), in the U.S. regulation for the ACOE Section 404 programs controls fills and other structures in wetlands. Smaller fills and other types of discharge are not regulated and permits are subject to conditions.

The U.S. Wetland Policy is currently changed. These changes are being implemented by ACOE District Officers and briefly include (Elder *et al.*, 1988; Loftus and Smardon, 1996; U.S. Fish and Wildlife Service, 2007):

- Delineation certification for all wetland specialists doing wetland delineation under Federal jurisdiction;
- Assessment methods are evolving from strictly functional assessment to hydro-geomorphic approaches and are being tested for effectiveness;
- Jurisdictional determination of agricultural lands by the Soil Conservation Service;
- Mitigation banks being supported and encouraged through new regulation;
- Permitting deadlines and appeals process are being tightened to reduce ambiguities and delays;
- A new nationwide permit for single family residential development was established by regulation;
- Section 404-Q comments by U.S. Fish and Wildlife Service and National Marine Fisheries Services has been implemented and is working smoothly;
- Coastal Zone Management (CZM) and Water Quality Certification for water quality permits has been established and is not working smoothly;
- Public notice for general permit procedures has been established for public input during the permit process.

Another federal program is CZM programs that were required to revise states' non-point source management plans to include the wetland management measures described in the Guidance Specifying Management Measures for Sources of Non-point Pollution in Coastal Waters (Loftus and Smardon, 1996).

State non-point source control programs provide an opportunity to create, to restore, and to enhance wetland resource to benefit water quality. Where non-point source control activities involve wetlands, a determination should first be made of the current and historic condition of the area where the proposed activity is to take place. If the area presently a wetland, activities could occur to develop water quality functions, supplied that all wetland functions are maintained and protected (U.S. Fish and Wildlife Service, 2007). In the region, the restorations of wetlands that historically contained wetlands and continue to provide enough hydrology have the probability of success. Non-point source control programs are supposed to focus first on the wetlands restoration projects. The protection of wetlands that provide water quality functions may be a low cost non-point source control by allowing natural vegetation to be reestablished. Where non-point source activity is designed to protect wetlands, or where the protection of restoration of wetlands is identified as a component of a non-point source control program, monitoring should be conducted to ensure that the functions and values of wetlands are maintained and protected, and that expected water quality improvements have completed (Loftus and Smardon, 1996; U.S. Fish and Wildlife Service, 2007).

Wetlands are connected to other surface waters, such as rivers, lakes, and estuaries. They are important in meeting water quality, objectives and non-point source control goals. The protection and restoration of wetlands within a watershed can be an effective tool in protecting adjacent and downstream waterbeds, some of which have special resource designation.

6. STATE WETLAND PROGRAMS AND THE CASE OF THE ACF RIVER

In the ACF river basin, Georgia, Alabama and Florida states are developing state wetland conservation plans or strategies. These plans or strategies provide an opportunity to coordinate wetland preservation and restoration aims with water quality targets in the basin. The states of ACF River have adopted wetland regulatory programs that require permits for special activities. Nevertheless drainage is not extensively regulated.

