Below is a compilation of current Charlotte Comprehensive Plan Water Quality Related Goals, Objectives, and Policies.
To view the list of all the Future Land Use – Goal, Objectives and Policies, click here.

Future Land Use Element

FLU GOAL 2: PLANNING CONCEPT PLAN IMPLEMENTATION - NATURAL RESOURCE PROTECTION
Promote land use practices that:

- **Preserve and protect natural resources and wildlife habitat.**
- **Target additional acquisition to close gaps in regional and Statewide wildlife corridors.**
- **Maintain or improve the quality of water that discharges into surface waters and groundwaters.**
- **Minimize negative environmental impacts within the built environment.**

FLU Objective 2.1: Protect Natural Lands
To create, protect and manage systems of green infrastructure including open spaces within developments, conservation lands, areas protected by easement or covenant, parks, wetlands, and floodplains.

FLU Policy 2.1.1: Conservation Lands
The County shall protect conservation lands in public and private ownership and assure the protection of large-scale conservation areas across the County. The planning principles that guide the decisions regarding the identification and protection of these conservation areas include:

1. Protect native biological diversity.
2. Protect viable portions of natural plant communities.
3. Link conservation lands.
4. Allow for natural flooding, prescribed fires and other natural land management tools.

FLU Objective 2.3: Water Quality and Quantity Protection
To enhance the significant assets associated with the County's water-based resources by ensuring that the water quality of these resources is protected, and the water supply is not compromised.

FLU Policy 2.3.1: Water Quality Protection
The County shall implement the recommendations of the Charlotte Harbor National Estuary Program for the Gasparilla Sound-Charlotte Harbor and Cape Haze Aquatic Preserves and their watersheds by establishing a program that focuses on:

1. Identifying and reducing sources of nutrients.
2. Restoring and maintaining natural surface and groundwater hydrology.
3. Identifying water quantity and quality impacts from mining, agriculture, and urban land uses.

FLU Policy 2.3.2: Charlotte Harbor Management Plan
The County shall require all development approvals, Future Land Use Map amendments and rezoning actions to be consistent with the provisions of the Charlotte Harbor Aquatic Preserves Management Plan (February 2017), which provides goals to protect and enhance the ecological integrity of the aquatic preserves; restore areas to their natural condition; encourage sustainable use and foster active stewardship by engaging local communities in the protection of aquatic preserves; and improve management effectiveness through a process based on sound science, consistent evaluation, and continual reassessment. Charlotte Harbor Surface Water Improvement and Management (SWIM) Plan Update November 2020), which focuses on water quality, hydrologic alterations, and the natural system.

FLU Policy 2.3.3: Nutrient Runoff
The County shall continue to monitor water quality in surface waters and shall require Best Management Practices to reduce nutrient-laden runoff, which includes but is not limited to runoff from urban areas, residential landscapes, and agricultural lands. The County shall require implementation of Best Management Practices as required by permits issued by State agencies.

FLU Policy 2.3.4: Aquifer Recharge Protection
The County shall protect groundwater resources by maintaining very low density and intensity in areas of aquifer recharge.

FLU Policy 2.3.5: Public Water System Wellhead Protection
The County shall evaluate the effects of development on wellheads for all proposed land uses within delineated cones of influence for all central potable water supply wellheads used for public consumption (FLUM Series Map #7). Where a cone of influence is not determined, all proposed development within 1,500 feet of the wellhead will be evaluated. Land uses in which hazardous materials, such as petroleum products, chemical or biological wastes, are produced or stored are not permitted to adversely impact groundwater resources. Landfills, wastewater treatment facilities, or feedlots/concentrated animal facilities are prohibited.

FLU Policy 2.3.6: Groundwater Protection
The County shall require commercial and industrial uses to be developed without the contamination of groundwater and shall not permit land uses in which hazardous materials, such as petroleum products, chemical or biological wastes, are produced or stored in areas where their presence would adversely impact groundwater resources, recharge areas (FLUM Series Map #6), or watersheds that drain into surface water supplies (FLUM Series Map #4).

FLU Policy 2.4.4: Green Design at the Site Planning Scale
The County shall consider introducing green design concepts into the site plan review and approval process through amendments to the Code of Laws and Ordinances within one year of the effective date of this comprehensive plan that will:

1. Create incentives and remove obstacles to allow a mix of uses on development sites.
2. Provide incentives to reduce conventional energy consumption.
3. Reduce fertilizers in urban landscapes.
4. Require Florida Friendly Landscaping.
5. Encourage a connected street network.
6. Minimize air pollution through the inclusion of multimodal transportation systems and a mixture of land uses.
7. Protect water quality and supply, and minimize water consumption.

FLU Policy 2.4.5: Incentives for Pollution Control at the Building Scale
The County shall consider amending its Code of Laws and Ordinances to provide incentives at the building level to minimize energy and water consumption**,** limit or eliminate the use of toxic materials and reduce waste.

FLU Policy 3.2.2: Elements of Rural Character
Rural character is denoted by:

1. Open space where the natural landscape and vegetation predominate over the built environment.
2. Visual landscapes that are traditionally found in rural areas, such as row crops, pasture, woodlands, barns, and fences.
3. Uses that are compatible with terrestrial and aquatic wildlife habitat and the continued use of that habitat by the wildlife.
4. Uses that are consistent with the protection of natural surface water flows and ground water and surface water recharge and discharge areas.

5. Intermittent concentrated village and hamlet style developments surrounded by large open spaces.
6. Uses that generally do not require an extension of urban governmental services:
    a. Large and small scale farming;
    b. Scattered agricultural industry;
    c. Sporadic commercial retail uses that serve the social and economic needs of the residents;
    d. Very low density development.

The following policies can only apply to properties located within the Burnt Store Area Plan area:

FLU Policy 6.2.6: Internal Water Management Systems

The County shall encourage, through incentives that may include impact fee credits, the provision of water storage capacity for storm water run-off from Burnt Store Road in the internal water management systems of new developments fronting Burnt Store Road. The intent is to assist the County in making the necessary improvements to Burnt Store Road in an economical and efficient manner by minimizing the amount of right-of-way necessary for widening Burnt Store Road.

FLU Policy 6.2.7: Watershed Flood Study

The County shall utilize the Burnt Store Watershed Flood Study (FLU Data and Analysis Appendix F) to quantify water quality discharges, conveyance system capacity and adequacy, recommend improvements over and above the item specified in FLU Policy 6.2.6, and specify the LOS after improvements.

FLU Policy 6.2.8: Enhancement of Water Quality

Based on the recommendations given in the Burnt Store Watershed Study, the County shall work with developers and property owners to create rain gardens, littoral zones or other similar mechanisms along any waterways to preserve, enhance and protect the water quality and quantity.

FLU Policy 6.2.9: Low Impact Design Practices

In partnership with SWFWMD, the County shall encourage developers and property owners to provide a variety of stormwater and low impact development practices, so that each practice will provide incremental benefits and all combined practices will:

1. Preserve native landscaping and natural water flows;
2. Minimize and control runoff generation at the source;
3. Promote infiltration;
4. Promote stormwater reuse; and
5. Minimize site disturbance.

FLU Policy 6.2.10: Natural Resource Connections

The County shall coordinate with developers and property owners to create the following natural resource connections, as shown on the Burnt Store Area map (SPAM Series Map #5) which is based on input and recommendations from the Florida Fish and Wildlife Commission and the National Estuaries Program.

1. *Blueways.* To assist in alleviating stormwater drainage concerns, the County shall require a restored or created flowway. The proposed flowway could connect surface water management lakes and on-site wetlands. Littoral shelves shall be planted along the proposed flowway to provide water quality treatment and foraging areas for wading birds. Road crossings may be constructed where the flowway is proposed, so long as the hydrological integrity of the flowway is maintained through drainage crossings.

