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INTRODUCTION

The purpose of the Public Facilities Element is to ensure that public facilities are available to meet the needs of Lake County. The Public Facilities Element is broken down into five sub-elements: sanitary sewer, potable water, stormwater, solid waste, and aquifer recharge.

Lake County does not own, operate, or maintain any potable water systems or wastewater systems, nor does Lake County have any water or sewer serviced areas. Municipal governments provide sanitary sewer and wastewater treatment within their jurisdictions and in adjacent areas that may be annexed as development in the county continues. Where public services are not available, private companies provide them. Septic systems and private wastewater treatment plants (package plants) treat waste in unincorporated Lake County. Potable water is provided by municipalities, private entities, or private wells.

Lake County's development and quality of life is dependent on this network of public facilities and services. Each type of service has a unique set of constraints and must adapt to growth and change differently. This element contains goals, objectives, and policies that establish the framework for the provision of public facilities in the County to meet the demand created by existing and future development.

The Florida Natural Areas Inventory has prioritized several conservation areas partially or wholly within Lake County, including, but not limited to: the Green Swamp Area of Critical State Concern, and the Wekiva/Ocala Greenway. Select ecosystems of Lake County are thus fragile and closely linked with the ecological sustainability of communities within and beyond the county's boundaries. Issues of plant and animal biodiversity and water supply are among the most important environmental considerations for the County.

The county is faced with the challenge of balancing development pressures with the preservation of the natural environment. To this end, Lake County will comply with all legislation (Federal, State, Regional and Local) as it pertains to Lake County's environmental sensitive areas.

DEFINITIONS

The following definitions shall be used in the review or interpretation of this comprehensive plan. Where a definition contained within this section is different or inconsistent with the definitions contained in enabling state legislation or is inconsistent with the definition contained within the Florida Administrative Code, the definition contained herein shall be utilized.

Acutely Hazardous Waste - Wastes designated by the U.S. EPA as being significantly more dangerous in small amounts than other hazardous wastes. Wastes listed in Appendix B of "Understanding the Small Quantity Generator Hazardous Waste Rules: A Handbook for Small Business" EPA/530-SW86-019, September 1986.

Adverse Effect - {upon a natural community} Direct contamination, destruction, or that which contributes to the contamination or destruction of a natural community, or portion thereof, to the degree that its environmental benefits are eliminated, reduced, impaired, or where there is a resultant threat to its present or future function.

Altered Natural Communities - Natural resources which have been substantially affected by development but continue to provide some environmental benefit.

Ambient - Circulating or surrounding.

Air Quality Control Region - Any air quality control region designated pursuant to Section 107 of the Clean Air Act. The boundaries of the air quality control regions in Florida are set forth in 40 CFR Sections 81.49, 81.68, 81.95, 81.96, and 81.97.

Aquatic Preserves - Submerged lands owned by the State of Florida as identified in Chapter 258, Florida Statutes, which have been set aside in an essentially natural or existing condition for the benefit of future generations.

Aquifer - A geologic formation, group of formations, or part of a formation that will yield significant quantities of water to streams, wells and springs. (See Floridan Aquifer System; Intermediate Aquifer System; and Surficial Aquifer System.)

Aquifer vulnerability - The tendency or likelihood for contaminants to reach the top of the applicable aquifer system after introduction at land surface based on existing knowledge of natural hydrological conditions. The areas requiring the most protection are those defined by the FGS on FAVA maps as being most vulnerable.

Aquifer Protection Zones - Those areas within "Protected Recharge Areas" "Areas Most Vulnerable to Contamination" and springsheds. In the Wekiva Study Area this term shall also include areas within or adjacent to "Most Effective Recharge Areas".

Aquifer Vulnerability - The tendency or likelihood for contaminants to reach the top of the specified aquifer system after introduction at land surface based on existing knowledge of natural hydrogeologic conditions.

Area Most Vulnerable to Contamination - Areas within the Primary Protection Zone as determined by FGS aquifer vulnerability maps.

Area of Special Flood Hazard - Any locality that, because of topography, soil limitations or geographic location, is subject to periodic or occasional inundation.

Artificial Waterway - Dredged canal created by man in upland or wetland.

Assimilative Capacity - The greatest amount of a pollutant loading that a water or wetland can receive without violating state water quality standards.

Best Management Practices (BMP) - Management or design criteria adopted for areawide application, usually associated with agricultural, horticultural, or commercial forestry pursuits.

Bicycle and Pedestrian Ways - Any road, path, or way which is open to bicycle travel and travel afoot and from which motor vehicles are excluded.

Biohazardous Waste - Any solid waste or liquid waste which may present a threat of infection to humans. The term includes, but is not limited to, nonliquid human tissue and body parts; laboratory and veterinary waste which contain human-disease-causing agents; used disposal sharps, human blood, and human blood products and body fluids; and other materials which in the opinion of the Florida Department of Health and Rehabilitative Services represent a significant risk of infection to persons outside the generating facility.

