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**ARTICLE 6**  
**RESOURCE PROTECTION STANDARDS**

**SECTION 6.01 PURPOSE:** The purpose of this Article is to implement the resource protection requirements of the Putnam County Comprehensive Plan. Additional resource protection standards shall be provided in Article 7 of this Code in the sections governing storm water management and sewage disposal. This Article is intended to protect resources identified as important to the public health, safety and welfare by establishing areas of a development site that must be protected from harmful affects of development. A developer should apply the provisions of this Article to a proposed development site before any other development design work is done. Application of the provisions of this Article will divide a proposed development site into areas that may be developed and areas that must generally be left free of development activity. The proposed development should then be designed to fit within the areas that may be developed. The setbacks and buffers required by this Article are meant to work in concert with standard zoning district setback and buffering requirements, and where the resource protection standards differ from the zoning district requirements with regard to setbacks and buffers, the more restrictive standards (i.e. larger setback) shall apply.

**SECTION 6.02 WETLANDS**

**6.02.01 -- Purpose and Intent:** It is the purpose and intent of this Section to provide for the protection, maintenance, enhancement and utilization of wetlands within Putnam County in accordance with the adopted Putnam County Comprehensive Plan, while recognizing the rights of individual property owners to use their lands in a reasonable manner, as well as the importance of wetland ecosystems to flood control, waste assimilation, water purification and recharge, and wildlife habitat and the rights of all citizens to protect Putnam County's wetland ecosystems to insure that they serve these needed functions. Nothing within Section 6.02 replaces or supercedes the jurisdiction and regulations of the Florida Department of Environmental Protection ("DEP"), the St. John's River Water Management District ("SJRWMD") or the Suwannee River Water Management District ("SRWMD"). Property owners are responsible for obtaining appropriate permits from these agencies, where required.

**6.02.02 -- Applicability and Requirements:** Development of any property in a wetland or within twenty (20) feet of a wetland shall be subject to the following:

- a. Wetland impacts shall first be avoided. The location and size of what the County will treat as wetlands for purposes of this Code are set forth in Map 6.1 in Appendix VI to this Code. Structures and other site improvements, including accessory uses, shall be setback at least 20 feet from these wetlands, except for those uses described in section 6.02.03 of this Code.
- b. Proposed developments shall establish a 20-foot buffer of native vegetation adjacent to wetlands to provide filtration of storm water pollutants. In addition, if the development is

or will be serviced by an onsite septic system, it must comply with the usable land requirements and wetland and water body setbacks of Chapter 64E-6, Florida Administrative Code and County Ordinance 87-5.

- c. Where a wetland is adjacent to or an integral part of a water body as described section 6.03 of this code, then the more restrictive provisions of either 6.02 or 6.03, including setback and buffering requirements, shall apply. For example, development of a property with wetlands adjacent to a water body will be required to meet the 50-foot setback requirements in Section 6.03; however, if the adjacent wetlands extend 50 or more feet from the water body, the minimum 20-foot wetland buffering requirements in paragraphs a and b of this subsection shall still apply, and the development will be set back 70 or more feet from the water body.
- d. All applicable state and federal regulations for permitting and mitigation must be met prior to the County issuing any construction permits for development in or adjacent to wetlands. Disturbance of wetlands, including the exemptions provided in subsection 6.02.03 below, shall not be permitted unless first authorized by the DEP, the U.S. Army Corps of Engineers (“COE”) and the St. Johns or Suwannee River Water Management Districts (“WMDs”). This will be enforced through the site plan review process conducted by Planning and Zoning Staff when a building permit application is submitted.
- e. Transfer of density from wetlands to the upland portion of a site shall be permitted through approval of an appropriate Planned Unit Development (PUD) application or an appropriate Article 10 development agreement and by establishing flexibility in the lot area requirements in the various zoning districts established in this Code in order to insure that development occurs outside of the wetlands and the 20-foot buffer. The wetland area will be included in calculating the gross density applicable to a property.
- f. Wetland protection shall be considered when the County evaluates a variance request for a setback modification that would move development away from wetlands.
- g. When creating a new parcel or subdividing or cutting out a portion of an existing parcel, each newly created lot or parcel shall contain sufficient uplands to allow the property to be developed under the existing zoning without encroachment on the wetlands or the 20 foot buffer and without need of a variance. Transfer of density from the wetlands to uplands, in accordance with paragraph e above, may be allowed in order to permit the creation of new parcels or lots that, except for the presence of wetlands, are permissible under this Code.

### **6.02.03 -- Exemptions**

- a. Activities that may be exempted from this Section are as follows:

1. Residential lots of record existing on or before the adoption of the comprehensive plan on December 19, 1991 at 5:00 p.m. which do not contain sufficient uplands to permit development of a residence without encroaching into wetlands, may be developed with one residential dwelling.
2. Resource-based recreational facilities such as trails, boardwalks, piers, and boat ramps.
3. Water dependent components of commercial development such as port facilities, marinas, fish camps, and commercial fishing and shell fishing operations.
4. General Agriculture, which shall maintain the natural hydrology and function of wetland areas in accord with the most recent version of USDA SCS guidelines established pursuant to the 1985 Food Securities Act, as amended; and by following best management practices and regulations set forth in pages 7-6 through 7-14 of the "Florida Non-Point Source Management Plan, Volume Two," (May 1989, Department of Environmental Regulation); and "Silviculture Best Management Practices Manual," (1993 Revision, Department of Agriculture and Consumer Services). The County may elect to apply a more current edition of a best management practices and management guideline manuals from the DEP or the Florida Department of Agriculture and Consumer Services, if available.
5. Silviculture, which shall follow the "Silviculture Best Management Practices Manual," (1993 Revision, Department of Agriculture and Consumer Services). The County may elect to apply a more current edition of a best management practices and management guideline manual from the Florida Department of Agriculture and Consumer Services, Division of Forestry, if available.
6. Essential public services, as those are defined in section 6.03.03 below.
7. Any emergency activity that is immediately necessary for the protection and preservation of life or property or for the protection or preservation of a natural resource. Such emergency activities may include, for example, search and rescue operations related to floods, hurricanes or other storms; or preventive and remedial activities related to large-scale contamination of streams or other bodies of water.
  - (a) Within three (3) days after the commencement of an emergency activity which otherwise would be treated as a regulated activity under this Section, the person chiefly responsible for undertaking such emergency activity shall send a written statement to the Department of Public Works generally describing the actions taken and setting forth the pertinent facts regarding the nature of the emergency, including an explanation of the

life, property or resource such activity was designed to protect or preserve.