The following policy only applies to the U.S. 17 Corridor Planning Area:

FLU Policy 6.3.11: Established Flowways

The County shall encourage the protection of historic flowways (SPAM Series Map #6) by designating them as environmentally sensitive and allowing density to be severed from these areas. Passive recreational uses may be incorporated into upland areas adjacent to restored flowways. Development along a flowway shall be encouraged to provide for public use by providing pedestrian paths and connections to adjacent properties. Public uses shall not include any activities that are detrimental to drainage, flood control, water conservation, erosion control or fish and wildlife habitat conservation and preservation. Proposed crossings of flowways shall include appropriately sized culverts or bridges to maintain surface water flows and wildlife underpasses where appropriate.

The following policies only apply the Babcock Ranch Community DRI:

FLU Policy 6.4.~~9~~8: Primary Greenways

The areas labeled as Greenways/Flowways/Agriculture, Parks, and Recreation on the Master Plan (Map H of the Master DRI Development Order) shall be considered Primary Greenways. A management plan shall be prepared as part of the DRI process for the Primary Greenways. Allowable usesin all Primary Greenways include transportation and utility corridors, including major roadways, minor roadways, major multi-use trails and secondary multi-use trails that shall be designed to avoid and then minimize impacts to native vegetation, flowways and wetlands. The edges of the Primary Greenways shall bedesigned to increase the functional value of the Primary Greenways areas and toprovide a transition from those areas to human uses. Existing agricultural uses shall be allowed in all Primary Greenways. Compatible land management activitiesmay be conducted in all of these Greenways, including but not limited to, ecological

burning, ecosystem restoration and hydrologic restoration. To the extent practicable, historic flowways or conveyances shall be restored within Primary Greenways where flowways have been constricted or otherwise impeded by pastactivities, or where additional land is needed to enhance wildlife corridors. In determining whether a proposed restoration is practicable, consideration shall be given to legal permissibility, cost of the restoration compared to the environmentalbenefit, and the physical impacts on persons and property both within and outsidethe BROD.

FLU Policy 6.4.14: Wetland Management

Impacts to naturally occurring wetlands within the BROD area shall be avoided first, and then minimized, to the greatest extent possible. These wetlands will be protected based upon the wetland functionality assessment outlined in Florida's Uniform Mitigation Assessment Method (UMAM), State permitting requirements ofthe South Florida Water Management District, the Florida Department of Environmental Protection and/or Federal permitting requirements, as applicable. Uses within protected wetlands shall be restricted to those uses which are compatible, including but not limited to, passive recreation, environmental research and education, boating, fishing, limited boardwalk and observation platforms, all in accordance with State and Federal permitting requirements. The use of existing wetland areas for water management (attenuation and storage, but not treatment) shall be allowed to the extent permitted by law.

Wetland areas within the BROD currently being used as water management areasmay be relocated if:

1. All approvals are obtained from appropriate Local, State and Federal agencies,
2. The affected wetland functions are replaced, and
3. Appropriate mitigation is provided within the Babcock Ranch, including theBROD area and the area sold to the State and Lee County.

Limited crossings of such wetlands may be allowed when:

1. It is the only feasible route to serve existing or designated future urban development areas,
2. The crossing is bridged or box-culverted to the greatest degree possible, maintaining pre-development volume, direction, distribution, and surface water hydroperiod, or
3. Appropriate mitigation is provided within the Babcock Ranch, including theBROD area and the area sold to the State and Lee County.

FLU Policy 6.4.15: Master Drainage Plan

The County shall require a Babcock Ranch Community Master Drainage Plan (SPAM Series Map #9) indicating existing, to be restored, or created primary flowways within the BROD. The primary flowways will connect surface water management lakes and on-site wetlands, but only if wetland seasonal hydroperiods will improve or remain consistent with pre-development conditions. Littoral shelves should be planted along the primary flowways to provide water quality treatment and foraging areas for wading birds. Road crossings may be constructed across and through primary flowways, as long as the hydrological integrity of the flowways is maintained through the crossings. The master drainageplan shall be designed to meet Class III water quality standards and maintain off- site flows at pre-development levels.

FLU Policy 6.4.16: Surface Water Management System

A surface water management system that incorporates the functions of the naturalon-site system, including seasonal hydroperiods, surficial aquifer/water table elevations, continuity of conveyance systems and water quality shall be required, in accordance with State and Federal permitting requirements. The surface watermanagement system shall be designed with Best Management Practices (BMPs)as necessary to meet the State water quality standards. The surface water management system will provide treatment in a created system prior to dischargeto the natural system. Man-made ponds, lakes and/or drainage features shall be designed (size, depth, etc.) and located (setbacks from wetlands, etc.) so as to maintain water levels, quality and hydroperiods for native aquatic vegetation and wildlife, to the extent possible. Storm water treatment ponds shall have planted littoral zones. Historic flows may also be restored within developing areas through the surface water management system design and permitting process. The conveyances shown in the western portion ofthe BROD may be modified to provide an equivalent conveyance. Water management treatment shall be done outside the historic conveyances. Further, the surface water management system for the BROD will be designed, permitted and constructed to assist in the Minimum Flow Levels (MFL) recovery program ofthe South Florida Water Management District, as applicable, and the system will not lessen any contributions of water to the Caloosahatchee River during low flow periods.

Coastal Planning Element

CST GOAL 1: COASTAL RESOURCE PROTECTION
Protect, conserve, maintain and improve remaining barrier islands, beaches, coastal wetlands, coastal surface and ground water quality, wildlife habitats and living marine resources within the Coastal Planning Area (CPA) (FLUM Series Map #13) and promote appropriate access to marine resources.

CST Objective 1.1: Coastal Resource Protection
To ensure that proposed and existing development and activities do not adversely impact the County's coastal and estuarine natural resources and to provide for the long-term protection and enhancement of coastal vegetation and wildlife communities and ecosystems.

CST Policy 1.1.1: Coastal Resources Management Program
The County shall create a Coastal Resources Management Program that will:

1. Identify the natural elements and processes that maintain the ecological and economic integrity and productivity of the County's coastal resources. Included in these resources are coastal uplands and wetland habitat systems that are most suitable for protection, enhancement, restoration, and conservation.
2. Recommend standards for approval to protect, conserve, and manage native coastal vegetation and wildlife communities, marine ecosystems, historical and archeological resources, and to develop avoidance, minimization and mitigation standards for adverse impacts to coastal resources.

CST Policy 1.1.5: Coastal Resource Clearing Permit
The County shall:

1. Develop and maintain rules, regulations, codes and policies that minimize the clearing and alteration of native coastal vegetation and habitats.
2. Where appropriate, require applications for development approval to include a specific evaluation of coastal resources including provisions to identify, assess, avoid and minimize adverse impacts to coastal resources (i.e. coastal wetlands, vegetation, wildlife, their habitats, including protective buffers and zones, and water quality prior to project approval, during and after construction).

CST Policy 1.1.7: Preliminary Development Plan Analysis
The County shall require all preliminary site plans, preliminary plats, or equivalent development requests adjacent to surface waters to depict the location of

submerged aquatic vegetation, coastal wetlands, oyster beds, and other natural resources, habitats or features within the proposed development site or within 200 feet of the development boundary.

CST Policy 1.1.8: Coastal Resources Protection Program
The County shall develop strategies with public and private stakeholders to protect, maintain, and, where feasible, restore native submerged aquatic vegetation, benthic communities and water quality in the County, particularly Lemon Bay, the Peace and Myakka Rivers, and Charlotte Harbor.

CST Policy 1.1.12: Protection of Natural Estuarine and Freshwater Shorelines
The County shall protect and preserve the function and value of marine and freshwater natural shoreline ecosystems on newly-acquired public lands by removing exotic and nuisance vegetation from the shoreline in order to protect the function of the estuary, enhance water quality, and preserve shoreline wetlands. These systems serve a variety of functions including, but not limited to, wildlife habitat, flood control and erosion control.