Biological Waste - Solid waste that causes or has the capability of causing disease or infection and includes, but is not limited to, biohazardous waste, diseased or dead animals, and other wastes capable of transmitting pathogens to humans or animals.

Borrow Activities - See Excavation.

Buffer Zone - Area which shields a natural community of protected species habitat by prohibiting development activities and removal of native vegetation. Such zones use naturally occurring vegetation or open space for the purposes of limiting the effects of development on natural systems or the recreational value of natural features.

Common Area - Any part of a development designed and intended to be used in common by the owners, residents or tenants of the development.

Common Open Space - All open space, natural areas and recreational areas which are part of a common area.

Compensating Storage - Physical replacement of natural flood water storage volumes that would be displaced in areas of special flood hazard due to development. The volume of compensating storage shall be calculated assuming normal wet season ground water levels.

Comprehensive Plan - A plan adopted pursuant to the "Local Comprehensive Planning and Land Development Regulation Act" and meeting the requirements of ss. 163.3177 and 163.3178.

Cone of Depression - A depression in the potentiometric surface of a body of ground water, which had the shape of an inverted cone and develops around a well from which water is being withdrawn.

Cone of Influence - The area in an aquifer around a well or wellfield where pumping affects the potentiometric surface in that aquifer.

Confined Aquifer - An aquifer that is bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself.

Confining Layer or Confining Unit - A rock or soil bed that lies above or below an aquifer and that allows very little water to flow through the other layers.

Confining Unit - A formation that does not conduct readily water and/or is less permeable than the aquifers above or below it. When a confining unit is above an aquifer, recharge to or discharge from that aquifer is restricted by that confining layer.

Connected Wetland - A vegetative community which is part of a flowing water system or a runoff system where waters flow through during times of heavy rainfall.

Conservation - The prudent use of natural resources commensurate with environmental functions.

Conservation Plan - A formal document, prepared or approved by the Lake County Soil and Water Conservation District organized pursuant to Chapter 582, Florida Statutes, which outlines a system of management practices to control soil erosion, reduce sediment loss or protect the water quality on a specific parcel.

Conservation Open Space - Land area that is suitable for conservation uses.

Conservation Uses - Activities within land areas designated for the purpose of conserving or protecting natural resources or environmental quality and includes areas designated for such purpose as flood control, protection of quality or quantity of groundwater of surface water, floodplain management, fisheries management, or protection of vegetative communities or wildlife habitat.

Critical - Of special importance, requiring high-priority treatment, usually applied to resource areas of special importance due to their usefulness, hazard, or pending impact from alteration.

Critical Habitat - The viable areas of habitation including feeding, breeding, and nesting areas for species of Special Concern as well as Endangered and Threatened species as confirmed by appropriate jurisdictional agency documentation, or by reports which may be submitted by an applicant requesting a development order on a site containing an area of such habitation by the above noted species. The extent of these areas shall have a definitive boundary which may vary in extent based on the individual species.

Depression Basins - Natural depression watershed areas which have no positive outfall for surface water runoff except by infiltration or evapotranspiration.

Development - As defined in 380.04 Florida Statutes.

Development Permit - Includes any building permit, zoning permit, subdivision approval, rezoning, certification, special exception, variance, or any other official action of local government having the effect of permitting the development of land.

Development Order - Means any order granting, denying, or granting with conditions and application for a development permit.

Development Rights - The potential for the improvement of a parcel of real property, measured in dwelling units per gross acre, or gross leasable area, which exists because of the land use designation or zoning classification of the parcel.

Endangered Species - Any species of flora and/or fauna naturally occurring in Florida, whose prospects of survival are in jeopardy due to modification or loss of habitat; over utilization for commercial, sporting, scientific, or educational purposes; disease; predation; inadequacy of regulatory mechanisms; or other natural or manmade factors affecting its continued existence. Endangered species include, at a minimum, those identified as such in Chapter 39-27, Florida Administrative Code, s. 581.185, Florida Statutes and 50 of Federal Regulations, Sections 17.11 and 17.12.

Environmentally Sensitive - Descriptive of lands which, by virtue of some qualifying environmental characteristic are regulated by either the the Florida Department of Environmental Regulation, the Southwest Florida or St. Johns River Water Management District, or any other governmental agency empowered by law for such regulation. Environmentally sensitive lands include, at a minimum, rivers, streams, lakes, springs, sinkholes, wetlands, floodplains, high recharge areas, and habitat inhabited by designated species.

Excavation - The removal and transport of earth materials (sometimes referred to as "borrow" activities). This definition excludes commercial mining operations (such as limerock and sand mining operations), excavation associated with construction of storm water management facilities, excavation activities governed by the Lake County Subdivision Regulations, and excavation associated with sod farming and removal activities, and tree farming activities.

Exotic Species - A non-native plant or animal.