- (b) Within three (3) days of receiving notice of the emergency activity, the County Engineer shall make a written determination regarding whether the activity was the result of an emergency or, where it is determined that the impacted wetlands fall within the jurisdiction of the DEP or SJRWMD, advise the appropriate State agency of the action in writing.
  - (c) Should the County Engineer determine that the activity taken on wetlands under the County jurisdiction and such actions were not the result of an emergency situation, the person undertaking the activity may be subject to an enforcement action under this Code, and the County Engineer shall report the activity to the appropriate state and federal agencies. Where the County Engineer determines that there was an emergency situation, he may require the property owner to mitigate some or all of the wetland impacts.
- b. Additional activities that may be exempted from this Section are set forth in paragraphs 1 through 4 below. However, where the exemptions identified in paragraphs 1 through 4 are based on acreage or size thresholds, they shall not apply and are expressly omitted as exceptions to this Code:
  - 1. All activity exempt from regulation by the DEP under Chapter 403, Florida Statutes, including any applicable agency rules.
  - 2. All activity exempt from regulation by the COE as authorized by section 404, Clean Water Act or Section 10, River and Harbor Act.
  - 3. All activity exempt from regulation by the St. Johns River Water Management District pursuant to Rule 40C-4, Florida Administrative Code.
  - 4. All activity exempt from regulation by the Suwannee River Water Management District pursuant to Rule 40B-4, Florida Administrative Code.
- c. All exceptions in this Section are allowed only when the proposed use is otherwise permissible under *all other applicable laws and ordinances of this County*; site characteristics are such that wetland impacts cannot be avoided; the impacts are limited to the minimum necessary to allow the permitted use of the property; and the site development or use complies with DEP, COE, Department of Health and the WMDs' regulations for permitting and mitigation.

## SECTION 6.03 WATERFRONT DEVELOPMENT

**6.03.01 -- Purpose and Intent:** In order to maintain surface water quality and reduce nutrient loading in lakes, rivers, creeks, streams and estuaries (hereinafter referred to collectively as “water body”), this Section is enacted as a measure to protect the public health and welfare by requiring that new structures be setback a reasonable distance from surface waters, and by requiring retention of vegetated shorelines. Additional standards for wastewater discharge into the St. John’s River and on-site sewage disposal systems for waterfront property *can be found in Putnam County Ordinance 87-5*

**6.03.02 -- Applicability and Definitions:** The regulations set forth in this Section, shall apply to all water bodies within the unincorporated areas of Putnam County, Florida. For purposes of this Section:

- a. Shoreline means the land or water along the edge of a body of water that is 50 feet upland from the ordinary high-water line.
- b. Shoreline Vegetation means vegetation that grows within the shoreline area; included are terrestrial and aquatic plants associated with wetlands and both emergent (plants growing above the water surface) and non-emergent (vegetation below the water surface).
- c. Water body is defined to include rivers, lakes, creeks or pond beds and any other permanently or historically water-covered land that occurs naturally at the intended site, up to the mean high water level. Maintained drainage ditches and retention ponds are not considered water bodies.

**6.03.03 -- Surface Water Protection Requirements:** All development within 500 feet of the Ordinary High Water Line (OHWL) of a water body shall comply with the following requirements:

- a. Lots that are created after December 19, 1991 that are adjacent to a water body must have at a minimum 100 feet of frontage along the water body in order to be eligible for permits. Lots created before December 19, 1991, shall meet the requirements of the applicable laws and ordinances at the time of creation.
- b. New waterfront development shall be reviewed to insure that they do not degrade ambient water quality of adjacent waters. The developer or property owner shall submit his proposed development to Putnam County Public Works for review and approval of the storm water management plans prior to issuance of any building permits.
- c. Where the development includes an on-site sewage system, such as a septic tank, the system must meet the design standards set forth in Ordinance 87-5, as amended, and regarding on-site sewage systems, which shall be read to include the following criteria:

1. The system shall be set back a minimum of 100 feet from the mean or ordinary high water line.
  2. The wall of a retaining dam of any effluent ponds must be at least three (3) feet in elevation above the mean high water mark. Subject to approval by the Florida Department of Environmental Protection (“DEP”), exceptions may be made upon the recommendation of the Putnam County Public Works Department and approval of the Board of County Commissioners. Effluent ponds shall be prohibited in an area of special flood hazard except as provided in Section 6.05 below.
  3. It shall be unlawful for any person, firm, corporation or utility to allow raw or treated sewage to be discharged directly into a water body or a tributary connected to such water body. No permits shall be issued that will allow such discharge to occur, except as provided in *Putnam County Ordinance 91-03*.
- d. Structures, including accessory structures, shall be set back a minimum of fifty (50) feet from the water body, and a vegetated upland buffer or filter using native plants shall be preserved, restored or installed for any waterfront development. The buffer strip shall provide for sheet flow of the surface runoff, and shall be a minimum of 50 feet in width, except as follows:

It is certified that either an existing condition or a buffer has been established which meets the USDA SCS specifications in the Code 393 Field Office Technical Guide, Florida Supplement dated January 1988, for a minimum design width of:

1. 15 feet in areas of less than four and one-half percent slope where the vegetation is ground cover species or mixed woody (trees and shrubs) and ground cover species.
2. 25 feet in areas of four and one-half percent or greater slope where the vegetation is ground cover species or mixed woody (trees and shrubs) and ground cover species.
3. 30 feet in areas of less than four and one-half percent slope where the vegetation is only woody species (trees and shrubs).
4. 50 feet in areas of four and one-half percent or greater slope where the vegetation is only woody species (trees and shrubs).

Where there are associated wetlands, the 20-foot vegetative buffer requirements

of section 6.02.02.b shall apply.

- e. Underground storage tanks are prohibited within 100 feet of the mean or ordinary water line and the installation of aboveground or belowground storage tanks within 500 feet of a water body shall first be approved by the Department of Health.
- f. Except for those uses described in paragraphs 1 through 5 below, no development activity shall be undertaken within buffers required by this Section 6.03. The uses described in paragraphs 1 through 5 below will be allowed only when the proposed use is otherwise permitted under *all other applicable laws and ordinances of this County*; when the site characteristics are such that impacts cannot be avoided; when the impacts are limited to the minimum necessary to allow the permitted use of the property; and when the WMDs, the Health Department, the DEP and the COE provide written authorization indicating that the site development or use is in compliance with their respective regulations for permitting and mitigation.
  - 1. Resource-based recreational facilities such as trails, boardwalks, piers and boat ramps.
  - 2. Water dependent components of commercial development such as port facilities, marinas, fish camps, and commercial fishing and shell fishing operations.
  - 3. General Agriculture, which shall meet the State water quality standards to maintain ambient water quality in accordance with the requirements of Chapter 62-302, Florida Administrative Code, as well as the best management practices and regulations set forth in pages 7-6 through 7-14 of the “Florida Non-Point Source Management Plan, Volume Two,” (May 1989, Department of Environmental Regulation); and where applicable, “Silviculture Best Management Practices Manual,” (1993 Revision, Department of Agriculture and Consumer Services). The County may elect to apply a more current edition of a best management practices and management guideline manuals from the DEP or the Florida Department of Agriculture and Consumer Services, if available.
  - 4. Silviculture, which shall follow the “Silviculture Best Management Practices Manual,” (1993 Revision, Department of Agriculture and Consumer Services). The County may elect to apply a more current edition of a best management practices and management guideline manual from the Florida Department of Agriculture and Consumer Services, Division of Forestry, if available.
  - 5. Essential public services, which includes the following:
    - (a) Emergency repairs on public or private projects necessary for the preservation of life, health, or property where taken to implement and

accomplish the beneficial purposes of this Section.