CST Policy 1.2.9: New Boating Facility Preferences
The County hereby establishes the following priority preference for approval of new boating facilities:

1. Preference shall be given to the expansion of suitable existing boating access facilities rather than construction of newly developed sites.
2. Preference shall be given to areas where there is adequate flushing of the basin to prevent stagnation and water quality deterioration.
3. Preference shall be given to sites that require no dredging or filling to provide access by canal, channel, or road.
4. Preference shall be given to sites that would have the least impact on natural resources including but not limited to sensitive estuarine habitats, sensitive bottom or shoreline habitats, submerged aquatic vegetation, manatee or other imperiled species habitat or mangroves.

CST Policy 1.2.10: Avoid Adverse Coastal Resource Impacts
The County shall ensure that all new boating access facilities will not adversely impact archeological and historical sites and environmentally sensitive coastal resources and shall be evaluated based upon the following:

1. The proposed location must minimize, and where possible, avoid areas approved by the Florida Department of Environmental Protection (FDEP) for shellfish harvesting, and other highly productive or unique habitats as

determined by FDEP, the FFWCC, and other appropriate State and Federal agencies.

2. Any new facilities shall be required to be compatible with approved manatee protection and preservation plans and procedures, and away from sites of high manatee concentrations and critical habitat identified by State and Federal agencies.
3. All channels crossing through seagrass beds shall be clearly marked with signage directing boaters to stay within marked channels and out of the seagrass beds.
4. Sufficient upland areas are present to accommodate all needed accessory facilities, such as parking spaces, rest rooms, and dry storage. Facilities shall avoid and minimize negative impacts to sensitive or rare upland habitats.
5. Adequate parking for vehicles and boat trailers is provided.
6. Facilities that provide overnight moorage of habitable vessels shall be required to have sewage pump-out facilities sufficient to handle 100 percent of anticipated occupancy and shall document usage.
7. Through sloping and use of curbs and other structural improvements, fuel facilities shall be designed to contain spills on the landside of the facility and prevent runoff into the surface water.
8. The design and construction of facilities shall include catchment systems for filtering pollutants from stormwater originating in boat repair and painting areas, and bilge water from boats removed from the water at ramps or lifts.
9. Except for ramps and other water-dependent facilities which, due to their function, must slope towards the water, all impervious surfaces in new boating facilities must be designed and constructed such that run-off water flows away from surface waters and wetlands.
10. Prior to final plan approval, proposed boating facilities must demonstrate that the facility will be able to contain any spills that may occur within surface waters.

CST Policy 1.2.11: Marina Monitoring Plan

The County shall develop an appropriate monitoring plan to be implemented during and after marina development for the purpose of monitoring adverse impacts upon water quality, natural vegetation, wildlife and wildlife habitat, soils and shoreline.

CST Policy 1.5.11: Shoreline Erosion Control

The County shall require all new construction adjacent to watercourses, wetlands, and bays to have stabilized vegetated buffer zones sufficiently wide to prevent sediments from washing into the adjacent water body or wetland or provide other measures to provide such protection. The use of native vegetation is required.

CST Objective 1.6: Identify and Monitor Coastal Resources
To continue to conduct, support, encourage and participate in local, State and Federal programs to identify and monitor strategic coastal resources, including but not limited to, submerged aquatic vegetation, sensitive marine habitats (hard and soft bottom), water quality, shoreline erosion, coastal wetlands, coastal uplands, and associated protected vegetation and wildlife species.

CST Policy 1.6.1: Water Quality Monitoring
The County shall continue to participate with the Southwest Florida Water Management Surface Water Quality Improvement (SWIM) Program, the Coastal Charlotte Harbor Monitoring Network (CCHNN), the Coastal and Heartland National Estuary Program (CHNEP), and other local governments in the collection and analysis of water samples from Charlotte Harbor and Lemon Bay.

CST Policy 1.6.2: Coastal Resource Coordination
The County shall coordinate with State, Federal, regional agencies and local partners to exchange updated coastal resource information about water quality, protected vegetation, wildlife and habitats in Charlotte County's CPA.

CST Policy 1.6.4: Coastal Resources Public Education Programs
The County shall encourage the protection of ecologically important and high-quality natural resources within the County's CPA by partnering with appropriate public and private organizations in developing and conducting public education programs designed to increase public awareness about the value of, and ways to protect important coastal resources (i.e. submerged aquatic vegetation, coastal wetlands, coastal uplands, wildlife and water quality).

CST GOAL 2: ESTUARINE QUALITY PROTECTION
Protect, maintain, and improve coastal surface and ground water quality and provide criteria or standards for prioritizing shoreline uses, giving priority to water-dependent uses.

CST Objective 2.1: Charlotte Harbor Watershed Protection
To ensure that the County's surface waters are protected.

CST Policy 2.1.1: Water Quality Standards
Charlotte County shall protect its surface waters through implementation of the following standards and guidelines:

1. On-site sewage disposal systems, including their associated drain fields, will be located as far landward as feasible on waterfront properties so as to reduce or prevent unnecessary nutrient and pathogen loading into surface waters.

2. The most current best management practices identified in the Handbook, Urban Runoff Pollution Prevention and Control Planning, EPA/625/R-93/004, which control erosion and limit the amount of sediment reaching surface waters, shall be used during all development activities.
3. Withdrawals from, or discharges to, surface waters which alter hydroperiods shall require the appropriate permits through FDEP, the appropriate Water Management District, or the USACoE, and shall not reduce the quality or productive capability of water-dependent ecosystems (estuaries, etc).
4. Development proposals must demonstrate that post-development discharges into surface waters, or diversion of freshwater inflow into (fresh or saltwater) surface waters, will not lower the quality or productive capability of the receiving water body (fresh or saltwater). Such discharge must not exceed the legal limit for established surface water quality parameters to include, but not limited to, biological oxygen demand, dissolved oxygen, nutrients, bacteriological quality and turbidity, for the appropriate class water, as outlined in Chapter 62, F.A.C.
5. The design and construction of (fresh or saltwater) artificial waterbodies will provide sufficient water quality, fish and wildlife habitat values and functions consistent with the requirements of State and Federal agency permits and the intended use of the water body.
6. Boat speeds shall be limited as necessary to avoid shoreline erosion, siltation and damage to benthic vegetation and wildlife; and to protect natural functions by establishing and enforcing speed zones and other prohibited activities in vulnerable areas.

CST Policy 2.1.2: Charlotte Harbor Management Committee

The County shall confer with public and private stakeholders in Lee, Charlotte and Sarasota Counties to discuss the benefits of establishing a Charlotte Harbor Management Committee, which would meet regularly to review major activities that might affect the social, economic and environmental values of Charlotte Harbor.

CST Policy 2.1.3: Lemon Bay Aquatic Preserve Management Plan

The County shall support the implementation of the FDEP Lemon Bay Aquatic Preserve Management Plan.

CST Policy 2.1.4: Peace River Basin and Myakka River Management Plans

The County shall continue to participate in local, State, and Federal watershed initiatives such as the Peace River Basin, Lemon Bay, and Myakka River Management Plans.

CST Policy 2.1.5: Gulf of Mexico Alliance

The County shall participate in the Gulf of Mexico Alliance discussions on the health and restoration of the Gulf. The County shall cooperate in advancing the understanding of system dynamics and the Board of County Commissioners shall consider relevant initiatives for support.

CST POLICY 2.1.6: Charlotte Harbor Management Plan

The County shall continue to support FDEP's Charlotte Harbor Aquatic Preserves Management Plan, which includes the waterbodies of Cape Haze, Gasparilla Sound-Charlotte Harbor as well as Pine Island Sound and Matlacha Pass in Lee County.

CST Policy 2.1.7: Charlotte Harbor Watershed Flows

The County shall continue to work with and support programs of public and private stakeholder organizations to protect, maintain and restore the optimum quality, quantity, distribution and timing of freshwater flows needed to protect, maintain and restore the ecological productivity and integrity of the Charlotte Harbor estuarine ecosystem.

CST Policy 2.1.8: Intergovernmental Coordination

The County shall continue to participate in and support the development and implementation of local, State and Federal programs and initiatives whose goals, objectives, and policies are to maintain, restore, and improve water quality in the Charlotte Harbor watershed, including all contiguous coastal wetlands and streams, the Peace and Myakka rivers and their tributaries.