Extraction - The removal of resources from their location so as to make them suitable for commercial, industrial, or construction use; but does not include excavation solely in aid of onsite farming or onsite construction, nor the process of searching, prospecting, exploring, or investigating for resources for drilling.

Fill - Raising the surface level of the land with suitable soil material.

Fish and Wildlife - Any member of the animal kingdom, including, but not limited to, any mammal, fish, bird, amphibian, reptile, mollusk, crustacean, arthropod, or other invertebrate.

Flatwoods -- Broad, nearly level, low ridges of dominantly poorly drained soils characteristically vegetated with open woods of pine and saw palmetto.

Flood or Flooding - The inundation of land by the overflow of a stream basin or depression basin, the accumulation of runoff, or the rise of ground water.

Flood Plain - Areas inundated during a 100-year flood event or identified by the National Flood Insurance Program as an A Zone or V Zone on Flood Insurance Rate Maps of Flood Hazard Boundary Maps.

Floodway - The channel of a river or other watercourse of the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.

The Floridan Aquifer System (FAS)- is contained within the limestones and dolomites of the carbonate unit below the deep clays. The FAS underlies all of Lake County and is the principal source of the water used in Lake County. It is composed of thick sequences of carbonate rocks (limestone, dolomitic limestones, and dolomite) of Eocene to Oligocene age that are generally high in permeability and hydraulically connected to each other in varying degrees. The FAS has two major water-bearing zones; the Upper Floridan and Lower Floridan zones. These zones are separated by a lower permeability limestone, dolomite and anhydrite formation.

Geophysical - Of or pertaining to the physical properties of earth materials and their chemical composition and transformations.

Groundwater – Water found below land surface in an aquifer. (Moisture present in unsaturated soil is not considered ground water.)

Habitat - The natural abode of a plant or animal. The kind of environment in which a plant or animal normally lives, as opposed to the range, or spatial distribution.

Habitat Corridors - A naturally-vegetated transportation route for plants and animals that connects larger natural areas. Wild plants and animals typically require avenues for dispersal to different feeding and breeding sites in order to survive.

Hazardous Waste - Solid waste, or a combination of solid wastes, which, because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or may pose a substantial present or potential hazzard to human health or the environment when improperly transported, disposed of, stored, treated or otherwise managed.

Hydrogeologic - Of or pertaining to the science that deal with subsurface waters and with related geologic aspects of surface water. Hydrology – the science that deals with global water (both liquid and solid), its properties, circulation, and distribution on or under the earth and in the atmosphere.

Hydroperiod - The annual period of inundation.

Hydric Soils - Soil that is wet long enough to periodically produce anaerobic conditions, thereby influencing the growth of plants.

Important Agricultural Areas - The important farmlands that are identified by the U. S. Soil Conservation Service. These include prime and unique farmlands, and additional farmland of statewide and local importance as described in 7 Code of Federal Regulations 657.

Important Ecological Community - An assemblage of native biota which may be easily recognized because of characteristics species or overall appearance, and which is sustainable through maintenance or ecosystem regulators such as fire to period inundation.

Injection Well - A well into which fluids are drained, either by gravity flow or under pressure. The terms deep well and shallow well injection have no real significance relative to the actual depth of a well. Specific depths should be stated.

Intermediate Aquifer System - that the aquifer system that lies between the overlying surficial aquifer system and the underlying Floridan aquifer system. This system contains ground water under confined conditions. This aquifer is not present in all areas of Lake County.

Isolated Wetland - Cypress domes or shallow marshes where no naturally occurring outfall exists.

Karst Area - A terrain, generally underlain by limestone or dolostone, in which the topography is chiefly formed by the dissolution of rocks, and which may be characterized by karst features.

Karst Features - springs, sinkholes, stream-to-sink basins and closed depressions.

Land Application - The act of disposing of sewage effluent and/or sludge on the earth's surface. There are three primary types of land application: (1) overland flow, which includes depository sludge in landfills, (2) rapid rate infiltration, such as in percolation ponds, and (3) slow rate infiltration such as spray irrigation.

Level of Service - An indicator of the extent or degree of service provided by or proposed to be provided by a facility based on and related to the operational characteristics of the facility. Level of service shall indicate the capacity per unit of demand for each public facility.

Listed - Refers to those lists of endangered species which are not accompanied by protection legislation, such as rare and endangered species lists compiled by academic or conservation groups.

Mining - The extraction of natural deposits from the earth which are regulated by the State of Florida under Part II of Chapter 211 and Chapter 378, Florida Statutes, and by Lake County Ordinance 68.

Minerals – Any naturally formed inorganic element or compound. All solid minerals, including clay, gravel, phosphate rock, lime, shells (excluding live shellfish), stone, sand, heavy minerals, and any rare earths, which are contained in the soils or waters of the state.

Most Effective Recharge Areas - Type "A" Hydrologic soils, defined by the NRCS Soil Survey, unless otherwise provided for by rule of the St Johns River Water Management District. Applies only to the Wekiva Study Area.

