

## ***CHAPTER SIX – Protection of Natural Features and Resources***

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The provisions set forth in Chapter 6 are intended to protect the natural features and natural resources within Coffee County, and to implement policies in the Comprehensive plan. The natural features and natural resources included in Chapter 6 are groundwater recharge areas and river corridors.

### **6-1 Groundwater Recharge Area District**

#### **6-1.1 Purpose**

In order to provide for the health, safety, and welfare of the public and a healthy economic climate within Coffee County and surrounding communities, it is essential that the quality of public drinking water be ensured. For this reason, it is necessary to protect the subsurface water resources that Coffee County and surrounding communities rely on as sources of public water.

Groundwater resources are contained within underground reservoirs known as aquifers. These aquifers are zones of rock beneath the earth's surface capable of containing or producing water from a well. They occupy vast regions of the subsurface and are replenished by infiltration of surface water runoff in zones of the surface known as groundwater recharge areas. Groundwater is susceptible to contamination when unrestricted development occurs within significant groundwater recharge areas. It is, therefore, necessary to manage land use within groundwater recharge areas in order to ensure that pollution threats are minimized.

### **6-2 Definitions**

1. **Aquifer** means any stratum or zone of rock beneath the surface of the earth capable of containing or producing water from a well.
2. **Drastic** means the standardized system for evaluating groundwater pollution potential using the hydrogeologic settings described in U.S. Environmental Protection Agency document EPA-600-2-87-035.
3. **Pollution Susceptibility** means the relative vulnerability of an aquifer to being polluted from spills, discharges, leaks, impoundments, applications of chemicals, injections and other human activities in the recharge area.
4. **Pollution Susceptibility Map** means the relative vulnerability to pollution prepared by the Department of Natural Resources, using the DRASTIC methodology. (Georgia Department of Natural Resources Hydrologic Atlas 20: Groundwater Pollution Susceptibility Map of Georgia)

5. Recharge Area means any portion of the earth's surface, where water infiltrates into the ground to replenish an aquifer.
6. Significant Recharge Areas means those areas mapped by the Georgia Department of Natural Resources in Hydrologic Atlas 18 (1989 edition)

### **6-3 Establishment of the Groundwater Recharge Area Protection District**

The Groundwater Recharge Area District is hereby established which shall correspond to all lands within the jurisdiction of Coffee County, Georgia that are mapped as significant recharge areas by the Georgia Department of Natural Resources in Hydrologic Atlas 18, 1989 edition. Said map is hereby adopted and made a part of this ordinance.

### **6-4 Determination of Pollution Susceptibility**

Each recharge area shall be determined to have a pollution susceptibility of high, medium, or low based on the Georgia Pollution Susceptibility Map, Hydrologic Atlas 20, 1992 edition. Said map is hereby adopted and made a part of this ordinance.

### **6-5 Protection Criteria**

1. No construction may proceed on a building or manufactured home to be served by a septic tank unless the Coffee County Health Department first approves the proposed septic tank installations as meeting the requirements of the Georgia Department of Human Resource for On-Site Sewage Management (hereinafter DHR Manual), and Sections B. and C. below.
2. New homes served by a septic tank/drain field system shall be on lots having minimum size limitations as follows, based on application of Table MT-1 of the DHR Manual (hereinafter DHR Table MT-1). The minimums set forth in Table MT-1 may be increased further based on consideration of other factors (set forth in Sections A-F) of the DHR Manual.
  - a. 150% of the subdivision minimum lot size calculated based on application of DHR Table MT-1 if they are within a high pollution susceptibility area.
  - b. 125% of the subdivision minimum lot size calculated based on application of DHR Table MT-1 if they are within a medium pollution susceptibility area.
  - c. 110% of the subdivision minimum lot size calculated based on application of DHR Table MT-1 if they are within a low pollution susceptibility area.
3. New manufactured home parks served by septic tank/drainfield systems shall have lots or spaces having minimum size limitations as follows, based on application of Table MT-

2 of the DHR Manual (hereinafter DHR Table MT-2). The minimums set forth in Table MT-2 may be increased further based on consideration of other factors (set forth in Sections A-F) of the DHR Manual.

- a. 150% of the subdivision minimum lot or space size calculated based on application of DHR Table MT-2 if they are within a high pollution susceptibility area.
  - b. 125% of the subdivision minimum lot or space size calculated based on application of DHR Table MT-2 if they are within a medium pollution susceptibility area.
  - c. 110% of the subdivision minimum lot or space size calculated based on application of DHR Table MT-2 if they are within a low pollution susceptibility area.
4. New agricultural waste impoundment sites shall be lined if they are within a high pollution susceptibility area; a medium pollution susceptibility area and exceed 15 acre-feet; or a low pollution susceptibility area and exceed 50 acre-feet. As a minimum, the liner shall be constructed of compacted clay having a thickness of one-foot and a vertical hydraulic conductivity of less than  $5 \times 10^{-7}$  cm/sec or other criteria established by the Natural Resource and Conservation Service.
  5. New above-ground chemical or petroleum storage tanks, having a volume of 660 gallons or more, shall be double-walled or have secondary containment for 110% of the volume of such tanks or 110% of the volume of the largest tank in a cluster of tanks. Such tanks used for agricultural purposes are exempt, provided they comply with all federal requirements.
  6. New facilities that handle hazardous materials of the types listed in section 312 of the Resource Conservation and Recovery Act of 1976 (excluding underground storage tanks) and in amounts of 10,000 pounds or more on any one day shall perform their operations on impervious surfaces and in conformance with any applicable federal spill prevention requirements and local fire code requirements.
  7. Permanent storm water infiltration basins shall not be constructed in areas having high pollution susceptibility.

#### **6-6 Exemptions**

Any lot of record approved prior to the adoption of this ordinance is exempt from the minimum lot size requirements contained in Sections 6-5 (2) and 6-5 (3) of this ordinance.