- (b) Maintenance of public or privately owned portions of a structural storm water or drainage control system that does not constitute major construction or rebuilding.
  - (c) Activities undertaken by Federal, State, Regional and Local agencies of government.
  - (d) Utility crossings.
  - (e) Mosquito control activities performed by the State or the County.
  - (f) Scenic, historic, wildlife, or scientific preserves.
  - (g) Developing a "Wetlands Storm Water Discharge Facility" or "Treatment Wetland" in accordance with state permits received under Chapter 62-25, Florida Administrative Code.
- g. Minimization Of Impacts: Activities that are allowed in the shoreline buffers required by this Section shall be designed, constructed, maintained and undertaken in a way that minimizes the adverse effects on the beneficial functions of the affected shoreline protection zone.
- h. Design Standards For Water Dependent Uses. In addition to any other applicable design standards, uses that can be carried out only on, in or adjacent to water bodies shall be subject to the following:
- 1. Marinas, fish camps, ports, commercial docks or moorings and other appropriate water dependent uses (hereinafter collectively referred to as "marinas") shall post the following signs where they are readily visible to all users of the development:
    - (a) Regulations pertaining to handling and disposal of waste, sewage, or toxic materials.
    - (b) Regulations prohibiting the use of vessel toilets while moored unless these toilets are self-contained or have an approved treatment device.
    - (c) Regulations prohibiting the disposal of fish or shellfish cleaning wastes, scrap-fish, viscera, or unused bait in or near the development.
    - (d) Appropriate messages relating to local ecological concerns, e.g., manatee protection.

2. A marina shall include public boat launch facilities unless the applicant can demonstrate that providing such facilities is not feasible or it is determined by the County that the ramp would be excessively damaging to the aquatic environment. The intent of this requirement is to combine destructive activities to a minimal number of sites along the shoreline. Providing a boat ramp at the already-disturbed marina site may be preferable to disturbing another site along the shoreline to provide the ramp.
3. Marinas shall have adequate rest-room facilities in compliance with Department of Health regulations.
4. Adequate garbage receptacles shall be provided and maintained by the marina operator at several locations convenient to users.
5. Any dredging shall be conducted at times of minimum biological activity to avoid fish migration and spawning, and other cycles and activities of wildlife.
6. If dredging changes the littoral drift processes and causes adjacent shores to erode, the developer shall periodically replenish these shores with the appropriate quantity and quality of aggregate in accordance with appropriate permits obtained from federal, state or regional levels of government.
7. Where wet moorage is offered for boats that have on-board sewage holding facilities or where other recreational vehicles (RVs) are allowed to stay overnight, then the developer or owner of the moorage or RV sites shall provide pump-out, holding, or treatment facilities for sewage and other wastes, including bilge, contained on vessels and vehicles. The facilities shall be conveniently available to all vessels and vehicles.

i. Limitations On Clearing:

1. When applying for a building permit, a property owner who desires to clear more than twenty-five (25) feet or twenty five percent (25%) of shoreline must provide proof of receipt of a DEP or WMD permit authorizing such vegetation removal or a letter indicating that no permit is required for the clearing activity proposed; and demonstrate compliance with all other setback and buffering requirements of this section.
2. A property owner whose shoreline was cleared prior to the adoption of this code in accordance with federal, state and local regulations existing prior to the adoption of this code may not need to obtain a permit as required by this subsection, if the clearing is continuously maintained. However, if shoreline

vegetation is reestablished, a permit or letter of compliance may be required to clear it in accordance with this subsection.

- j. Mining activities are prohibited within 500 feet from a water body meandered by State. A list of the water bodies in Putnam County meandered by the State is found in Table 6.1 of Appendix VI.

## **SECTION 6.04      HABITAT OF ENDANGERED OR THREATENED SPECIES**

**6.04.01 -- Habitat Protection and Density Bonuses:** Impacts to habitat of endangered or threatened species shall first be avoided and disturbance of such habitats shall not be allowed where an otherwise permissible development can occur without impacting such habitat.

- a.      The County may require transfer of densities in order to prevent or minimize a development's impacts to habitat of endangered or threatened species.
- b.      Developments that result in the protection of significant wildlife habitat and vegetative communities that warrant protection shall be eligible for density bonuses in accordance with the requirements contained in Article 7 of this Code.
- c.      Protection of habitat for endangered and threatened species shall be considered when the County evaluates a variance request for a setback modification that would move development away from the habitat.

**6.04.02 – Endangered Species, Threatened Species, or Species of Special Concern:** Future development of property in Putnam County known to serve as a habitat for plant or animal species listed by the U.S. Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FFWCC), Florida Department of Environmental Protection, or the Florida Department of Agriculture as endangered, threatened or as species of special concern, shall comply with the management criteria of the USFWS and the FFWCC.

### **6.04.03 -- Manatee Protection Plan:**

The County shall post informational signage regarding manatees at all county owned and maintained public boat ramps.

**6.04.04 -- Development adjacent to Ocala National Forest, Greenways and other wildlife or resource conservation and preservation areas:** In the process of reviewing site plans, the County shall assess the compatibility of land use activities and development on parcels adjacent to the Ocala National Forest, established greenways, as well as other wildlife management areas, state or private preserves or other Federal, State or local natural resource protection, conservation and environmentally sensitive areas and conservation easements. The County may require additional buffering and setbacks between the proposed use and the protected area. In establishing such buffering, the reviewing board or Staff member will look at the nature and quality of the protected area; the type of use (i.e. residential, agricultural, commercial, industrial, or mining); the proximity of the use to the protected area; the intensity, size and duration of the use; other adjacent land uses; and the use's potential for impacting the protected area. A map indicating the recognized conservation, preservation and environmentally sensitive areas is provided in Map 6.2 of Appendix VI to this Code.

## **SECTION 6.05      FLOOD HAZARD MANAGEMENT AND FLOODPLAIN PROTECTION**

**6.05.01 -- Purpose:** The purpose is as follows:

- a. To protect human life and health;
- b. To minimize expenditure of public money for costly flood-control projects;
- c. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- d. To minimize prolonged business interruptions;
- e. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
- f. To help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize flood blight areas;
- g. To ensure that potential home buyers are notified that property is in a flood area; and
- h. To comply with the requirements of the National Flood Insurance Program so as to ensure the availability of flood insurance for residents and property owners.

**6.05.02 -- Intent and Scope of Regulations:** It is the intent of this Section to require any new development or expansion of an existing development to occur outside of the 100-year flood plain. This Section shall apply to all areas of special flood hazard within the jurisdiction of the County.

### **6.05.03 -- Compliance**

- a. No structure or land shall hereafter be constructed, located, extended, converted or structurally expanded inside the 100-year floodplain, unless otherwise allowed under the terms of this Section and all other applicable Federal, State and local regulations.
- b. Violation of the provisions of this Section or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a violation of this Code, which shall be punishable in accordance with the Code Enforcement procedures of Ordinance 90-26. In addition, the County may assess a civil penalty of not more than \$500 through a citation or seek injunctive relief from the Courts to, among other things, compel the correction of any such Code violation, or both. Each day that the violation

continues shall constitute a separate offense. Nothing contained herein shall prevent the County from taking such other lawful actions as are necessary to prevent or remedy any violation, including but not limited to such criminal enforcement actions as are allowed under Chapter 162, Florida Statutes.