Mounding - Filling the area of the absorption field of a septic tank with suitable soil material to raise it above the water table to meet state and local regulations.

National Ambient Air Quality Standards (NAAQS) - Restrictions established by the U.S. EPA pursuant to Section 109 of the Clean Air Act to limit the quality or concentration of an air pollutant that may be allowed to exist in the ambient air for any specific period of time. Those air pollutants for which standards exist are: carbon monoxide, lead, nitrogen dioxide, ozone, sulfur dioxide and total suspended particulates.

Native Biota - The natural occurrence of species of plants and animals in a specific region. Native biota does not include species that are exotic or introduced by humans and that have become "naturalized".

Native Vegetation - Plant that are indigenous to the State of Florida.

Natural Drainage Features - The naturally occurring features of an area which accommodate the flow of rainfall runoff, such as streams, rivers, lakes and wetlands.

Natural Ecological Communities - An ecological community is an assemblage of plants and animals that is: (1) repeatable in general terms under similar physical conditions over the landscape, (2) capable of self-maintenance, (3) can be recognized as being distinct from adjoining communities, and (4) has not been significantly altered by previous manmade activities. A community can usually be recognized by a few key species of plants. A natural ecological community is one that is important as a reserve of biological diversity.

Natural Reservation - Areas designated for conservation purposes and operated by contractual agreement with or managed by a federal, state, regional, or local government or non-profit agency such as national parks, state parks, lands purchased under the Save Our Coasts, Conservation and Recreational Lands or Save Our Rivers programs, sanctuaries, preserves, monuments, archaeological sites, historic sites, wildlife management areas, national seashores, and Outstanding Florida Waters.

Natural Resources System -

Natural Resources - Natural resources include, at a minimum, all the natural features associated with the land, air, water, groundwater, flora and fauna, as well as other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the State of Florida and situated in an area of critical state concern or offshore from an area of critical state concern.

Non-attainment - Any area not meeting ambient air quality standards and designated as a non-attainment area under Section 17-2.410, F.A.C. for any of the NAAQS listed air pollutants.

Non-point Source Pollution - Contamination arising from the discharge of wastes to the land, soils, water bodies or to the atmosphere from dispersed sources.

Paleontologic - Dealing with the study of life in past geologic time based on fossils, plants and animals.

Percolation - The movement of water through small openings within a porous materials, generally soils.

Permeability - The capacity of a geologic formation or soil for transmitting water.

Point source pollution - Contamination arising from direct discharge of wastes to water bodies, geologic formation or to the atmosphere. This can be through a pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operations or vessel or other floating craft or other concentrated means from which pollutants are discharged.

Ponding - Standing water on soils in closed depressions.

Potentiometric Map or "Pot" Map - A subsurface contour map showing the elevation of a potentiometric surface. Maps of the potentiometric surface of the Floridan aquifer are prepared twice a year by the US Geological Survey in Florida.

Potentiometric Surface - An imaginary surface representing the total head of ground water and defined by the level to which water will rise in a tightly cased well. The potentiometric surface is related to a specific aquifer, usually the Floridan.

Preservation - The perpetual maintenance of areas in their natural state.

Productivity (soil) - The capacity of a soil for producing a specified plant or sequence of plants under specified management.

Protected - Refers to official Federal, State or international treaty lists which provide legal protection for the rare and endangered species they list.

Protected recharge areas - Areas with an annual recharge rate of 10 inches or greater to the Florida aquifer.

Rare species - Species which, although not presently endangered or threatened as defined, are potentially at risk because they are found only within a restricted geographic area or habitat in the State, or are sparsely distributed over a wider range.

Recharge - the process of adding water to the zone of saturation. Recharge is commonly described in inches per year. Recharge can be influenced by development. Increasing the rate of stormwater runoff and building impervious surfaces—such as roads, parking lots, and buildings — can alter both the rate and volume of recharge and reduce the area available for rainfall percolation. The quality of the water being recharged can also be influenced by development.

Recharge areas - areas where recharge to an aquifer occurs.

Reclamation - The filling, backfilling, restructuring, reshaping, and/or revegetation within and around a land excavation, mine or filled area to a safe and aesthetic condition.

Relief - The elevations of inequalities of a land surface, considered collectively.

Reuse (land)- The planned activity or activities that are intended for the land excavation or filling area and/or abutting land after the excavation or filling ceases and reclamation is completed .

Reuse (water) - the reuse of wastewater generally treated to drinking water standards

Runoff - The precipitation that does not infiltrate into the soil.

Secondary Treatment - The second step in wastewater processing whereby most of the organic material in sewage areas is broken down to simpler, inorganic molecules. The biological demands of sewage, such as the heavy use of oxygen, are reduced at this step. This kind of treatment is commonly the last step in sewage treatment plants.

Seepage - To move water through small openings in the soil.

Sensitive - Areas where natural resource values or hazards play a primary role in land suitability and capability. These include areas with special natural resource characteristics which may be described as fragile and subject to harm with a minimal amount of alteration.

