INTRODUCTION

The purpose of the Public Facilities Element is to ensure that public facilities are available to meet the needs of Lake County. The Pubic 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 exits 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 POT 1

Coordinate for the adequate production, treatment and distribution of potable water in a cost effective manner balancing the needs of growth, environment and public health, safety and welfare.

OBJECTIVE 1.0 COORDINATE THE PROVISION OF POTABLE WATER SERVICE TO MEET THE ANTICIPATED DEMAND AND ESTABLISH REQUIRED LEVELS OF SERVICE

Lake County shall coordinate with central water providers under the Joint Planning Areas (JPAs) and with private utilities to meet the anticipated demand and to establish the required levels of service for the provision of potable water. Design and construction standards for potable water systems will be updated to standards consistent with the providers.

1.1 Level of Service Standards

Lake County shall require, at a minimum, all potable water to be produced, treated, stored and distributed in accordance with all federal, state, regional and local requirements.

1.2 Design and Construction Standards

Lake County shall update the current design and construction standards for the production of raw water supplies, treatment, storage and distribution.

1.3 Promote Innovative Methods

Lake County, through the Land Development Regulations, will allow innovative methods, such as dual water systems that demonstrate reduction and conservation of potable water.

1.4 Monitor the Impact of Reclaimed Water.

Lake County shall monitor the impact of reclaimed water on potable water demand. Development containing irrigated open space shall be required to accept reclaimed water for irrigation when such reclaimed water is available.

1.5 Monitor Impacts to Private Individual Potable Water Supply

Lake County shall monitor Consumptive Use Permit allocations and capacities to coordinate with federal, state, regional and local agencies in the preservation of sufficient potable water supply capacity and to protect private self-supply wells.

1.6 Water Efficient Landscaping

Lake County will promote and as appropriate require water efficient landscaping techniques, water wise landscaping, and stormwater reuse to reduce the irrigation demand for potable water in developments and agriculture.

1.7 Water Shortages

Lake County shall, upon request, assist the Water Management Districts in the enforcement of Water Management District guidelines during declared water shortages to the extent possible.

1.8 Encouragement of Public-Private Partnerships

The County shall encourage the development of public-private partnerships in the provision of regional potable water services where such partnerships will result in the timely provision of services in a manner that is both cost-efficient and environmentally sound and is consistent with the Lake County Comprehensive Plan, Water Master Plan and County Codes.

1.9 Coordination with Other Agencies

Lake County shall work closely with the federal, state, regional and local agencies to ensure all possible alternatives are explored and implemented with respect to new development and water conservation. This can include:

- Define urban and rural expansion areas throughout undeveloped areas of Lake County
- Require the use of reuse water where ever possible including instillation of dual lines in anticipation of reuse water becoming available.
- Promote and facilitate Joint Planning Agreements (JPAs) between cities, and with the county and cities.
- Consider exploring alternative water supply options
- Look for opportunities to capitalize on economies of scale
- Pursue or support grant matching funding, participation, subsidized loans, and low-cost loan programs for environmental, water resource, and public welfare projects in Lake County
- Assist entities with "seed" money grants for beneficial projects or develop another cooperative approach
- Facilitate regional programs for Lake County entities
- Create Special Water Districts in cooperation with municipalities and regulatory agencies
- Water Resource Cooperation and Support Agreement developed through the JPA process
- Active participation in regional water supply planning with municipalities and regulatory agencies
- Promote conservation through education, incentives, and regulation
- Encourage phasing-out septic systems where possible
- Develop incentives to connect to central water and wastewater systems

1.10 Well Field Protection

The County will cooperate with the State and water management districts in protecting well fields in accordance with all State and water management district requirements.

OBJECTIVE 2.0 PROVISION OF CENTRAL WATER FACILITIES.

Lake County shall guide the orderly growth and development of the County by coordinating water service availability with the municipalities, private enterprise and individuals. The coordination of service delivery shall be in a manner that provides maximum use of existing facilities.