#### **6.05.04 -- Basis and Procedures For Establishing Areas Of Special Flood Hazard**

- a. The areas of special flood hazard are those areas identified as category A, AO, AH, A1 through A30, AE and A-99 on the latest available Flood Insurance Rate Map (“FIRM”) for a given area of Putnam County. These FIRMs are developed by Federal Emergency Management Agency (“FEMA”) and adopted by reference and hereby made part of this Code [**Policy A.1.1.1**]. FIRMs are panel maps that indicate potential flood hazards within a given sector of Putnam County. Copies of these FIRMs are available to be reviewed at the Planning, Zoning and Building Department. The County also provides a composite flood zone map, which is set forth in Appendix VI as Map 6.3; however, the composite map is for illustrative purposes only and the FIRMs shall govern any formal flood hazard determination.
  
- b. Planning and Zoning Staff shall use the FIRMs (either hard copy or computer generated) to determine whether a given parcel or development activity is in an area of special flood hazard. Where an area of special flood hazard does not have an established base flood elevation on the FIRMs, Staff shall extrapolate the base flood elevation using the Corp of Engineers United States Geographical Survey (USGS) quadrangle maps with a maximum interval of 10 feet between contour lines. Should a person dispute a Staff determination of a base flood elevation or dispute that a parcel or development activity is inside an area of special flood hazard, the burden shall be on that person to demonstrate that the parcel or development activity is not in an area of special flood hazard by providing one of the following:
  1. A complete and fully executed letter of map amendment (LOMA) from FEMA; or
  2. An elevation certificate and elevation survey signed and sealed by a licensed surveyor in good standing; or
  3. When there is a discrepancy between the elevation provided through interpretation of the quadrangle map and the elevations measured in the field by the licensed surveyor, as shown on a signed and sealed elevation survey, the County Planner or the County Planner’s designee may, after conducting observations in the field at the site in question, require that the lowest floor, as well as all mechanical and electrical equipment, be elevated in accordance with whichever one of the following will result in the highest elevated level:

- (a) One foot above any observable high-water marks; or
  - (b) Two feet above the highest adjacent grade.
4. A boundary survey or a map-based determination shall not be sufficient to carry this burden and shall not be accepted as proof that a parcel or development activity is out of the area of special flood hazard.
- c. The degree of flood protection required by this Section is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This Section does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This Section shall not create liability on the part of the County or by any officer or employee thereof for any flood damages that result from reliance on this Section or any administrative decision lawfully made hereunder.

**6.05.05 -- General Construction Standards for Flood Hazard.** In all areas of special flood hazard where development is allowed or proposed, the following provisions are required:

- a. Development within areas of special flood hazard shall first be avoided. If residential development is allowed to occur in the area of special flood hazard, it must be subject to the lowest density of the applicable future land use designation.
- b. New and existing structures that are allowed or existing in the 100-year floodplain shall be anchored to prevent flotation, collapse or lateral movement of the structure.
- c. Manufactured homes shall also be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top of frame ties attached to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces.
- d. New construction and substantial improvements to structures shall be constructed with materials and utility equipment resistant to flood damage and by methods and practices that minimize flood damage. New construction or substantial improvements means structures for which the "start of construction" occurred on or after the effective date of this Code, and any alteration, repair, reconstruction or improvements to a structure which is in compliance with these flood damage prevention regulations.
- e. Electrical, heating, ventilation, plumbing, air conditioning equipment, duct work and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

- f. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwater into the system.
- g. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwater into the systems and discharges from the systems into floodwater.
- h. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- i. Where an existing structure is in compliance with the provisions of this Section, regardless of when the structure was constructed, erected or installed, any proposed alteration, repair, reconstruction or improvement to the structure shall meet the requirements of "new construction" as contained in this Section.
- j. Where an existing structure is not in compliance with this Section, any alteration, repair, reconstruction or improvement that is not a "substantial improvement", as that term is defined herein, may be undertaken only if the provisions in *Article II, Division 7, Zoning Ordinance 88-1, as amended*, regarding non-conforming uses are met, and only if, where possible, such alteration, repair, reconstruction or improvement includes additional flood hazard mitigation measures.
- k. The flood carrying capacity of a watercourse shall not be diminished by any relocation or alteration or bridge construction.
- l. Adequate drainage paths shall be provided around structures to guide storm water runoff away from them.
- m. The cumulative effect of proposed development, when combined with all other existing and anticipated development, must not increase the flood elevation more than 0.0000 inches at any point in the community.
- n. The storage, disposal or production of hazardous materials is prohibited within the 100-year floodplain.
- o. Clearing of native vegetation will be minimized in flood prone areas by following the special buffer requirements of this Article and the lot coverage and floor area ratio requirements of the applicable zoning district and future land use category.
- p. Development that is allowed to occur within the 100-year floodplain shall be required to connect to a municipal, county or investor-owned sewer system, if such a system is located within a half mile from the development and the owner/operator of the system

can and will allow the connection. Where such a connection is not possible, development shall be limited to low density residential and septic systems shall be located and designed as specified by the County Department of Health and the Department of Planning, Zoning and Building.

**6.05.06 -- Particular Design and Construction Standards for Special Flood Hazard Areas.**

In all areas indicated to be within a special flood hazard, identified as zone A, AH, A1 through A30, AE and A99 on the FIRMs, the following provisions are required:

- a. Residential construction. New construction or substantial improvement of any existing residential structure, including manufactured homes, shall first be prohibited. If the construction or substantial improvement of the residential structure is or will be in compliance with all other federal, state and local laws, but cannot otherwise be constructed outside the area of special flood hazard, the lowest floor, together with all mechanical and electrical equipment, including laundry facilities and food freezers and the basement, must be elevated no lower than one (1) foot above the base flood elevation. Lowest floor, as used throughout this Section, means the lowest enclosed area (including a basement or the ground itself where the structure is fully enclosed).
- b. Nonresidential construction. New construction or substantial improvement of any existing commercial, industrial, or other nonresidential structure shall first be prohibited. If the construction or substantial improvement of the residential structure is or will be in compliance with all other federal, state and local laws, but cannot otherwise be constructed outside the area of special flood hazard,, the lowest floor, together with all mechanical and electrical equipment, including the basement, must be elevated no lower than one (1) foot above the level of the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwater shall be provided in accordance with standards of paragraph c of this section.
- c. Elevated buildings. New construction or substantial improvements of existing elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwater to automatically equalize hydrostatic flood forces on exterior walls. In addition:
  1. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
    - (a) Provide a minimum of two (2) openings in walls or doors having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;

- (b) The bottom of all openings shall be no higher than one (1) foot above grade; and
    - (c) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both directions.
  - 2. Electrical, plumbing, and other utility connections are prohibited below the base flood elevation.
  - 3. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator).
  - 4. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.
  - 5. Use of such enclosed areas shall be limited to parking, storage, and building access.
- d. **Manufactured Homes and Recreational Vehicles.**
- 1. All manufactured homes placed or substantially improved, together with all mechanical and electrical equipment, on individual lots or parcels, in expansions to existing manufactured home parks or subdivisions, or in substantially improved manufactured home parks or subdivisions, must meet all the requirements for new residential construction contained in subsection 6.05.05 and 6.05.06.a and c, including installation on permanent foundation systems, elevation, and anchoring. At minimum, a "permanent foundation system" shall constitute reinforced piers placed on poured footings, or other foundation elements of equivalent strength. Any additions to manufactured homes subject to provisions of this subsection shall also be considered "new construction" since they must be supported by an independent foundation system. "Additions" must therefore comply with the provisions contained in subsection 6.05.05 and 6.05.06.a and c, including elevation. This may necessitate elevating of an existing manufactured home to match the required elevation of the "addition".
  - 2. All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:
    - (a) The lowest floor of the manufactured home is elevated on a permanent foundation no lower than 1 foot above the level of the base flood

elevation.