CST Policy 2.1.9: Watershed Surface Water Quality Protection

The County shall confer with public and private stakeholders to discuss the benefits of establishing regional surface water protection overlay districts in the Charlotte Harbor Watershed, including, but not limited to, the basins of the Peace and Myakka rivers and their tributaries, wherever protection of the quality and quantity of those surface waters is deemed critical to the health, safety and welfare of current and future citizens or the environment.

CST Policy 2.1.10: Coastal Water Quality Studies

The County shall continue to support and participate in local, State, or Federal scientific water quality studies of Charlotte Harbor, Lower Peace and Myakka Rivers, and Lemon Bay.

CST Policy 2.1.11: Examine Nonpoint Source Coastal Water Pollution

The County shall periodically study the effects of existing drainage systems and the impacts of point source and nonpoint source pollution on estuarine water

quality per Chapter 163.3178(2), F.S., and shall continue to encourage best management practices to minimize these sources.

CST Policy 2.1.12: Coordination of Coastal Water Quality Monitoring
The County shall maintain a liaison with other local, State, and Federal agencies engaged in water quality monitoring, and reviewing their data, conclusions, and recommendations.

CST Policy 2.1.13: Interagency Cooperation for Water Quality Protection
The County shall cooperate with the Florida Marine Patrol, U.S. Coast Guard, USACoE, and the FDEP in the enforcement of point and nonpoint source pollution control standards for septic systems, marinas, marine dumping, and illegal discharges from water craft.

CST Objective 4.4: Establish Level of Service Standards

To establish LOS standards for roads, stormwater systems, parks, potable water, sanitary sewer, schools, and solid waste that take into account the special needs that result from the unique circumstances and dynamics associated with the natural and manmade dynamics of the CPA; including but not limited to, tidal fluctuations, coastal erosion, tropical storms, high water tables, flooding, rising sea levels, etc.

CST Policy 4.4.1: Evaluation of Existing Infrastructure Elements
The County shall regularly evaluate existing infrastructure elements to ensure that they satisfy the unique demands associated with the natural and manmade dynamics of the CPA (i.e., tropical storms, high winds, flooding, transportation, structural demands, etc.) and revise County regulations and requirements as needed to ensure the health, safety and welfare of the current and future citizens are protected.

ENV Policy 1.1.4: Green Landscaping and Low Impact Techniques

The County shall promote landscaping techniques that reduce water and fertilizer usage, require low maintenance, and eliminate or reduce the need for herbicide and pesticide usage, such as encouraged by the Florida Native Plant Society, the University of Florida IFAS Extension and other similar groups. Incorporation of landscaping into Low Impact Development design of stormwater systems is encouraged.

ENV Objective 1.4: Water Quality

To ensure that human health and the natural environment are not damaged by water contamination.

ENV Policy 1.4.1: Water Quality Standards

The County shall not allow the quality of Charlotte County's groundwater and surface water resources to be degraded below the minimum criteria for water quality provided in Chapter 62 FAC, the Clean Water Act, 33 USC 1251, or by adopted Site Specific Alternative Criteria (62-302.800 FAC), and shall ensure that it is maintained or, as necessary, improved to ensure the availability of this resource for present and future generations. The County shall not allow any activity that on its own or in combination with other existing activities to cause a violation of water quality standards.

ENV Policy 1.4.2: Water Quality Monitoring

The County shall support and encourage continued water quality monitoring by local, State, and Federal agencies, non-profit groups, and individual volunteers that will help identify and formulate plans to address point and non-point source pollution.

ENV Policy 1.4.3: Protection Guidelines

The County shall implement the following standards and guidelines to protect its surface waters:

1. The discharge of stormwater runoff, wastewater, or other potential sources of contamination into surface waters resulting in a degradation of the quality is prohibited and shall be enforced.
2. The most current Best Management Practices which control erosion and limit the amount of sediment reaching surface waters shall be applied to all activities that result in disturbance of earth.
3. Removal or control of submerged, emergent, or floating vegetation through non-chemical means shall be prioritized. Removal shall be limited to that necessary to allow reasonable access to water resources except for the

removal of invasive, exotic species such as hydrilla, water hyacinth, or water lettuce.

4. Non-chemical means, where feasible, and Best Management Practices shall be used as alternatives to insecticides and herbicides for the control of mosquitoes.

ENV Policy 1.4.4: Interagency and Intergovernmental Cooperation

The County shall pursue interagency and intergovernmental cooperation to ensure that the County's surface and ground waters are protected. The County shall require protection of the Charlotte Harbor estuarine system, which supports a multi-billion dollar tourism industry that relies on a productive aquatic ecosystem, by continuing to monitor and object to any activities within and without the County that may negatively impact the quality, quantity, and timing of freshwater flows from entering the County's water resources.

ENV Policy 1.4.5: Land Acquisition

The County shall continue to protect the County's surface waters and ground waters through implementation of land acquisition programs that will provide opportunities to protect and manage lands adjacent to surface waters. Charlotte County shall also continue to encourage and partner with State agencies and develop working relationships with private lands trusts to maximize potential for acquiring such lands within Charlotte County.

ENV Policy 1.4.6: National Estuary Program

The County shall continue to participate in the Coastal and Heartland National Estuary Partnership (CHNEP) by participation on the CHNEP's advisory committees, and by continuing to uphold and implement the goals and objectives of the CHNEP's Comprehensive Conservation and Management Plan (CCMP) for the Greater Charlotte Harbor Watershed.

ENV Policy 1.4.7: Water Management Districts

The County shall continue to be involved in updates to and the governance of the Southwest Florida Water Management District's (SWFWMD) Charlotte Harbor Surface Water Improvement and Management Plan, Peace River Comprehensive Watershed Management Plan, Myakka River Watershed Management Plan, and Shell Creek and Prairie Creek Watersheds Management Plan; and in the governance of the SWFWMD's ecosystem restoration plan(s). In addition, Charlotte County shall support the two major components of the Southern Water Use Caution Area Recovery Strategy plan, which are management of groundwater withdrawals to minimize saltwater intrusion into the Floridan aquifer and restoration of minimum flows to the upper Peace River.

ENV Policy 1.4.8: Peace River Basin Resource Management Plan
The County supports the identified regulatory and non-regulatory methods to minimize impacts to the Peace River basin identified in the Peace River Basin Resource Management Plan, which is based on the results of the Peace River Cumulative Impact Assessment.

ENV Policy 1.4.9: Watershed Overlay District (WOD)
The County shall establish the Watershed Overlay District as illustrated on FLUM Series Map # 4. The intent of the WOD is to protect the quantity and quality of water within the Hendrickson Dam Reservoir, which is the City of Punta Gorda's potable water supply. Since all overground and underground waters within the watersheds of Shell Creek and Prairie Creek drain into the reservoir, those watershed perimeters shall constitute the boundary of the Overlay. The creek system is delineated along with the boundaries of two significant water sources, Long Island Marsh and Tippen Bay.

1. The following shall apply throughout the entire Overlay:
    a. By right uses shall be those allowed by the comprehensive plan.
    b. All agricultural and resource conservation uses are encouraged to utilize Best Management Practices as created by the Florida Department of Environmental Protection, The Florida Department of Agriculture and Consumer Services, and the Florida Department of Forestry, as applicable. The County shall support and assist, as possible, in the Facilitating Agricultural Resource Management Systems (FARMS) projects and the Federal Environmental Quality Incentives Program (EQIP).
    c. The generation or continuous transmission of petroleum products or other hazardous substances is prohibited.
2. The following shall apply within one-half mile of the creek system and within Long Island Marsh or Tippen Bay:
    a. There shall be no increases in intensity. This does not apply to changes in agricultural uses.
    b. Density is restricted to the maximum density allowed at time of adoption of this comprehensive plan. There shall be no increases in density except in connection with establishment of conservation subdivision.
    c. New commercial excavations are prohibited.
    d. Implementation of Agricultural Best Management Practices as required by permits issued by State agencies.
    e. Biofuel manufacturing operations are prohibited, except when ancillary to a bona fide agricultural operation that utilizes Best Management Practices.

f. Prohibited uses may be allowed on a case by case basis by the Board of County Commissioners if it can be demonstrated through generally accepted, science-based analysis that the proposed use will have no negative affect on the quality or quantity of water within the Hendrickson Dam Reservoir. In no case shall prohibited uses be allowed within one-quarter mile of the shoreline of the creeks or creeks' tributaries.
g. When incidental to a permitted use, the bulk storage associated with bona fide agricultural uses and use of such products are allowed. This exemption shall not be construed to relieve these activities from compliance with applicable State and Federal regulations pertaining to the installation and use of hazardous substances.