Sheet flow - The pattern of water movement where water moves in a broad, shallow layer across the surface. This is typical in wetlands, marshes, grasslands, pine flatwoods, and prairies.

Significant Natural Upland Community or Significant Upland Community - Those sites identified on the Conservation Element as "Significant Upland Communities".

Silviculture - Of or pertaining to commercial forestry.

Sinkhole - A naturally occurring, karst feature on the land surface measured in meters or tens of meters, typically circular and/or conical in shape, characterized by closed depressional contours, internal drainage and side slopes that are notably steeper than the natural slope of the surrounding land surface. A sinkhole may exhibit an open connection into the Floridan aquifer and/or may contain standing water. To be characterized a sinkhole, the settlement that caused the depression must have resulted from subsidence or raveling of soils, sediments, or rock materials into subterranean voids created by the effect of water on a limestone or similar rock formation.

Slough - A broad, slightly depressional, poorly defined drainageway.

Soil - A natural three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.

Solid Waste - Means sludge from a waste treatment works, water supply treatment plant, or air pollution control facility, or garbage, rubbish, refuse, or other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from domestic, industrial, commercial, mining, agricultural, or governmental operations.

Source Separation - The separation of the components of solid waste (glass, metal, paper, chemicals, plastic, kitchen wastes, etc.) at the source of generation before disposal to allow for alternative waste management practices such as reuse, recycling, and energy recovery.

Species of Special Concern - Fauna identified in Section 39-27.005 F.A.C. which warrants special protection, recognition or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a Threatened species; may already meet certain criteria for designation as a Threatened species but for which conclusive data is limited or lacking; may occupy such an unusually vital and essential ecological niche that should it decline significantly in numbers or distribution other species would be adversely affected to a significant degree; or has not sufficiently recovered from past population depletion.

Spring - A point where underground water emerges onto the Earth's surface (including at the bottom of a stream, lake or the ocean).

Springshed - Those areas within ground- and surface-water basins that contribute to the discharge of the spring. Also known as a spring recharge basin.

Stream - Any river, creek, slough, or natural watercourse in which water usually flows in a defined bed or channel. It is not essential that the flowing be uniform or uninterrupted. The fact that some part of the bed or channel has been dredged or improved does not prevent the watercourse from being a stream.

Stream-to-Sink Basins - A drainage basin typified by surface streams discharging into a sinkhole(s).

Stream Basins - Watershed areas which drain surface water runoff via streams and channels, both natural and manmade.

Stream Crossing - Transportation and utility crossings of stream basins.

Structure - Anything constructed or erected, the use of which requires permanent location on the ground or attachment to something having a permanent location on the ground as well as a mobile home.

Surface Waters - Water upon the surface of the earth, whether contained in bounds created naturally or artificially or diffused. Water from natural springs shall be classified as surface water when it exits from the spring onto the earth's surface.

Surficial Aquifer System - An aquifer system where the ground water is at atmospheric pressure, i.e. not confined. It consists of consists of the surficial sands, silts and clays and in some cases limestone where there is no confining layer.

Tertiary Treatment - The third and usually most expensive in a series of processes whereby pollutants such as phosphorous or nitrogen compounds are removed from wastewater. Most sewage treatment plants are only capable of secondary treatment of wastewater.

Threatened Species - Any species of flora or fauna naturally occurring in Florida which may not be in immediate danger of extinction, but which exists in such small populations as to become endangered if it is subjected to increased stress as a result of further modification of its environment. Threatened species include, at a minimum, those identified as such in Chapter 39-27, Florida Administrative Code, s. 581.185, Florida Statutes and 50 of Federal Regulations, Sections 17.11 and 17.12.

Type A soils - A soil group defined by the NRCS as having high infiltration rates.

Unconfined Aquifer - See surficial aquifer system.

Upland Communities - Those non-wetland, non-aquatic areas not subject to regular flooding. These include: scrub, sandhill, xeric hammock, upland pine forest, mesic hammock, slope forest, mesic flatwoods and scrubby flatwoods. For this element, communities that do not consistently meet legal criteria for protection as a wetland have also been included. These are floodplain forest, baygall, wet flatwoods, and hydric hammocks.

Vertical Drainage - The characteristic of porous soils and rocks whereby water pools only temporarily and cannot form perennial streams on the earth's surface; instead, water flows straight down through soils and rock to an underlying aquifer.

Vegetative Communities - Ecological communities, such as oak hammocks or cypress swamps, which are classified based on the presence of certain soils, vegetation and animals.

Water - Any and all water on or beneath the surface of the ground or in the atmosphere, including natural or artificial watercourses, lakes, ponds, or diffused surface water and water percolating, standing, or flowing, beneath the surface of ground, as well as all coastal waters within the jurisdiction of the state.