- (b) As an alternative to the requirements of paragraph a, the manufactured home chassis may be supported by reinforced piers, or other foundation elements of at least an equivalent strength, of no less than 36 inches in height above grade.
  - (c) The manufactured home must be securely anchored to the adequately anchored foundation system to resist flotation, collapse and lateral movement.
  - (d) In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as result of a flood, the manufactured home shall be replaced or improved pursuant to the standards of subsection 6.05.05 and 6.05.06.a and c, above. "**Substantial damage**" means damage to any part of the manufactured home resulting in a need for any combination of repairs, reconstruction, alteration, or improvements to a building (including electrical, plumbing and heating/air conditioning) in which the cumulative cost equals or exceeds fifty percent (50%) of the assessed value of the home prior to such damage occurring.
  - (e) Any additions to manufactured homes subject to provisions of this subsection shall be considered "new construction" subject to the provisions contained in subsection 6.05.06.a and c, including installation on permanent foundation systems, elevation, and anchoring.
3. All recreational vehicles placed on sites must be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, it is attached to the site only by quick disconnect type utilities and security devices, and it has no permanently attached structures.
- e. Accessory Structures. Structures that represent a minimal investment and that are subordinate to and accessory to the primary structure or use on the property (e.g. storage sheds, detached garages, gazebos, and barns) may be exempted from the elevation requirements of paragraph b, provided the following criteria are met:
- 1. The structure is not used for human habitation, including occupancy as a workplace for extended periods of time, and are not attached to structures used for human habitation;
  - 2. The structure is designed and constructed so as to have a low potential for damage during a flood (e.g. using flood resistant materials as provided in FEMA Technical Bulletin #88-2, and any subsequent revisions thereto);

3. The structure shall be located on the building site so as to offer the minimum resistance to the flow of floodwater (e.g. parallel to a stream, perpendicular to the ocean);
  4. The structure is firmly anchored to prevent flotation, per section 6.05.05.a; and
  5. All electrical service, heating/cooling equipment, and other mechanical or electrical equipment is either elevated above the elevation required by section 6.05.06.a, or is flood-proofed. One electrical switch and outlet connected to a ground-fault interrupt breaker is allowed below Base Flood Elevation.
- f. Temporary Structures. Certain types of structures (e.g.. fruit stands, construction site offices) may be sited temporarily on property without having to comply with the General Standards of section 6.05.05, or the elevation standard of section 6.05.06.b, provided the following criteria are met:
1. The structure is mobile, or can be made so, and is capable of being removed from the site with a minimum of four (4) hours warning.
  2. The structure does not remain on the property for 180 days or more within a 12-month period commencing from the first day the structure is on the site.
  3. The applicant submits a plan for the removal of the structure, containing the following documentation:
    - (a) The name, address, phone number and emergency contact point of the individual responsible for the removal of the temporary structure.
    - (b) The time at which the structure will be removed (i.e. a minimum of 72 hours in advance of the projected landfall of a hurricane).
    - (c) A copy of a contract or other suitable instrument with a trucking company to ensure the availability of removal of the structure when needed, together with the name, address, and emergency phone number of the responsible trucking company agent.
    - (d) Designation, accompanied by documentation (e.g.. signed consent of the property owner), of a site outside the special flood hazard area to which the temporary structure will be moved.
    - (e) Signatures of the applicant, the property owner on which the temporary structure will be placed and the owner of the temporary structure (if

different from applicant or property owner), agreeing to abide by the terms of the removal plan.

4. A "temporary development permit" shall be issued when a temporary structure is approved, and the expiration date shall be clearly marked on the face of the permit. The original copy of the removal plan shall be attached to the permit, and the documentation shall be kept on file in the Administrators office for a period of at least 5 years. A copy of the permit, together with the removal plan, shall be provided to the local emergency management coordinator.
- g. **Substantially Improved Buildings. "Substantial improvement"** means any combination of repairs, reconstruction, alteration, or improvements to a building (including electrical, plumbing and heating/air conditioning), in which the cumulative cost equals or exceeds fifty percent (50%) of the assessed value of the building. Substantially improved buildings must be elevated and otherwise brought into conformance with the requirements for new construction contained in this Section. In determining "substantial improvement", the County shall utilize data for the assessed value of the structure and the value of the improvements that are justifiably comparable. Substantial improvement calculations shall include the cost of labor and mechanical, electrical and plumbing systems, cabinetry, finishes, and any other improvements that will be permanently affixed to the structure, except for exterior decks and porches. If the improvement project is conducted in phases, the total of all costs associated with each phase, beginning with issuance of the first permit, shall be utilized to determine whether "substantial improvement" has occurred. Interpretation and determination of substantial improvements shall rely on applicable FEMA publications and policy guidance.
1. **Rehabilitations, reconstructions, and renovations:** When an existing building is rehabilitated, reconstructed, or renovated, with no or only minimal additions, and the total improvement costs meet the definition of "substantial" (equal or exceed 50% of the value of the structure), the existing structure must be elevated and otherwise brought into conformance with this Section.
  2. **Lateral additions:** When the substantial improvement is a lateral addition to an existing structure, only the addition is required to be elevated and conform with the standards of sections 6.05.05 and 6.05.06, unless the common wall between the existing building and the addition is substantially removed or improvements are being made to the existing structure which, independently from the addition, equal or exceed 50% of the assessed value of the structure. In such cases, the lateral addition is deemed to constitute only one part of a reconstruction or renovation, and both the existing structure and the addition must conform to the Section.
  3. **Vertical additions:** When the substantial improvement is a vertical addition to an

existing structure, the improvement is classified as a "renovation" or "reconstruction", and the existing structure must be elevated and brought into conformance with this Section.

- h. Improvements to "post-FIRM" structures. Any improvements made to buildings for which permits were issued on or after the effective date of the Flood Insurance Rate Map ("post-FIRM buildings"), shall conform to the standards of this Section.
- i. Historic buildings. Any improvements to historic structures listed in the Local Register of Historic Places or identified as contributing to a district listed in the Local Register of Historic Places per Section 4.04 of this Code, or otherwise identified by the appropriate state or federal agency as a historic structure, may be exempted from one or all of the standards contained in this Section, provided the request for an exemption is approved as a variance under Article 12 of this Code, and the proposed improvements are certified by a certified local government or the State Historic Preservation Officer as maintaining the historical integrity and classification of the building.
- j. At a minimum, in all situations, no encroachments, including fill material or structures shall be located within a distance of the stream bank equal to five times the width of the stream at the top of bank or twenty feet each side from top of bank, whichever is greater.