3. The following are prohibited within 200 feet of the mean high water mark of the creeks and creeks' tributaries:
   a. All septic systems (including all components of those systems), and
   b. The storage or use of any hazardous substances, except when such storage or use is in compliance with applicable State and Federal regulations.
4. For residential properties adjacent to the creek system, the County shall require adherence to the applicable Federal and State standards.

ENV Policy 1.4.10: Surface Water Protection Overlay District (SWPOD)

The County shall establish the Surface Water Protection Overlay District as illustrated on FLUM Series Map # 5. The intent of the SWPOD is to improve surface water quality by providing for natural filtration of pollutants prior to stormwater flows entering the waterbodies that feed into the Myakka River, Peace River, Lemon Bay, or Charlotte Harbor. Charlotte County shall place those natural and manmade waterbodies identified on FLUM Series Map # 5 into the SWPOD.

Owners of property adjacent to these waterbodies, and the receiving waterbodies, are encouraged to utilize alternatives to traditional sodding such as berming, planting or retaining native vegetation, and utilizing bio-retention swales and rain gardens. A reduction of impervious surfaces parcel-wide in also encouraged. Fertilizer and pesticide usage is discouraged.

ENV Policy 1.4.11: Establishment of Wellhead Protection Areas

The County shall, in coordination with the SWFWMD and the South Florida Water Management District (SFWMD), maintain and update wellhead protection areas for all public water supply wells, which shall include potable water and Aquifer and Storage Recovery (ASR) wellheads. Wellhead protection areas may be modified due to changes in technical knowledge, such as transmissivity, or porosity; changes in pumping rates; reconfiguration of well fields; abandonment or

relocation of wells; the installation of new wells or well fields; establishment of minimum flows or levels pursuant to Chapter 373, Florida Statutes; changes in maximum contaminant levels; or to accommodate changes in topography or hydrology, such as newly approved mining areas.

ENV Policy 1.4.12: Wellhead Protection
The County shall enforce, and improve as necessary, the wellfield protection requirements of the Charlotte County Code of Laws and Ordinances, which shall include prohibitions against the placement of incompatible uses known to contaminate drinking water. Cones of influence shall be delineated and updated in the Land Development Regulations.

ENV Policy 1.4.13: Aquifer Recharge Protection
Within Charlotte County's Prime Aquifer Recharge Area, as identified on Future Land Use Map Series Map # 6, the County shall prohibit the generation or transmission of petroleum products or other hazardous substances. The storage and use of such products as incidental to a permitted use are allowed (the exemption shall not be construed to relieve these activities from compliance with applicable State and Federal regulations pertaining to the installation and use of hazardous substances). The County shall further protect its aquifer recharge area by requiring properties to develop in accordance with the guidelines of the Groundwater and Aquifer Recharge subelement of the Infrastructure element, AQR Policies 1.1.1 and 1.1.2.

ENV Policy 1.4.14: Groundwater - Waste Disposal & Discharge
The County shall monitor permit compliance for waste disposal and discharge facilities and activities, and take appropriate action when necessary. Appropriate action shall include notification of the permitting agency, intervention in agency proceedings, or legal action by the County.

ENV Policy 1.4.15: Groundwater - Public, Industrial, Agricultural Uses
The County shall monitor permit compliance for public, industrial, or agricultural water uses, and take appropriate action when necessary. Appropriate action shall include notification of the permitting agency, intervention in agency proceedings, or legal action by the County.

ENV Policy 1.4.16: Groundwater - Mandatory Connection to Water and Sewer
The County shall continue to require connection to central water and to sewer service when such service is available in order to reduce the direct demand on groundwater for domestic use and reduce the potential for contamination from septic tank leachate per the Potable Water and Sanitary Sewer subelement of the Infrastructure element, WSW Objective 3.1 and associated policies.

ENV Policy 1.4.17: Groundwater - External Impacts
The County shall continue discussions with the Water Management Districts, Southwest Florida Regional Planning Council, and jurisdictional local governments to determine what measures may be taken to help prevent impacts to recharge areas and other hydrogeologic features which occur outside Charlotte County's boundary and are connected to the County's groundwater.

ENV Policy 1.4.18: Nutrient Load Reduction
The County shall continue to work toward compliance with the requirements of the National Pollutant Discharge Elimination System and will utilize all available means, including stormwater units, MSBUs, and other revenue sources, to provide funding for these necessary requirements and programs to ensure that water quality and productive capability meets or exceeds the standards provided in Chapter 62, FAC and the Clean Water Act, 33 USC 1251. At such time when nutrient load reduction goals are promulgated through the Charlotte Harbor Surface Water Improvement and Management (SWIM) program or through Total Maximum Daily Load (TMDL) programs, Charlotte County will review and, as necessary, revise its Code of Laws and Ordinances to ensure that these goals are met through the County's development review processes.

ENV Policy 1.4.19: Emergency Water Conservation Plan
The County shall continue to cooperate with the SWFWMD and the SFWMD to conduct water conservation programs and maintain and implement the County's emergency water conservation plan.

ENV Policy 2.2.4: Limitation on Land Use Changes
The County may deny increases in density or intensity of land use if it can be determined that such a change would be harmful to natural resources. This would include, but is not limited to, harmful impacts to listed flora and fauna, imperiled and rare communities, water quality and quantity, historic flowways and other such resources. Impacts to wetlands shall be processed as described by ENV Objective 3.1 and associated policies.

ENV Policy 2.2.5: Environmental Land Identification for Acquisition
The County shall identify lands suitable for fee or less-than-fee acquisition and shall prioritize acquisition projects based on the following criteria:

1. Rarity of natural community types, such as pine flatwoods, hammocks or scrub; rarity of species, including rare and endangered species such as the Florida panther or Red-cockaded woodpecker; uniqueness of the sites special features; and
2. Connectivity and proximity to other protected lands to create green corridors; and

3. Ecological quality; diversity of species; ecological integrity; and
4. Important to maintaining water quality in either a natural water course, groundwater recharge area or estuarine environment; and
5. Potential for long-term viability and public enjoyment of lands.

Potential acquisition sites shall include, but not be limited to, scrub habitats, riparian corridors, floodplain areas, wetlands, wildlife corridors and habitats, or dune and coastal systems.

ENV Objective 2.5: Excavation Activities

To minimize the detrimental effects of mineral extraction on groundwater, surface water, wildlife and wildlife habitats, surrounding land uses and values, and the health, safety, and welfare of the general public.

ENV Policy 2.5.1: Review of Excavation Activities

During its review of proposed excavation activities, the County shall ensure that:

1. All mitigation activities proposed by a mining operation are acceptable to Charlotte County prior to the approval of a mining permit.
2. Detrimental effects to groundwater and surface water resources are minimized.
3. Reclamation plans include criteria for beneficial post-operation land use activities. Reclamation plans shall: maximize the reclamation of the resultant waterbodies for fish and wildlife and include the creation and planting of littoral shelves with native plant species to provide wildlife habitat; help improve or maintain water quality; prevent erosion of the shoreline; restore pre-development functions and values, including restoration of similar natural communities; and make the site aesthetically pleasing. The County shall require a bonding mechanism for reclamation expenses in the event of non-compliance by an operator. Reclamation bonds shall be equal to the cost of reclamation.
4. Minimum buffer zones and setbacks are being observed between extractive and non-extractive land use activities.
5. Cumulative impacts to the built and natural environment are assessed.
6. The hydrological functions of natural flow ways and sloughs are maintained

ENV GOAL 3: WETLANDS

Avoid, minimize, or mitigate impacts to wetlands by restoration, enhancement, creation or local wetland mitigation banking, when available.