2.1 Coordination of Services with the Municipalities

Lake County shall execute Interlocal Agreements with the municipal utility suppliers within Lake County for establishing service areas so as not to duplicate services and to provide for conditions for the establishment of and the operation within the service area. Municipal service areas shall be based upon the available capacity reported, and the future service areas delineated in the Comprehensive Plans of each municipality which provides potable water service. Prior to the execution of Interlocal Agreements, the County shall allow municipalities to provide service in the unincorporated part of Lake County in accordance with the area set forth in the adopted Comprehensive Plans of each municipality which provides potable water service, and the criteria set forth in the Lake County Comprehensive Plan. Expansion of services, both water and sewer by the municipalities, should be consistent with their Capital Improvement Plan (CIP), Capital Improvement Element (CIE) and the Joint Planning Agreement (JPA).

2.2 Potable Water Service Criteria

At a minimum, all systems must meet the regulatory criteria of a Public Water Supply System (PWS) for the provision to the public of water for human consumption through pipes or other constructed conveyances, where such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least 60 days out of the year or otherwise as applicable to FDEP regulation and those systems that service less than 15 connections or a density greater than 1 dwelling unit per net acre must connect to a regional system.

2.3 Mandatory Connection Ordinance

Lake County shall prepare and adopt as appropriate a mandatory connection ordinance which, at a minimum shall require the following within the Urban Land Use Series: New development that exceeds 1500 GPD and is located within 1000 feet of a public potable water system, or new homes or developments with usage less than 1500 GPD and located within 300 feet of public potable water, shall be required to connect to public potable water. Existing homes and development shall be required to connect to public potable water within 5 years of meeting this criteria or within 5 years of the effective date of this ordinance.

Upon connection to public water supply, private wells completed in and or otherwise withdrawing water from the Floridan Aquifer must be abandoned in accordance with Water Management District rules. Where reuse water is not available, private wells with back flow prevention may be used for irrigation. Where reuse water is available for irrigation, private wells completed in the Surficial Aquifer must be abandoned in accordance with Water Management District Rules.

2.4 Connection of Community and Non-Community Systems

Lake County shall require the connection of community and non-community utility services when there is endangerment to the environment, public health, safety and welfare. Financial assistance, to partially offset the cost of connecting to central utility services for individuals and non-profit utility service providers may be provided by Lake County through application for federal and state grants/loans or through the establishment of a construction fund funded by user charges and/or special benefit assessments.

2.5 Coordination of Services with Private Enterprises

Lake County shall identify, and exempt from mandatory connection, those privately owned facilities located within those portions of Lake County, where centralized water services are available or planned, which have the ability to meet regulations and individual permit criteria and where mandatory connection would not be required for the economic viability of a centralized system or necessary to protect public health, safety and/or welfare. Those privately-owned facilities not meeting the above criteria shall be required to connect to the centralized system when available. Lake County shall identify those areas within the County where centralized utilities are needed and can be better served by a privately owned utility, through an agreement with Lake County, for the provision of the service.

2.6 Provision of Potable Water Services Inside of Designated Urban Areas

The county shall require that property within the Urban Land Use Series connect to potable water services consistent with mandatory connection policy. Independent utility providers or public-private partnerships may be considered to provide regional potable water services within the Urban Land Use Series where connection to a municipal system is not feasible, and if such services are both cost efficient and environmentally sound.

2.7 Provision of Potable Water Services Outside of Designated Urban Areas

The County may allow for the provision of central potable water services outside of the Urban Land Use series on a case specific basis if compelling information exists to demonstrate that the lack of potable water services poses a significant health or environmental problem for which there is no other feasible solution. The County shall encourage property within the Rural Transition Future Land Use category adjacent to designated urban areas to connect to potable water services if economically feasible.

OBJECTIVE 3.0 COORDINATION AND URBAN SPRAWL

The County shall coordinate the extension of lines or increase of facility capacity with adjacent municipal and private facilities to discourage urban sprawl.

3.1 Extension of Service to New Development

Within the Urban Land Use Series, the County shall require new development to connect to and fund the connection of their potable water facilities to municipal or private utilities systems where possible.

3.2 Prohibit the Provision of Potable Water as Sole Justification for Land Use Amendments

Lake County shall prohibit the provision of potable water as sole justification for amendments to the Future Land Use Element where new or expanded development will adversely impact resource/ conservation areas or neighborhoods or will otherwise promote urban sprawl.

3.3 Coordination of Potable Water with Land Use

Lake County shall maximize the use of existing facilities and discourage urban sprawl by encouraging the provision of central potable water services within existing and planned service areas where possible and prohibiting the extension of potable water facilities outside of existing and planned service areas as depicted on the Future Land Use Map.