**6.05.07 -- Floodways.** Located within areas of special flood hazard there may be areas that function as floodways. Floodways lie inside the 100-year Floodplain and include the channel of a natural stream or river and portions of the floodplain adjoining the channel that must be free from development in order to carry and discharge the floodwater or flood flow of any natural stream or river during a 100-year flood without an increase in the flood heights. The known floodways for unincorporated Putnam County are set forth in an August 1994 Flood Insurance Study published by FEMA and indicated on most current FIRMs. Table 3 of that Study is provided as Table 6.2 in Appendix VI of this Code. Since the floodway is an extremely hazardous area due to the velocity of floodwater that carries debris, potential projectiles and has erosion potential, the following provisions shall apply to activity in a floodway:

- a. New construction, including enclosed accessory structures, substantial improvements, fill and other developments or encroachments are prohibited. Upon an application for a variance from this requirement, Planning and Zoning staff and the County Building official may consider a certification (with supporting technical data) by a registered professional engineer that demonstrates that such encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge. This certification shall be based on an evaluation utilizing methodologies specified by the FEMA Region IV office. Such certification does not, by itself, create a right to develop in a floodway. In any event, no development will be allowed that causes more than a 0.0000 ft. rise in the Base Flood Elevation.

- b. If paragraph “a” is satisfied, all new construction and substantial improvements shall comply with all other applicable portions of this Section.
- c. The placement of manufactured homes (mobile homes) is prohibited, except in an existing and vested manufactured home (mobile homes) park or subdivision. A replacement manufactured home may be placed on a lot in an existing and vested manufactured home park or subdivision provided the anchoring standards of section 6.05.06.a, and the elevation standards of section 6.05.06.c and paragraph a.1 of this section are met. No other exceptions shall be allowed to this prohibition.
- d. Standards along streams with no identified floodways. Where no "floodway" has been designated along a stream in a regulated flood zone for which Base Flood Elevations have been provided on the FIRM, no encroachments, including fill material or structures shall be located within areas of special flood hazard, unless certification by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood at any point within the community. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles. Streams with no flood zone designation shall meet the requirements of section 6.05.08 below. If a certification is provided, all proposed new construction and substantial improvements shall comply with all other applicable portions of this Section.

**6.05.08 -- Streams Without Established Base Flood Elevations or Floodways.** Development proposed to be located or existing within the areas of special flood hazard that include small streams but where no base flood data have been provided or where no floodways have been provided, the following provisions apply:

- a. No encroachments, including fill material or structures shall be located within a distance of the stream bank equal to five (5) times the width of the stream at the top of bank or twenty (20) feet each side from top of bank, whichever is greater, unless certification by a registered professional engineer is provided demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- b. New construction or substantial improvements of structures or manufactured homes shall be elevated in accordance with this Section.

**6.05.09 -- Areas Of Shallow Flooding (AO Zones).** Located within the areas of special flood hazard are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:

- a. All new construction and substantial improvements of residential and non-residential structures shall conform to the design standards of subsection 6.05.05 and 6.05.06 of this Section, and shall have the lowest floor, including basement, elevated above the highest adjacent grade at a height that is equal to or above the depth number specified on the applicable FIRM (i.e. if the FIRM indicates a depth number of 2 feet, the elevation of the lowest floor must be at least 2 feet above the highest adjacent grade). If no depth number is specified, the lowest floor, including basement, shall be elevated, at least two (2) feet above the highest adjacent grade.
- b. Accessory or temporary structures shall be exempt from these requirements, provided they conform to the standards of section 6.05.06.f.
- c. No encroachments, including fill material or structures shall be located within a distance of the stream bank equal to five (5) times the width of the stream at the top of bank or twenty (20) feet each side from top of bank, whichever is greater.

**6.05.10 -- Subdivision Proposals.** All subdivision proposals, including industrial and commercial subdivisions, shall be consistent with the need to minimize flood damage. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards. Base flood elevation data shall be provided for subdivision proposals and other proposed development (including shopping centers and manufactured or mobile home parks) which are greater than the lesser of fifty (50) lots or five (5) acres. The base flood boundary, floodway and the base flood elevation for the building site on each lot shall be clearly marked on all recorded subdivision plats for all residential, commercial, or industrial use.

**6.05.11 -- Criteria for Variances To Flood Hazard Management Regulations**

- a. Additional Finding: In addition to the criteria described in *Article II, Division 5 of Zoning Ordinance 88-1*, and in order to approve any requested variance, the Zoning Board of Adjustment must find that the requested variance will not result in an increase in the base flood elevation (“BFE”), or result in additional threats to public safety, additional public expense, the creation of nuisances, fraud or victimization of the public, or conflicts with other local ordinances.
- b. Variances may be issued for the repair or rehabilitation of historic structures located in the flood hazard area upon a determination that the proposed repair or rehabilitation would not preclude the structure's continuing designation as a historic structure and the variance is the minimum to preserve the historic character and design of the structure.
- c. Considerations: No variance shall be permitted that will result in an increase of the BFE. If it is determined that the proposed variance will not result in an increase to the BFE, the Zoning Board of Adjustment shall consider the following before granting a variance:
  - 1. The danger that materials may be swept from the site onto other lands.
  - 2. The danger to life and property from flooding or erosion.
  - 3. The potential of the proposed facility and its contents to cause flood damage and the effect of that damage on the owner and the public.
  - 4. The importance of the services provided by the proposed facility to the community.
  - 5. The availability of alternative locations, not subject to flooding or erosion, for the proposed use.

6. The compatibility of the proposed use with existing and anticipated neighboring development.
  7. The relationship of the proposed use to the comprehensive plan and floodplain management program for the area.
  8. Safe vehicular access to the property in times of flood.
  9. The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and effects of wave action, if applicable, at the site.
  10. The costs of providing governmental services during and after floods including maintenance and repair of public utilities and facilities.
- d. Special Restriction For Regulatory Floodways: Variances that would increase flood levels during the base flood shall not be issued within any Floodway.
  - e. Flowage Easements: No variance that would increase flood damage on other property shall be granted unless flowage easements have been obtained from the owners of all affected properties. However, in no event shall a variance be granted that would increase the elevation of the BFE.
  - f. Notification: All variances to the flood damage prevention regulations shall:
    1. Specify the difference between the flood protection elevation and the elevation to which the structure is to be built.
    2. State that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
    3. State that construction below the Flood Protection Level increases risks to life and property.
  - g. Notification Record Of Variances To Be Maintained: The Planning, Zoning and Building Department shall maintain a record of all variances, including the justification for their issuance and a copy of the notice of the variance.

## **SECTION 6.06 POTABLE WATER WELL FIELD PROTECTION**

**6.06.01 -- Purpose and Intent:** The purpose and intent of this Section is to safeguard potable water supplies by regulating the storage, handling, use or production of hazardous substances around public potable water supply wells. It is also the intent and purpose of this Section to control development in and adjacent to designated wellheads to protect water supplies from potential contamination by regulating or, where appropriate, prohibiting polluting uses. The availability of adequate and dependable supplies of quality potable water for domestic, agricultural, and industrial use is of primary importance to the health, safety and welfare of the citizens of Putnam County. Thus, this Section sets forth standards protecting both the quantity and quality of the groundwater supply from public wellheads as defined herein. Specific setback and protection requirements for individual, private water wells shall be in accordance with Department of Health regulations .