ENV Objective 3.1: Wetland Protections

To protect wetlands and the natural functions and values of wetlands.

ENV Policy 3.1.1: Identification and Categorization of Wetlands
The County shall require that the presence of wetlands be identified within the review processes of Developments of Regional Impact, Land Use Amendments, Rezoning applications and preliminary site plans. The type (i.e. Category I or II as defined below) of wetlands shall also be indicated by the applicant and reviewed for accuracy.

ENV Policy 3.1.2: Indicators of Wetlands
During site review processes, the County shall utilize all available resources from State and Federal agencies as potential indicators of the presence of current and historic wetlands. The precise categorization of these areas shall be verified through site specific studies and field determinations.

ENV Policy 3.1.3: Wetland Categories

Category I
Category I wetlands are those wetlands that are considered critically necessary to sustain the health of the County's environment and shall mean those wetlands that meet at least two of the following criteria:

1. Any wetland of any size that has a permanent surface water connection to natural surface waterbodies with special water classifications, such as an Outstanding Florida Water, an Aquatic Preserve, or Class I or II waters. A natural hydrological connection that has been enhanced by human technology will be considered a connection under this category.
2. Any wetland of any size that has a direct connection to the Floridan aquifer by way of an open sinkhole or spring.
3. Any wetland of any size that has functioning hydroperiods with minimal human disturbance and provides critical habitat for listed species.
4. Any wetland of any size whose functioning hydroperiods are connected via a direct natural surface water connection to parks or conservation lands.
5 Any wetland of any size where downstream or other hydrologically connected habitats are significantly dependent on discharges from the wetland.

Wetlands meeting two or more of the above criteria must have no more than 30 percent coverage of exotic invasive vegetation. The County shall limit the removal, alteration, encroachment, dredging, filling, or changes to the natural hydroperiod or water quality (hereinafter collectively referred to as "impacts") within Category I wetlands, regardless of any other regulatory agency authorization, to cases where no other feasible and practicable alternative exists that will permit a reasonable use of the land. The protection, preservation, and continuing viability of Category

I wetlands shall be the prime objective of the basis for review of all proposed impacts.

Category II

Category II wetlands shall mean those wetlands that consist of isolated wetlands or formerly isolated wetlands which by way of man's activities have been directly connected to other surface water drainage. Impacts within Category II wetlands shall first be avoided. Impacts that can~~n~~ot be avoided may be mitigated as permitted by State and Federal permitting agencies. The County shall review the reasoning for any proposed impacts and may prohibit such if it determined to be contrary to the public interest.

ENV Policy 3.1.4: Protection Incentive

The County shall allow density to be severed from wetlands at the base density calculation. Per FLU Policy 1.2.13, the County will explore a density bonus program or other incentive program for landowners that provide habitat management of wetlands.

ENV Policy 3.1.5: All Wetlands Impact Limitations

The County shall limit impacts in wetlands to the following:

1. Development of parcels of land created prior to June 15, 2010 only if adequate uplands do not exist to support the footprint of the proposed use - impacts shall be limited to the minimal area necessary to support the proposed use. Sewer shall be utilized unless adequate spacing exists to allow a distance separation of at least 100 feet between the Onsite Sewage Treatment and Disposal System (OSTDS) and the delineated edge of the wetland. Contiguous parcels under same ownership shall be consolidated to minimize wetland impacts to Category I and II wetlands.
2. Redevelopment of previously permitted structures provided all development occurs within the footprint of the original structure.
3. Activities necessary to prevent or eliminate a public hazard.
4. Activities that provide a direct benefit to the public at large that would exceed any public loss as a result of the activity, such as removal of exotic species.
5. Passive, resource oriented activities for which wetland functions and values are the primary attraction.
6. Agriculture, provided the overall ecological integrity of the wetlands community shall be maintained as follows:
    a. Viable populations of protected or listed species found onsite can be maintained onsite;

b. Harvests are planned to provide for varying age and height diversity, supporting a variety of vegetative successional stages within the overall wetland ecosystem;
c. The natural hydrology and hydroperiod of wetlands are not significantly modified on a long-term basis and State water quality standards are not violated; and
d. There is no conversion of wetland systems to upland systems.

7. Non-commercial water dependent uses and structures such as boardwalks, docks or boat ramps constructed in a manner to minimize impacts to wetlands and aquatic resources.
8. Linear facilities serving a public need that cannot be reasonably located outside of all wetlands may cross or occur in wetlands provided the proposed facility impacts the least sensitive portions (i.e., narrowest, most impacted, etc.), bridging may be considered as means to minimize impacts. Linear facilities can include boring or directional drilling.
9. Stormwater treatment or tertiary treatment of wastewater may be allowed only for innovative designs which demonstrate that:
    a. The continued natural functioning of the wetland system will be maintained or improved.
    b. The natural hydroperiod of the wetland will be maintained.
    c. Water quality, vegetation, and aquatic lifeforms will be maintained or improved.
    d. All substances that could adversely impact water quality, vegetation and aquatic lifeforms will be removed or treated prior to discharge to the wetland system.
    e. The wetland's ability to assimilate any nutrients in the effluent discharged to the wetland system will not be exceeded.
    f. The project owner or operator agree to a monitoring program of the wetlands system, at their expense, and any degradation of the wetland system that occurs during the monitoring period due to project design failure shall be corrected at the owner or operator's expense.

ENV Policy 3.1.6: Incompatible Uses

Where adequate land area exists to support the proposed use, the County shall require a 50 foot, undeveloped buffer between any commercial intensive and industrial land uses, including associated uses such as parking lots and storage areas, and any waterways, wetlands, or lakes.

ENV Policy 3.1.7: Prohibited Uses

The use, storage, transmission, or generation of hazardous substances, or substances which may artificially accelerate the eutrophication of wetlands and waterbodies, is prohibited within 200 feet of wetlands.

ENV Policy 3.1.8: Subdivision Approval
The County shall prohibit the creation of new lots and parcels that do not contain adequate buildable land to support the least intensive use allowed under the land use category.

ENV Policy 3.1.9: Roads
Roads necessary for access to upland portions of a subject property may cross wetlands provided they cross the least sensitive portion (i.e., narrowest, most degraded, etc.) of the affected wetlands and all environmental permitting procedures have been followed. Minimally invasive building techniques and pervious road surfaces will be required.

ENV Policy 3.1.10: Permits
The County shall require an FDEP Environmental Resource Permit and other State or Federal wetland permits prior to issuing local development permits. All conditions placed on such permits by the issuing agencies, including upland buffer zone requirements, restrictions of use within the wetland, etc., shall be incorporated into the final development approval issued by the County. The County reserves the right to deny any local permit regardless of any other regulatory agency authorization. Charlotte County shall also coordinate with permitting agencies to review wetland delineations prior to the finalization of the agency permits. If the County determines that the boundary may be incorrect, staff will work with the permitting agency to correct the delineation.

Infrastructure – Stormwater Management Subelement

SWM GOAL 1: STORMWATER MANAGEMENT
Implement best management practices of both a structural and a non-structural nature to reduce the impact of stormwater on receiving water bodies.

SWM Objective 1.1: Master Stormwater Management Plan
To implement the developed Master Stormwater Management Plan (MSMP) and implement the capital improvement projects identified as a result of the areas originally studied.

SWM Policy 1.1.1: Implementation of MSMP
The County shall program Phase II of the MSMP through its Capital Improvements Plan. Full implementation is anticipated to be completed by 2022. Basins that are less dependent on structural controls will be improved through the Primary Ditch Maintenance Program.