6.1. Apalachicola-Chattahoochee-Flint (ACF) River

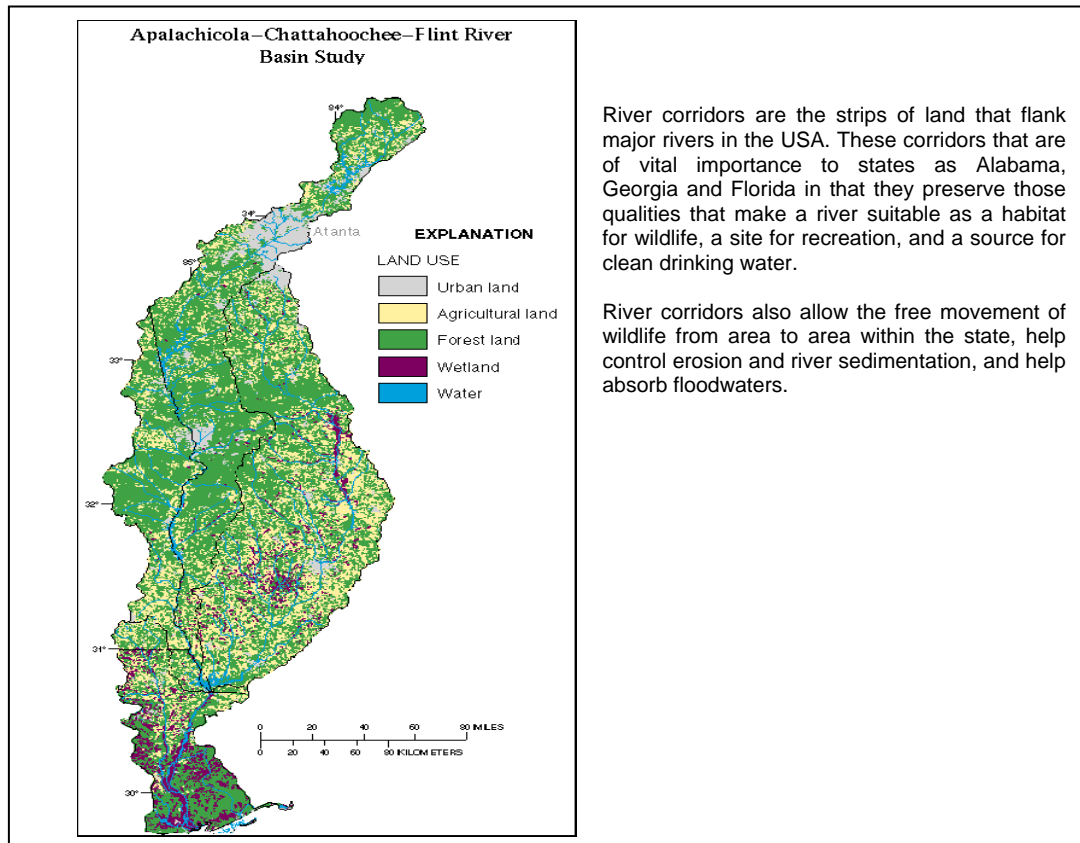


Figure-1 ACF River Water Basin (USGS, 2004)

The ACF River (Figure-1), its tributaries and its watershed are a vital and beautiful resource of watershed zones. The ACF River is about 20,400 sq. mile. This number includes the drainage area at the mouth of the Apalachicola River (19,600 sq. mile) (USGS, 2004); the new river watershed (about 510 sq. mile) (USGS, 2004); and the Apalachicola Bay, Florida and surrounding coastal areas and barrier islands (about 270 sq. mile). The Chattahoochee and Flint Rivers merge in Lake Seminole to form the Apalachicola River, which flows through the panhandle of Florida into the Apalachicola Bay, and discharges into the Gulf of Mexico (Elder *et al.*, 1988; USGS, 2004).

Near West Point Lake, the Chattahoochee River defines the state boundaries between Alabama and Georgia. The Flint River basin is contained entirely within Georgia. Except for the upper reaches of the Chipola River in Alabama, the Apalachicola River basin is contained within the panhandle of Florida (Pensacola Community, 1999).

The ACF River corridor is mostly in a natural state and provides sample opportunities for recreating activities such as hiking, jogging, canoeing, and fishing. However, the Chattahoochee is also a river in danger. Many of the major tributaries to the river suffer from urban runoff, eroded stream banks and sewer overflows. Several NGOs and governmental environmental groups have filed suit in federal court because of elevated levels of pollution that have been blamed on inadequate wastewater and sewer overflows.

6.2. Georgia State Wetlands Programs: Coastal Marshlands Protection Act

Georgia and Florida States have their own CWPAs and relative protection acts such as State of Georgia has Coastal Marshlands Protection Act that was created in 1970 but amended in 1992 (USGS, 2004).

In the State of Georgia, the Coastal Marshlands Protection Act provides the Coastal Resources Division with the authority to protect tidal wetlands. Where the proposed activity involves construction on State-owned tidal water bottoms, a Revocable License issued by the Coastal Resources Division may also be required. The estuarine area is defined as all tidally influenced waters, marshes, and marshlands lying within a tide-elevation range from 5.6 feet above mean high-tide level and below. The jurisdiction of the Coastal Marshlands Protection Act includes marshlands, inter-tidal area, mudflats, tidal water bottoms, and salt marsh area within estuarine areas of the state (Elder *et al.*, 1988; EHSO, 1999).

Permits for marinas, community docks, boat ramps, recreational docks, and the Coastal Resources Division administer piers within the jurisdiction of the Coastal Marshlands Protection Act. A lease is required to construct a marina. Private-use recreational docks are exempt from the Coastal Marshlands Protection Act but must obtain a Revocable License and the U.S. Army Corps of Engineers (ACOE) docks permit (USGS, 2004).

Few states can claim the rich resources of Georgia's coastal marshlands - nearly 700,000 acres of thick vegetation, picturesque and serene from a distance, but up close teeming with life.

The Coastal Marshlands Protection Act of 1970, amended in 1992, recognizes the state's marshlands as vital natural resources that provide (Moulton and Jacob, 2003):

- Habitat for many species of marine life and wildlife
- Food for the survival of these species
- A nursery area for commercially and recreationally important fish and shellfish
- A buffer against flooding and erosion
- A filter to help control and disseminate pollutants.

The Georgia Environmental Protection Act (GEPA), a state law designed to help state agencies conduct their projects with an awareness that they are stewards of air, land, water, plants, animals and environmental, historical and cultural resources, defines the wetlands that is under the Federal Regulation, 33 CFR 32.93 (Livingston, 1992; EHSO, 1999).