### **6.06.02 -- Establishment of Well Field Protection Zone**

- a. A Well Field Protection Zone is hereby established, consisting of a 500-foot fixed radius around all public water wellheads in Putnam County in order to protect such well heads from adverse effects of development. A public water wellhead includes any publicly or privately owned potable water wellhead that requires a consumptive use permit or other permit from the DEP, SJRWMD or SRWMD. The locations of all known public wellheads are delineated on Map 6.4 of Appendix VI to this Code.
- b. For the purposes of this section, non-polluting land uses shall include recreational and conservation land uses and low-density residential land uses of no more than 1 dwelling unit per 5 acres. Non-polluting land uses shall be exempt from the development restrictions of Well Field Protection Zone. All other uses are presumed to be polluting land uses and therefore subject to the development restrictions in subsection 6.06.03.
- c. The County is hereby authorized to purchase property, through condemnation proceedings if necessary, within a Well Field Protection Zone and set it aside for such non-polluting land uses. In order to protect the health and safety of the potable water well field within a Well Field Protection Zone, the County may require the relocation of existing polluting land uses to an area outside of the Well Field Protection Zone. Where possible, such relocation shall occur through a transfer of density or a set back variance for a portion of the property outside of the Well Field Protection Zone.
- d. The underlying zoning in a Well Field Protection Zone shall not be up zoned to a land use designation that is more intense or dense than low-density residential, either through the rezoning process or a Comprehensive Plan Amendment process.

### **6.06.03 -- Development Restrictions Within The Well Field Protection Zone**

- a. Where prohibition or relocation of a use, or the outright purchase of the property are not possible within a Well Field Protection Zone, any proposed or existing polluting land use shall be subject to the additional development restrictions and design standards set forth below. **[Policy D.1.7.1]**
  
- b. New Development. In addition to any other applicable design and regulatory standards set forth in this Code, the following standards shall be applied to new development wholly or partially located within a Well Field Protection Zone
  1. On-site sewage treatment.
    - (a) Any allowed or existing development within the well field protection zone must be connected to a municipal, county or investor-owned sewage system, if such a system is located or is planned to be located within one-half mile of the protection zone and the owner/operator can and does permit such connection.
    - (b) Subject to subparagraph (c) below, where connection to a municipal, county or investor-owned sewage system is not possible and the lot or parcel is of a sufficient size, the development shall install an individual sewage system in accordance with County Ordinance 87-5
    - (c) Individual sewage systems (i.e. septic systems) are not permitted on lots or parcels less than one acre in size within a well head protection zone, unless there is a sufficient portion of the lot or parcel located outside of the well head protection zone to allow for installation of an on-site sewage disposal system outside the zone in accordance with the other requirements of this Code regarding on-site sewage disposal.
  
  2. Residential land uses shall not be permitted in any wellhead protection zone unless they have a density of 1 dwelling unit per 5 acres or lower, or they are capable of connecting to a municipal, county or investor-owned sewage treatment system.
  
  3. Storage Tanks. Subject to the limitations and prohibitions set forth in subparagraph c below, storage tanks storing hazardous waste or hazardous substances shall be permitted, designed and maintained in accordance with Chapter 376, Florida Statutes and the permitting requirements and prohibitions of the DEP.
    - (a) Tanks with storage capacity of less than 110 gallons shall be above ground and have appropriate secondary containment systems sufficient to contain 110% of the materials capable of being stored in the tanks.

- (b) In the event that any storage tank within a wellhead protection zone is found to be leaking, the owner and/or operator shall immediately empty the remaining contents of the tank and the emptied product shall be transferred to approved product-tight holding tanks. The leak shall also be reported to Planning and Zoning Department and the DEP.
  4. Storm water runoff. All development inside a Well Field Protection Zone, including parking facilities, shall construct or make use of an existing storm water management system, which moves water runoff to retention or storage facilities outside of the Well Field Protection Zone. Storm water retention or storage is prohibited inside the Well Field Protection Zone. The costs of any improvements to an existing system made necessary by new uses or expansion of existing uses shall be borne by the applicant. In areas of greater sensitivity to development pressures, the Planning and Zoning Department may require more stringent design and construction standards for the storm water management system.
  5. Injection and drainage wells of any kind are strictly prohibited within the Well Field Protection Zone.
  6. Solid waste landfills and hazardous waste storage facilities (except as provided in subparagraph c) are strictly prohibited in the Well Field Protection Zone.
  7. Non-residential uses within a Well Field Protection Zone shall first be prohibited. Non-residential uses that are allowed shall be limited to uses allowed under CPO and C-1 zoning. All other non-residential uses shall not be permitted within the Well Field Protection Zone, and any non-residential uses otherwise lawfully located inside the protection zone prior to the effective date of this Code shall be a non-conforming use.
- c. Hazardous Substances in a Well Field Protection Zone.
1. Storage of hazardous waste or substances that are not necessary and incidental to the on-going operations and maintenance of an existing and otherwise permissible use are prohibited.
  2. Hazardous substances necessary or incidental to the on-going operations and maintenance of an otherwise permissible use, including residential uses, must be distributed, sold and/or stored in self-contained packaging or storage vessels in accordance with the manufacturer's requirements, federal regulations or state regulations, whichever is more stringent. Leaking or broken packages or vessels containing hazardous materials shall be removed from the premises and stored in product-tight container outside of the Well Field Protection Zone.

3. Where storage of hazardous waste or other substances is necessary and incidental to the on-going operations of a permitted use, the owner or operator shall store such wastes or substances on or over an impervious surface with sufficient containment to prevent such substances from entering the groundwater in the event of a spill or leak. Hazardous substances that are no longer in use or cease to be a necessary part of an allowed use shall be removed and disposed of in a lawful manner within 30 days of discontinued use. Hazardous waste generated by an allowed use shall be removed from the zone within thirty (30) days of being generated.
4. Hazardous waste or substances that are not necessary and incidental to the on-going operations or maintenance of an existing use are prohibited.
5. Violation of the provisions of this Section or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a violation of this Code, which shall be punishable in accordance with the Code Enforcement procedures of Ordinance 90-26. In addition, the County may assess a civil penalty of not more than \$500 through a citation or seek injunctive relief from the Courts to, among other things, compel the correction of any such Code violation, or both. . Each day that the violation continues shall constitute a separate offense. Nothing contained herein shall prevent the County from taking such other lawful actions as are necessary to prevent or remedy any violation.

d. Existing Activity

1. Any land use, other than a non-polluting use, located within five hundred (500) feet of a well serving the public will not be permitted to expand or to be substantially improved.
2. Any new public water wellhead will be located at least five (500) feet from existing polluting land uses so that it does not cause an existing facility, activity or land use to become a nonconforming use under this Section.

e. Exemptions. The following activities or uses are exempt from the provisions of this Section:

1. The continuous transportation of any hazardous waste through Well Field Protection Zone is exempt from the restrictions and prohibitions of this subsection, only when no other alternative route is reasonably available. Continuous transportation means the non-stop movement of hazardous substances by a mobile vehicle. It shall not be interpreted to mean the use of pipes, a waste

transfer station or any other permanent or semi-permanent facility for transport or storage of hazardous waste within the protection zone; nor shall it be interpreted to allow the parking or temporary storage of hazardous waste within the protection zone.