SWM Policy 1.1.2: Construction and Maintenance
The County shall employ a system of Municipal Services Benefit Units (MSBUs), Municipal Services Taxing Units (MSTUs), a stormwater utility, or other funding mechanisms for stormwater management in order to fund the construction and maintenance of stormwater management infrastructure and associated lands.

SWM Policy 1.1.3: Coordination
The County Public Works Department and Growth Management Department, or their successors, shall coordinate in reviewing development plans to ensure consistency with the MSMP.

SWM Policy 1.1.4: Prioritization
The County shall establish the following prioritization in the maintenance of existing stormwater maintenance facilities and construction of new ones:

1. The reduction of flooding in buildings and structures;
2. The reduction of pollutants in impaired water bodies;
3. The reduction of flooding of highways;
4. The reduction of pollutants where studies show a statistically significant increase in pollutants;
5. The reduction of other types of flooding.

The priorities shall also reflect the Smart Growth Principles established in **FLU Goal 1: Smart Growth Framework** and the following Future Land Use element policies:

1. FLU Policy 1.2.3: Service Area Delineation
2. FLU Policy 1.2.4: Urban Service Area
3. FLU Policy 3.2.4: Limitation on the Extension of Urban Infrastructure
4. FLU Policy 4.1.8: Priority for the Provision of Urban Services

SWM GOAL 2: LEVELS OF SERVICE
Ensure that stormwater management facilities are in place and available to serve all new development, whether provided by the County or by those creating the new development.

SWM Objective 2.1: Level of Service Standards
To maintain the Stormwater Management System to meet or exceed the established Level of Service (LOS) standards, both quantitatively and qualitatively.

SWM Policy 2.1.1: Flooding LOS Standards
The County shall adopt the following flooding LOS standards for stormwater management:

1. New arterial roadways will be designed and constructed to remain flood-free in the 100-year rainfall event distributed in accordance with methodologies approved by the appropriate Water Management District (WMD).
2. New and improved collector roadways will be designed and constructed to enable not less than one lane of traffic in each direction above the design high water elevation resulting from a 25-year frequency, 24-hour duration rainfall event distributed in accordance with methodologies approved by the appropriate WMD.
3. New local roads will be designed and constructed with the pavement centerline at or above the design high water elevation resulting from a 5-year, 24-hour rainfall event distributed in accordance with methodologies approved by the appropriate WMD.
4. New parking facilities may be designed and constructed with a maximum temporary detention depth of nine inches distributed in accordance with methodologies approved by the appropriate WMD.
5. Stormwater management facilities for structures in all new subdivisions will manage stormwater resulting from a 25-year frequency, 24-hour rainfall event distributed in accordance with methodologies approved by the appropriate WMD by either providing individual on-site facilities or a central facility or facilities.
6. All new development on existing platted lots (except single-family, duplex, and triplex dwelling units that are not part of a larger, common project) is required to provide on-site stormwater management for runoff resulting from a 25-year, 24-hour rainfall event distributed in accordance with methodologies approved by the appropriate WMD.

SWM Policy 2.1.2: Water Quality LOS Standards

The County shall adopt the following water quality LOS standards for stormwater management:

1. No discharge from any stormwater management facility shall cause or contribute to a violation of water quality standards in waters of the State as provided for in Federal law, State statute, or County ordinance. Water quality LOS shall be set consistent with the protection of health, safety, and welfare and natural resources functions and values.
    a. All stormwater systems for new development and redevelopment shall include features to minimize pollution from oil, suspended solids, nutrients, and other objectionable materials prior to discharge into natural systems. Such features shall be designed to treat the runoff resulting from the first one inch of rainfall or the first 1.5 inches in the case of projects discharging into an Outstanding Florida Water body. Stormwater systems shall include additional measures to reduce floating and suspended solids to a minimum. Higher design criteria for water treatment shall apply if such criteria are necessary to meet and maintain the LOS or to protect water bodies (such as potable surface waters, impaired waters, or Outstanding Florida Waters) which require higher levels of protection. The higher design criteria shall be based on a treatment system which treats 1.5 times the volume required for the selected treatment system or equivalent.
    b. New development and redevelopment shall provide mitigation measures and best management practices to control pollutants specific to the pollutant characteristics of the proposed land use consisting of such measures and practices that have been shown to be effective in controlling the specific pollutants characteristic of the type of new development.
    c. Mitigation measures and best management practices relating to drainage shall be taken during construction activities to ensure that water quality is not degraded during the land clearing and construction or development. No cutting, clearing, grading, or filling shall be accomplished on any site under development unless appropriate devices have been installed to minimize pollution from objectionable materials, to control erosion, and to remove sediment from surface water runoff. Appropriate techniques shall also be used to stabilize and revegetate disturbed land upon completion of the project.
2. New and existing industrial activities (as defined in the National Pollutant Discharge Elimination System regulations for stormwater) shall develop

and implement a Storm Water Pollution Prevention Plan (SW3P) for such activity as required by any FDEP permit process.

3. Enrollment in the Florida Department of Agriculture and Consumer Services Best Management Practices and participation in the Southwest Florida Water Management District's (SWFWMD) Facilitating Agricultural Resource Management Systems (FARMS) program shall be encouraged for all agricultural land uses.

SWM Policy 2.1.3: Concurrency

The County shall require that the necessary stormwater management facilities and services are in place and available to serve any new development prior to issuance of a certificate of occupancy, or that they are guaranteed to be in place and available by an enforceable development agreement before any development order or permit will be issued.

SWM GOAL 3: STORMWATER RUNOFF

Minimize the degradation of water quality through proper stormwater management.

SWM Objective 3.1: Regulation

To establish and identify a system of regulation at the Federal, State, and County levels that minimizes the degradation of water quality resulting from stormwater runoff.

SWM Policy 3.1.1: Water Management District Coordination

The County shall coordinate with the applicable WMD to apply proper stormwater management techniques to new developments. The appropriate WMD will inspect new facilities prior to the transfer of a permit to the Operation and Maintenance Phase as provided by law (Chapter 62-330, F.A.C.).

SWM Policy 3.1.2: Compliance with Regulations

The County shall require all stormwater management facilities to be built in accordance with all applicable local, regional, State, and Federal standards.

SWM Policy 3.1.3: NPDES Requirements

The County shall meet or exceed all requirements of the National Pollution Discharge and Elimination System (NPDES) *(*USEPA s. 402 of the Clean Water Act, Pub. L. No. 92-500 and 33 USC ss. 1251 et seq.*)*.

SWM Policy 3.1.4: Design and Performance Standards

The County shall require all stormwater management facilities which discharge into waters of the State, including wetlands, to meet or exceed, where possible, the design and performance standards specified in Chapters 62-330 and 62-4, F.A.C.

SWM Policy 3.1.5: Pollution Abatement

The County shall adopt the water quality standards of Chapter 62-330, F.A.C. Pollution abatement shall be accomplished by requiring stormwater management systems in accordance with the requirements of that chapter, as amended.

SWM Policy 3.1.6: Best Management Practices

The County shall require the implementation of structural and non-structural Best Management Practices as established in the *Urban Runoff Pollution Prevention and Control Planning Handbook*, prepared by the U.S. Environmental Protection Agency (EPA/625/R-93/004), in the construction of all stormwater management facilities for new development, or for the upgrading of the existing infrastructure.

SWM Policy 3.1.7: Nutrient Pollution and Fertilizer Management

The County shall reduce fertilizer use in the Urban Service Area and implement best management practices through its fertilizer management ordinance.

SWM Objective 3.3: Low Impact Development and Green Infrastructure

To achieve long-term benefits such as improved water quality, improved air quality, improved groundwater infiltration and recharge, increased water storage, expanded wildlife habitat, expanded recreational opportunities and visual relief within the urban environment by incorporating low impact development design criteria and green infrastructure as part of the stormwater management system.

SWM Policy 3.3.1: Low Impact Development Effort

The County, in partnership with other government, non-profit, and private entities, shall seek grant funding to establish a Low Impact Development (LID) research and training facility to clarify best local area practices and to educate the public and the development community about sustainable site development best management practices.