"The DNR Rules for Environmental Planning, Chapter 391-3-16-03, incorporate the federal definition as well as both acceptable and unacceptable uses of wetlands. Under current federal law and state policy, alterations or degradations of wetlands should be avoided unless it can be demonstrated that there will be no long-term impacts or net loss of wetlands. A Federal Permit is required for most wetland activities." (EHSO, 1999)

6.3. Florida State Wetland Programs: Coastal Protection Act

Florida also has Coastal Protection Act such as the Florida Coastal Management Act of 1978 networked many existing statutes and regulations. It resulted in the Florida Coastal Management Program, which was approved in 1981. The Beach and Shore Preservation Act (BSPA) of 1985 and the Coastal Zone Protection Act (CZPA) of

1985 address coastal activities and processes (Elder *et al.*, 1988). Originally, the office of Coastal Zone Management (CZM) was in the Department of Environmental Regulation (DER), while the Department of Natural Resources (DNR) administered the BSPA and CZPA. With the Florida Environmental Reorganization Act of 1994, Florida combined DER and DNR under the Department of Environmental Protection (DEP) which administers Part I and II of the BSPA. The Department of Community Affairs administers Part III. further consolidation with the Game and Freshwater Fish Commission into a Department of Conservation has been proposed (DEP, 2007).

In Florida, all marina resources that are beaches, dunes, waters, animal life, estuaries, and the integrity of the coastal environment should protect and preserve. Main reasons (USGS, 2004; DEP, 2007):

- to bring together area citizens, agencies and businesses toward a common commitment to a sustainable environment and economy,
- to protect and preserve our natural resources through conservation, energy efficiency, and the development of renewable energy sources, and
- to work toward these goals through education, research, grassroots organizing, and related activities.

Florida has also been experiencing explosive development. Dredge and fill permits have increased dramatically and many more large developments are planned. Each brings with it-increased runoff and associated impacts. Wetlands are the key to protecting the area's water quality and quantity, and preventing flooding. Florida needs these proposed guidelines to protect its wetlands and surface waters (Elder *et al.*, 1988; DEP, 2007).

The benefits of the proposed legislation should (DEP, 2007):

- protect isolated wetlands,
- protect surface water by decreasing storm-water runoff,
- avoid future cleanups of water bodies,
- regulate storm-water quality and quantity and offer flood protection,
- reduce flood recovery costs,
- avoid future costs to solve flooding problems,
- lower flood insurance premiums,
- standardize wetland delineation methodology with the rest of the state,
- streamline permitting by combining wetlands and storm-water into a single permit,
- be enforceable, criteria have already been tested in court and
- include grandfather provisions for complete applications and activities under existing permits.

a. Acquisition

National, state and local governments in some instances have acquired the ACF river basin wetland areas; however, there seems to be more activity in NGOs moving toward acquisition of wetlands for habitat management, heritage values or interpretative potential (Elder *et al.*, 1988; Moulton and Jacob, 2003).

b. Basic Problems to implement the Wetlands Regulations

There are some fundamental problems to implement the wetland regulations (Moulton and Jacob, 2003):

- The environmental tends to be gradient making it very difficult to place a definitive edge or boundary around something that in most case is relatively edgeless.
- Although wetlands in general are important ecosystems, not all wetlands are equally valuable, and many are not necessarily more valuable than other upland ecosystems.
- Public sentiment is not uniformly in favor of wetland protection (large part of marsh for hunting acceptable, but bunch of cattails and broken willow trees down the road from somebody's house is not). Community sentiment varies widely as well; marshlands along a stream, acceptable; wet old-field in the area designated for commercial or industrial development, non-acceptable.

- Wetland protection is only part of a larger issue of protection of many landscape ecosystems, most of which human are unwilling to limit peoples' use of in truly meaningful ways. Limiting use means that someone has to take away some rights from other individuals.

c. Non-Government Activities in the Wetland Protection Act

NGOs on the each part of the ACF river basin have played a crucial role in the protection of wetlands through two kind of activities. First, they have an individual or collective action to protect or restore individual wetlands and the next is to exert public impact on government to do more effective job in wetland regulatory programs (Elder *et al.*, 1988). There is some NGOs (i.e. Bream Fishermen's Association, Gulf Coast Environmental defense, Sierra Club, Environmental Club, Green net, Citizens Planning Responsibly, etc.) in the Northwest Florida helping to protect coastal wetlands (DEP, 2007).

7. CONCLUSION

The Apalachicola-Chattahoochee-Flint (ACF) river states—Georgia, Alabama, and Florida—have an incredible variation in the structure and function of their wetland program affecting the ACF river basins' wetlands. Some of them have no state programs, but they have ACOE Section 404 permits and water quality certification. Some state programs affect state agencies while local government implements other programs. Moreover, habitat protection and restoration tend to be the domain of the NGOs.

The CWPA should indicate that vegetated wetlands, particularly freshwater emergent and forested wetlands, are resources that need conservation efforts. The upland category consists mostly of non-patterned native forests, grasslands, and brush lands. As these habitats, as well as agricultural lands, undergo urban, rural, and cultural development, pressure to make up losses of farmlands and rangelands at the expense of wetlands may intensify.

Protecting wetlands should be a top priority. The main goal should address the need for protecting the wetlands that are invaluable both economically and environmentally.

The CWPA built the Coastal Wetlands Protection Committee. The committee that evaluates proposed construction or development projects that might affect these areas grants or denies permits for the projects based on their environmental impacts and the public interest. Projects must be water-dependent with no alternatives available.

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