2. Agricultural and silvicultural uses, except that said uses shall comply with Chapter 487.011 et seq, the Florida Pesticide Law and the Florida Pesticide Application Act of 1974, as amended, and any rules adopted pursuant thereto or otherwise applicable to agricultural and silvicultural uses. This exemption does not include the storage and treatment facilities of dairy farms or concentrated livestock feeding operations, which in all cases shall be located at least 300 feet from the public wellhead.
3. The use of any hazardous substance solely as fuel in a vehicle fuel tank or as lubricant in a vehicle. This is not meant to expressly allow for refueling or lubricating operations within zone. It is only meant to permit the parking of such vehicles, where parking is otherwise allowed under this Code.
4. Fire, police, emergency medical services, governmental emergency management center facilities, and public utilities.
5. Geotechnical boring.
6. Exceptions provided for under Rule 62-521.400, Florida Administrative Code. The applicant or property owner shall be responsible for determining whether the proposed use fits within an exception under this state rule and obtain a permit, or other written documentation from the state approving the proposed development within the Well Field Protection Zone.

## **SECTION 6.07            GROUNDWATER RECHARGE AREAS**

**6.07.01 -- Purpose and Intent:** The availability of adequate and dependable supplies of potable quality water is of primary importance to the health, safety and welfare of the citizens of Putnam County. Therefore, standards are described and adopted in this Section with the intent of protecting both the quantity and quality of the groundwater supply. This is accomplished by prohibiting certain uses that threaten to pollute the Floridan aquifer and establishing limitations upon impervious surface coverage created by development. The term aquifer means an underground formation, or group of formations, or part of a formation, that is permeable enough to transmit and store usable quantities of water. It is the purpose of this Section to provide standards necessary to protect the recharge capabilities of areas of high aquifer recharge to the Floridan Aquifer and to minimize the risk of aquifer contamination from pollution. In Putnam County the top of the Floridan Aquifer is considered to be the top of the continuous limestone unit of the Hawthorn Formation where present or the top of the Ocala Limestone where the limestone unit of the Hawthorn Formation is absent.

**6.07.02 -- Applicability:** The requirements of this Section shall apply to all areas of high aquifer recharge to the Floridan Aquifer (a.k.a. “primary aquifer recharge areas”). Areas of high aquifer recharge include areas where recharge is more than 8 inches per year, as shown on the St. Johns River Water Management District Map entitled Floridan Aquifer Recharge Areas of Putnam County (December 1996); as well as that portion of the County that falls within the Suwannee River Water Management District. Areas of high aquifer recharge shall be protected through prohibition of landfills, underground storage of toxic materials and locating of hazardous substances within such areas, as well as by additional regulations for permissible development.

**6.07.03 -- Establishment of Aquifer Protection Zone:** There is hereby established an Aquifer Protection Zone consisting of all property located in areas of high aquifer recharge to the Floridan Aquifer. All such primary aquifer recharge areas known to the County are identified on Map 6.5 found in Appendix VI to this Code. Site specific information provided in writing from a professional in an appropriate field of expertise for determination of recharge areas may be substituted for Map 6.5 in determining whether a given development lies within an area of high recharge.

### **6.07.04 -- Development Restrictions within the Zone of Protection:**

- a.        The following uses shall be strictly prohibited within areas of high recharge (see Map 6.5): auto salvage and junkyards, landfills, underground storage of toxic materials and hazardous waste sites.
  
- b.        Development Standards: All development within the protection zones shall first be prohibited. Development allowed inside the recharge zone shall be designed, constructed

and maintained using a method of capturing storm water run-off on site in a facility designed to retain the runoff and recharge the aquifer. A development will not be required to follow these additional standards if it has an impervious surface that is less than 35% of the total area of the development site.

- c. Hazardous Substances in an Aquifer Protection Zone.
1. Storage of hazardous waste or substances that are not necessary and incidental to the on-going operations and maintenance of an existing and otherwise permissible use is prohibited.
  2. Hazardous substances necessary or incidental to the on-going operations and maintenance of an otherwise permissible use, including residential uses, must be distributed, sold and/or stored in self-contained packaging or storage vessels in accordance with the manufacturer's requirements, federal regulations or state regulations, whichever is more stringent. Leaking or broken packages or vessels containing hazardous materials shall be removed from the premises and stored in product-tight container outside of the Aquifer Protection Zone.
  3. Where storage of hazardous waste or other substances is necessary and incidental to the on-going operations of a permitted use, the owner or operator shall store such wastes or substances on or over an impervious surface with sufficient containment to prevent such substances from entering the groundwater in the event of a spill or leak. Hazardous substances that are no longer in use or cease to be a necessary part of an allowed use shall be removed and disposed of in a lawful manner within 30 days of discontinued use. Hazardous waste generated by an allowed use shall be removed from the zone within thirty (30) days of being generated.
  4. Hazardous waste or substances that are not necessary and incidental to the on-going operations or maintenance of an existing use are prohibited.
  5. Violation of the provisions of this Section or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a violation of this Code, which shall be punishable in accordance with the Code Enforcement procedures of Ordinance 90-26. In addition, the County may assess a civil penalty of not more than \$500 through a citation or seek injunctive relief from the Courts to, among other things, compel the correction of any such Code violation, or both. Each day that the violation continues shall constitute a separate offense. Nothing contained herein shall prevent the County from taking such other lawful actions as are necessary to prevent or remedy any violation.

- d. Transfer of density from the recharge area to the upland portion of a site shall be permitted through approval of an appropriate Planned Unit Development (PUD) application and by establishing flexibility in the lot area requirements in the various zoning districts established in this Code in order to insure that development occurs outside of the recharge area. The recharge area will be included in calculating the gross density applicable to a property.
- e. Recharge protection shall be considered when the County evaluates a variance request for a setback modification that would move development away from an area of high recharge.

**6.07.05 -- Development Approval.** No permit shall be approved or certificate of occupancy issued until the Director of the Department of Public Works approves the storm water management facility required by this Section.

**6.07.06 -- Exemptions.** The following activities or uses are exempt from the provisions of this Section:

- a. The continuous transportation of any hazardous substance through an Aquifer Protection Zone. This exemption shall not be interpreted to exempt the use of pipes, a waste transfer station or any other permanent or semi-permanent facility used to transport hazardous substances within the protection zone, nor does it exempt temporary storage of hazardous substances within the protection zone.
- b. Agricultural and silvicultural uses, other than pig, poultry, cattle and dairy feedlots or farming operations that require a waste disposal permit from the DEP, are exempt. Except that such agriculture and silviculture uses shall comply with Chapter 487.011 et seq, the Florida Pesticide Law and the Florida Pesticide Application Act of 1974, as amended, and any rules adopted pursuant thereto.
- c. The use of any hazardous substance solely as fuel in a vehicle fuel tank or as lubricant in a vehicle. This is meant only to allow a vehicle to park within an Aquifer Protection Zone. It does not allow for refueling or lubricating operations within the zone, unless otherwise allowed for in this Section.
- d. Fire, police, emergency medical services, governmental emergency management center facilities, and public utilities.
- e. Geotechnical boring.

**APPENDIX VI**

**Tables**

**Maps**