SWM Policy 3.3.2: Low Impact Development Research

Prior to development of a full-scale LID research and training facility, the County shall establish an LID library and LID advocacy group that will arrange training from the Southwest Florida Water Management District, and others, that will be responsible for developing and maintaining the LID research and training facility.

SWM Policy 3.3.3: Low Impact Development Design Criteria

The County shall incorporate LID design criteria, best management practices (BMPs), and stormwater credits into its Code of Laws and Ordinances and capital projects practices within one year of the effective date of this comprehensive plan, and in coordination with State and WMD initiatives.

Pre-design BMPs may include but are not limited to:

1. Tree, topographical, soil, and wildlife surveys;
2. The provision and preservation of native landscaping and natural water flows;
3. Narrow road designs;
4. The preservation of natural depressions;
5. The conservation of existing vegetation and resulting habitats.

Post-design BMPs may include but are not limited to:

1. Bioretention areas, biofilters, and rain gardens;
2. Bioswales or grassed and vegetated swales;
3. Dry wells;
4. Filter buffer strips;
5. Green infrastructure;
6. Green roofs or vegetated roofs;
7. Infiltration trenches;
8. Inlet pollution removal devices;
9. Native landscaping;
10. Permeable or porous pavement and pavers;
11. Rain barrels and cisterns;
12. Soil amendments or soil augmentation;
13. Stormwater planters;
14. Tree planting and tree preservation;
15. Tree box filters;
16. Vegetated buffers;
17. Wetland restoration.

SWM Policy 3.3.4: Best Management Practices
The County shall encourage new development and redevelopment to design stormwater management systems to incorporate BMPs including, but not limited to, filtration marshes, grassed swales planted with native vegetation, retention/detention lakes with enlarged littoral zones, upland buffers, preserved or restored wetlands, and meandering flowways.

SWM Policy 3.3.5: Wetlands in Stormwater Management Systems
The County shall allow new development and redevelopment to incorporate existing wetland systems in the design of stormwater management systems for polishing treated stormwater that meets BMPs established by WMDs and the criteria of ENV Policy 3.1.5 (9), provided that the stormwater management systems have been approved in their design by the appropriate governmental agencies.

SWM Policy 3.3.6: Protection of Unaltered Drainage
The County shall ensure, whenever possible, that relatively unaltered drainage features are protected from the disruption of natural hydroperiods, flows, and water quality by construction activities.

SWM Policy 3.3.7: Existing Natural Flowways
The County shall encourage the preservation of existing natural flowways and encourage the restoration of historic natural flowways and historic watershed boundaries.

SWM Objective 3.4: Regional Stormwater Management Facilities
To allow regional stormwater management facilities in order to supplement substandard stormwater management facilities.

SWM Policy 3.4.1: Natural Features in Stormwater Management Facilities
The County shall minimize the conversion of land while ensuring adequate stormwater management. This may include allowing for the inclusion of existing wetlands, flowways, and other natural features in stormwater management facilities as much as possible.

SWM Policy 3.4.2: Public Regional Facilities
The County shall pursue developing regional stormwater management facilities, including those that could take the place of site-specific attenuation facilities. The County may require contributions by development toward funding the facilities when used in lieu of construction of onsite private facilities. When utilized in lieu of private facilities, water quality pre-treatment facilities should be located onsite to promote source control of pollutants as part of an initial treatment train before they enter the County stormwater management system.

Public Regional SWM Facilities should incorporate native land, including uplands, and allow for the inclusion of existing wetlands, flowways, and other natural features as much as possible for final polishing. Such public facilities should take advantage of other public values including recreation and education.

SWM Policy 3.4.3: Private Regional Facilities
The County shall encourage private landowners to enter into agreements to provide regional stormwater management facilities, including those that could take the place of site-specific attenuation facilities. Water quality pre-treatment facilities should be located onsite to promote source control of pollutants before they enter the regional stormwater management system.

SWM GOAL 4: WATER QUALITY MONITORING
To support and encourage continued fixed station and probabilistic stratified random water quality monitoring of major surface water bodies by Federal, State, regional, and local agencies.

SWM Objective 4.1: Fixed Station Water Quality Monitoring
To support and cooperate with Federal, State, regional, and local agencies in fixed station monitoring of water quality to help determine water quality status and trends.

SWM Policy 4.1.1: Fixed Station Water Quality Monitoring and Analysis
The County shall continue to assist Federal, State, regional, and local agencies that provide fixed station and on-site monitoring of water quality. Further, the County shall participate with the Charlotte Harbor National Estuary Program and its triennial Water Quality Status and Trends analysis.

SWM Policy 4.1.2: Reporting
The County shall coordinate and partner with the Charlotte Harbor National Estuary Program on an as-needed basis to update the Board of County Commissioners on issues related to water quality.

SWM Objective 4.2: Coastal Charlotte Harbor Monitoring Network
As funding permits, continue to participate in the Coastal Charlotte Harbor Monitoring Network (CCHMN) and monitoring with other local governments and agencies.

SWM Policy 4.2.1: CCHMN Data Collection
As funding permits, the County shall advocate continuation of CCHMN data collection efforts by SWFWMD.

SWM Policy 4.2.2: Charlotte County Commitments
As funding permits, the County shall continue all existing commitments toward CCHMN data collection.

SWM GOAL 5: FEMA AND FLOODPLAIN MANAGEMENT
Maintain Federal Emergency Management Agency (FEMA) floodplain management requirements and manage development within the 100-year, 1% chance floodplain.

SWM Objective 5.1: FEMA Certification
To maintain certification under the Community Rating System (CRS) administered by FEMA.

SWM Policy 5.1.1: Maintenance of Rating
The County shall continue to implement stormwater management activities in order to maintain the County's Class 6 rating by the Community Rating System (*Federal Emergency Management Agency, National Flood Insurance Program Community*

Rating System Coordinators Manual, FAI-15/2017) and shall strive to improve that rating to a Class 4.

SWM Objective 5.2: 100-Year, 1% Chance Floodplain Management
To manage development within the FEMA 100-year floodplain.

SWM Policy 5.2.1: Development within the 100-Year, 1% Chance Floodplain
The County shall require all new residential or commercial development located within the FEMA 100-year, 1% chance flood hazard zone to be constructed to a minimum of 1' above the base flood elevation, as required by the Florida Building Code, and as established by FEMA Flood Insurance Rate Maps.

SWM Policy 5.2.2: Standing with FEMA
The County shall require that all new development located within the 100-year, 1% chance floodplain should be in good standing with FEMA floodplain management requirements.

Infrastructure – Potable Water and Sanitary Sewer Subelement

WSW Objective 5.2: Environmental Quality

To establish and operate an ambient water quality monitoring program to determine the impacts of pollution resulting from the use of sanitary sewer treatment systems (e.g., septic systems, package treatment plants, and central sanitary sewer systems).

WSW Policy 5.2.1: Sampling
The County shall assist CCHD in collecting water and soil samples from various locations within the County to be analyzed for pollutant loadings.

WSW Policy 5.2.2: Funding
The County may seek funding, in cooperation with CCHD, from various sources in order to implement an ambient water quality monitoring program. Sources may include the State of Florida, local governments, regional and Federal agencies, and the Charlotte Harbor National Estuary Program.

WSW Policy 5.2.3: Adverse Environmental Impacts and System Repairs
The County shall, when analysis indicates that a sanitary sewer treatment system is adversely impacting the environment according to State water quality standards (Chapter 62-302, F.A.C., for surface water, Chapter 62-520, F.A.C., for ground water, and Chapter 64E-9, F.A.C., for bathing places) and that public health standards are endangered, cause those sanitary sewer treatment systems to be repaired or replaced.

WSW Policy 6.1.2: Sewer Expansion Program
CCU shall develop a cost-effective sewer expansion program consistent with the Goals, Objectives, and Policies of this Plan with the intent of reducing the impact of pollutants on the natural environment and preserving groundwater quality.