Water Recharge Area - Land or water areas through which groundwater is replenished. The surficial aquifer system (SAS) is recharged by rainfall. Recharge is augmented locally by artificial recharge — wastewater or reuse water land application, rapid-infiltration basins, and septic systems. In areas where the water level in the surficial aquifer is higher than the potentiometric surface of the Floridan aquifer, the Floridan aquifer system (FAS) is recharged by the SAS. These areas include much of the county. There are also two locations where the FAS receives direct recharge from surface runoff through sinkholes. These areas are Shockley Heights in the Ocala National Forest and Wolf Sink just east of Mt. Dora.

Water table - The ground water surface in the surficial aquifer. It is defined by the levels at which water stands in wells that penetrate the water body just far enough to hold standing water.

Wetlands - Lands which are transitional between terrestrial (upland) and aquatic (open water) systems where the water table is usually at or near the surface, or where the land is covered by shallow water. Such lands are predominantly characterized by hydrophytic vegetation identified in Section 17-4.022, F.A.C. The presence of hydric soils determined by the U.S. Soil Conservation Service, and other indicators of regular or periodic inundation, shall be used as presumptive evidence of the presence of a wetland area. The existence and extent of these shall be determined by the jurisdictional limits defined by Chapter 17-4, F.A.C. and implemented by the Florida Department of Environmental Regulation, or as defined within Chapter 40D-4 and implemented by the Southwest Florida District or within Chapter 40C-4 and implemented by the St. Johns River Water Management District.

Wildlife - See fish and wildlife.

Woodland Management Plan - A document developed by or in coordination with the Florida Department of Agriculture's Division of Forestry for areas containing commercially valuable forests, developing forests, or other valuable forested areas.

GOAL SOL 1

Lake County shall provide for an integrated solid waste management system, which protects the public health, sanitation, and environment and provides for operational efficiency and beneficial land use and growth patterns.

OBJECTIVE 1.0 INTEGRATED SOLID WASTE MANAGEMENT SYSTEM

Lake County shall plan and implement an Integrated Solid Waste Management System to responsibly manage the volume of solid waste disposed in Lake County landfills. An Integrated Solid Waste Management System consists of a combination of Solid Waste Management Techniques to manage and dispose of specific components of the solid waste stream, which work together to meet the Counties and Municipalities needs for safe and effective Solid Waste Management.

1.1 Receipt of Materials at Landfills

Landfills shall be designated to receive only regulatory defined and acceptable items that cannot be reused, composted, recycled, incinerated, or processed for volume reduction in a technologically feasible and economically practical manner.

1.2 Focus on Proper Management, Conservation, and Optimization of Capacity

The integrated solid waste management program shall focus on the proper management of solid waste, conservation of resources, and responsible management of landfill capacity.

OBJECTIVE 2.0 ENVIRONMENTAL COMPLIANCE OF SOLID WASTE MANAGEMENT

The County shall operate solid waste management facilities in compliance with applicable air, groundwater, and surface water pollution standards established by Federal, State, and local laws, regulations, and guidelines.

2.1 Continuance of Universal Solid Waste Collection Service

The County will provide universal collection service. Universal collection of solid waste was adopted for residents in the unincorporated portions of the County. The ordinance requires residences to pay a fee for solid waste collection. The ordinance includes provisions for exemptions from fee payment when severe economic hardship can be demonstrated.

2.2 Facility Improvements

The County shall identify, plan, and implement solid waste management facility improvements that are necessary to meet environmental performance standards and other applicable regulations.

2.3 Closure and Monitoring of Former Landfills

The County shall close and monitor the County's former landfills in compliance with standards established by Federal, State, and local laws, regulations, and guidelines.

2.4 Opening of New Landfill Facility

The County maintains more than eighty acres of land at the existing County Solid Waste Facility on which additional permitted solid waste landfill cells may be built. New cell(s) shall be operational to replace the existing operating cell. The capacity of waste disposal represented by the additionally permitted land is in excess of 11 million cubic yards. This meets the disposal needs of the County for the duration of this Comprehensive Plan.

2.5 Location of New Transfer Stations

Lake County shall consider constructing or obtaining contractual services for the use of transfer stations within areas of the County as population densities increase and economics indicate support for such facilities.

2.6 Prohibition of Incompatible New Development Near Solid Waste Management Facilities

The County shall adopt land development regulations that prohibit new development that is incompatible with the operation of nearby solid waste management facilities based on land use types and specified distance buffers contained in the Future Land Use Element and Future Land Use Map. Landfill site set backs will comply with Florida Department of Environmental Protection regulation.

2.7 Minimizing the Impacts from Solid Waste Management Facilities

Peripheral buffers and landscaping shall be required at new or expanding solid waste facilities to minimize impacts to the surrounding area.

2.8 Landfill Monitoring

The County shall continue the present well monitoring program at the County's landfills to determine ground water and surface water pollutant levels and shall expand the number of monitoring wells concurrent with any expansion of the landfills and any future establishment of landfills/monofills.

2.9 State Regulation Compliance

Lake County shall follow applicable federal and state regulations at all County solid waste disposal facilities to protect the water quality of the Floridan and surficial aquifers.

OBJECTIVE 3.0 IMPLEMENTATION OF RECYCLING PROGRAMS

Lake County shall develop programs to reuse, reduce, and recycle the waste streams generated by the residential, commercial and industrial sectors.

3.1 Commercial and Industrial Recycling Emphasis

Lake County shall encourage and promote the commercial/industrial sectors to examine their individual waste streams to determine those materials that may be reused, recycled, or composted.

3.2 Promote the Use of Recycled Products in the Commercial, Industrial and Government Sectors

Lake County shall encourage and promote programs to assist the commercial/industrial/government sectors in examining their operations and processes to identify recycled products that may be used in place of virgin materials and to identify ways to reduce their waste generation.

3.3 Enhance Public Education

Lake County shall promote, expand, and enhance public education and awareness programs to encourage and inform both the residential and the commercial/industrial sectors of the need to reduce, recycle, reuse, and recover.

3.4 Composting and Mulching Program

Lake County shall continue the program for the mulching of green yard waste (i.e. grass clippings, garden waste, hedge clippings). Lake County shall encourage backyard composting through the public education and awareness programs. The County, during the development of the mulching program, shall evaluate the establishment of local composting areas.

3.5 Inclusion of Materials not Traditionally Targeted for Recycling, Reuse or Volume Reduction

Lake County shall develop, improve, and expand the waste reduction, reuse, and recycling programs to include additional materials, methods, or technologies.

OBJECTIVE 4.0 IMPLEMENTATION OF A WASTE-TO-ENERGY TECHNOLOGY TO REDUCE THE VOLUME OF SOLID WASTE REQUIRING LANDFILLING

Lake County shall maximize the use of its existing facilities. Further waste volume reduction may be accomplished by utilizing the Lake County Resource Recovery facility, a waste-to-energy facility, to reduce the volume of solid wastes entering the landfill.

4.1 Utilization of the Waste-to-Energy Facility

The Lake County Waste-to-Energy (resource recovery) facility maintains a contract with Lake County to process waste until 2014. Continued utilization of the facility in its present or an expanded configuration shall be determined prior to the expiration of the current Waste Disposal Agreement, but no later than 2010.

4.2 Reduction in the Size of Bulky Waste

The County shall investigate methods to reduce the size of bulky waste so it may be processed through the waste-to-energy facility, recycled or disposed in the County or other permitted facilities in the most effective manner.

4.3 Monitor the Potential for Ash Residue Reuse

The County shall monitor the research and development of ash residue reuse to reduce the quantity requiring ultimate disposal.

OBJECTIVE 5.0 ENVIRONMENTAL MONITORING OF PRIVATE SOLID WASTE MANAGEMENT FACILITIES

Lake County and the Florida Department of Environmental Protection (FDEP) shall monitor privately owned and operated solid waste management facilities including landfills, resource recovery facilities, and solid waste processing facilities. This monitoring is needed to ensure that solid waste facilities in Lake County remain in compliance with applicable air, groundwater, and surface water pollution standards established by Federal, State, and local laws, regulations, and guidelines.

5.1 Safe Operation of Privately-Owned Solid Waste Management Facilities

Upon adoption of its Comprehensive Plan, the County shall cooperate with the Florida Department of Environmental Protection in their regulation of privately-owned, as well as publicly-owned, solid waste management facilities to assure they are operated in a manner that will protect the public health, welfare, and safety.

5.2 Monitoring Impacts from Privately-Owned Solid Waste Management Facilities

The Department of Environmental Services shall cooperate with the Florida Department of Environmental Protection in their efforts to monitor the impacts to air, land, ground and surface water, and wildlife habitat from privately operated solid waste management facilities.

5.3 Acceptance of Imported Solid Waste

Lake County shall encourage the acceptance of only those imported solid wastes for disposal at the waste-to-energy facility that have, at the point of origin, a recycling program that eliminates to a practicable degree materials such as batteries from the waste stream.

OBJECTIVE 6.0 SOLID WASTE MANAGEMENT FACILITY PLANNING

Lake County shall plan new solid waste management facilities, additions, expansions, and improvements of existing facilities to meet the present needs and support the anticipated growth for a minimum of 25-years available disposal capacity. To assist in this planning process, a reasonable and effective level of service shall be established. The ultimate objective of the integrated solid waste management system shall be to reduce the solid waste generation rate and to increase solid waste disposal capacity.

6.1 Long-range Planning Program for Solid Waste Management

The County shall establish a long-range planning program to address the available capacity of solid waste management facilities for a minimum 25-year planning period.

6.2 Annual Evaluation of Generation Rates, Disposal Rates, and Facility Capacity

Lake County shall conduct an annual review of solid waste generation, disposal rates, and facility capacity to monitor existing programs and to evaluate future needs.

6.3 Evaluation of Funding Alternatives

Lake County shall identify and evaluate funding alternatives for the continued development and operation of the integrated solid waste management system.

6.4 Cost and Performance Efficiency

The County shall operate all of its solid waste management facilities in a manner that will protect the public health, welfare, and safety, and will control cost and performance.

6.5 Regulation of the Waste Stream

The County shall identify solid waste generated within and outside of Lake County, and adopt controls to direct components of the waste stream to processing facilities prior to final disposal. The County may opt not to accept for disposal waste generated outside the County. Such waste that is dedicated to agreements with adjacent counties pursuant to an interlocal agreement shall be accepted for disposal or processing at a rate to be established.

6.6 Solid Waste Level of Service

The County's adopted level of service (LOS) for its solid waste disposal facilities shall be:

- The base LOS is 2-1-1: 2 days per week garbage pickup, 1 day per week recycling pickup, and 1 day per week yard waste pickup.
- Exceptions are in the north and northeast part of the County, which are contracted for 1-1-1 due to road conditions and a less dense population.

OBJECTIVE 7.0 OBJECTIVE SOL 1.7: PROPER DISPOSAL OF SOLID WASTE

The County shall develop and implement programs to address the problems of illegal dumping of solid waste materials.

7.1 Enforcement of Regulation to Guard Against Illegal Dumping

Lake County shall assist in the enforcement of existing County ordinances, Florida Statutes, and Federal laws concerned with illegal dumping.

7.2 Emphasize the Problems Associated with Illegal Dumping

Lake County shall discourage illegal dumping, through education, public awareness, and cooperation with County and Departmental Code Enforcement staff in the issuance of enforcement penalties.

OBJECTIVE 8.0 HEALTH AND SAFETY

The County shall endeavor to protect County residents from diseases associated with solid waste, from nuisances caused by the improper management and/or disposal of waste materials and from adverse impact resulting from the improper management and/or disposal of regulated materials and hazardous waste.

8.1 Household Hazardous Waste Programs

Lake County shall maintain a Household Hazardous Waste Program and Conditionally Exempt Small Quantity Generators' (CESQG) Program, and operate a Household Hazardous Waste Collection facility at the Residential Drop-Offs and Landfill and provide for the pickup and disposal of household hazardous waste materials by appropriately licensed hazardous waste management firms.

8.2 Compliance with State Regulations – Pollutant Storage Tank Systems

The County shall comply with Florida Administrative Code (FAC) requirements for above ground facilities, below ground storage facilities, and for Florida Petroleum Liability Insurance requirements.

8.3 The Lake County FDEP Pollutant Storage Tank Monitoring Program

The County shall monitor the compliance of newly permitted storage tanks and retrofit existing tanks, the County shall utilize the information the Health Department already has to complete a geographic inventory of storage tank locations. This inventory should be developed in the same manner as a septic tank inventory. A coordinated inventory and inspection should occur between the two programs whenever possible. The County shall implement the state mandated program through a continuing contract.

8.4 Litter/Nuisance Control

The County shall enforce the Lake County nuisance provisions through available remedies and shall promote anti-litter practices through the adopt-a-road program. The County shall cooperate with other jurisdictions and agencies on the detection and correction of nuisances through a countywide litter committee comprised of Solid Waste, Potable Water, DOT, Library & Leisure Services and Administrative Services.

8.5 Enhanced Battery Collection and Disposal Program

Lake County shall encourage the recycling of batteries, and those collected shall be properly and safely stored for recycling. If the batteries are not recyclable than they should be disposed in a properly permitted landfill.

8.6 Battery and Used Oil Collection Program

Lake County shall maintain battery and used oil collection programs in order to eliminate these materials from the waste stream.

8.7 New Solid Waste Facilities and Expansions of Existing Facilities Within the Wekiva Study Area

The County will evaluate the hazards posed by new solid waste facilities and expansions of existing facilities within the Wekiva Study Area (WSA). The County will study appropriate siting criteria and other issues for solid waste transfer stations, hazardous and toxic materials treatment and disposal sites, and landfills. The County may adopt regulations, as needed, to limit or exclude such facilities within portions of the WSA.

OBJECTIVE 9.0 COORDINATION, MAXIMIZATION, AND DEFICIENCY CORRECTION

The County shall correct and future capacity deficiencies coordinate capacity increases and maximize the use of existing facilities.

9.1 Priority of Solid Waste Services

The County shall establish the priority of solid waste activities as follows in order of priority:

- A. Operation and maintenance of all facilities in accordance with applicable regulations.
- B. Provision of additional capacity to service new development.

9.2 Intergovernmental Coordination

The County shall support an intergovernmental approach to the problems and opportunities of waste management, both within and outside the County, through the monthly coordination meetings and any future interlocal agreements.

9.3 Annual Capital Improvement Element Update

The County shall annually update the Capital Improvements Element to adequately fund activities and programs enabling the correction of any deficiencies that might arise, the replacement of equipment, the maximizing of existing facilities and facility capacity increases needed to serve future needs.