Supplemental Documents		Updates to be made
1.	Protection of Wetlands, Surface Waters, and Natural and Archaeological Resources	The current public interest criteria for wetland impacts are the minimum criteria specified by the State but do not address social inequities or environmental justice considerations. The City will develop additional public interest criteria to supplement existing criteria and incorporate these considerations.
2.	Land Acquisition and Conservation	No updates planned.
3.	Stormwater Management	No updates planned.
4.	Hazardous Materials Management	No updates planned.
5.	Water Quality and Conservation	No updates planned.
6.	Air Quality	No updates planned.
7.	Energy Conservation	No updates planned.
8.	Urban Forestry	No updates planned.
9.	Potable Water and Wastewater	No updates planned.
10.	. Solid Waste	No updates planned.

#### **OUR ENVIRONMENT**

#### APPENDIX I

This section outlines supporting strategies to advance the outcomes identified in this chapter.

- I. Protection of Wetlands, Surface Waters, and Natural and Archaeological Resources
  - 1. The following minimum standards shall be used to protect environmentally sensitive resources. The City shall develop and adopt land development regulations that, at minimum, meet the standards addressed below:
    - a. Creeks: Between 35 and 150 feet from the break in slope at the top of the bank, there is a rebuttable presumption that development is detrimental to the regulated creek. Development must conform to applicable provisions of the land development regulations that prohibit development within a minimum of 35 feet of the break in slope at the top of the bank of any regulated creeks.
    - b. Wetlands: Developments containing wetlands must avoid loss of function of degradation of wetland habitat and/or wetland hydrology as the highest priority. Where impact is unavoidable, degradation or loss of function shall be minimized, and the applicant must demonstrate that the project is clearly in the public interest. The City shall develop and implement land development regulations that at a minimum:
      - Establish criteria that are at least consistent with the relevant criteria of Section 373.414(1), F.S., for determining whether the project is clearly in the public interest and expand on existing criteria to incorporate equity and environmental justice considerations.
      - ii. Require the use of the most current functional assessment methodology that is in use by regulatory agencies in Florida for determining mitigation requirements for impacts on wetlands.
      - iii. Specify wetland creation as a mitigation strategy that shall be considered only after substantial evidence, based on the functional assessment, indicates that the preservation, enhancement, or restoration of existing wetlands is less desirable or effective as an option.
      - iv. Establish bonding, long-term monitoring and enforceable long-term maintenance requirements for wetland mitigation projects to ensure that the negative impacts have been mitigated. Monitoring reports shall be reviewed by the City of Gainesville or other appropriate monitoring agency or reviewing entity to ensure mitigation criteria are met, with regulatory fees paid by the permitted applicant. The mitigation plan must be approved prior to the approval and initiation of the project.
      - v. Require off-site mitigation to be performed within the same basin and sub-basin in which the impact occurred, unless it is shown that mitigation within the basin is not feasible or that mitigation outside the basin is more appropriate. The order of preference for the location of mitigated area(s) in relation to the impacted areas will be established in the land development regulations (LDRs).

- vi. Require that development shall not cause indirect or secondary wetland impacts off-site.
- vii. Require a minimum buffer distance of 35 feet and an average buffer distance of 50 feet between the landward extent of any wetland and the developed area. Larger buffers may be warranted as specified in the land development regulations.
- viii. Specify that the protections for wetlands shall be extended to all wetland delineated in accordance with Chapter 62-340, F.A.C., regardless of whether they are currently mapped by the City of Gainesville.
- ix. Require review and approval of wetland mitigation projects by qualified professionals.
- x. Require protection of listed species in wetlands.
- xi. Require that wetlands impacted as a result of noncompliance or unauthorized excavation, filling, drainage, mechanical land clearing, or other development activity on or subsequent to the effective date of this policy be, at the owner's expense, either restored to their original function and condition prior to such damage, or mitigated for pursuant to the mitigation requirements of this Comprehensive Plan or the Land Development Code.
- c. Lakes: Developments containing or adjacent to a natural lake (or lakes) must not adversely impact the condition of the lake. Dredge and fill shall be discouraged and other alternatives considered. Development shall be prohibited within 75 feet of the landward extent of a lake.
- d. Natural and Archaeological Resource Areas: Developments within or including an upland area identified as a significant natural community, listed species habitat, strategic ecosystem based on areas identified and described in the KBN/Golder Associates Report, "Alachua County Ecological Inventory Project" (1996), significant geological resource feature, or a significant archaeological resource must submit a resource inventory and assessment for the parcel. Based on the inventory and any required verification of the extent of the resource area, land development regulations shall provide for the set-aside of identified resource areas for conservation and resource protection.
- 2. The City shall collaborate with local, regional, and state environmental agencies (including Alachua County and the St. Johns and Suwannee River Water Management Districts) to develop basin management plans, which shall identify wetlands of special concern, disturbed wetlands, and appropriate sites for mitigation. The plans shall also consider those factors affecting the structure and functions of wetlands.
- 3. The City shall incorporate by reference the General Soil Map Alachua County Florida, that is the Soil Survey of Alachua County (1985, United States Department of Agriculture, Soil Conservation Service).
- 4. The City shall maintain an updated inventory of identified environmentally significant resources in the Geographic Information System (GIS) Map Library located on the City's Planning and Development Services Department website. If additional resources are

- identified or as annexations occur, these properties shall be subject to regulations keyed to the resource present at the site. The Environmentally Significant Land and Resources Map Series within the Future Land Use Map Series shall be updated as annexations occur and when additional resources are identified.
- 5. Future road alignments shall minimize their impact on environmentally significant natural communities, wildlife corridors, and listed species habitats.
- 6. The City shall periodically inventory environmentally significant plants, animals, and habitats within City-owned parks or open space parcels; update on an on-going basis a list of plants, animals, and habitats that are to be protected and monitor the populations of these plants and animals.
- 7. The City's land development regulations shall protect environmentally significant lands and resources by:
  - a. Providing opportunities for alternative and innovative site development;
  - b. Providing setback and parking standards;
  - c. Providing mandatory mitigation to ensure no net loss of functions and values when wetlands are unavoidably lost;
  - d. Allowing for, or requiring the clustering of development away from environmentally-significant resources;
  - e. Restricting on-site waste disposal systems; and
  - f. Allowing transfer or land use density and/or intensity to retain development potential from set-aside areas that are required to meet the goals, policies, and regulations of this Element and the Land Development Code.
- 8. Conservation strategies for significant natural communities, listed species habitats, and strategic ecosystem resources shall include, at a minimum:
  - a. Conservation of natural resource of uplands, including areas of significant natural communities, listed species habitats, significant geological features, and strategic ecosystem resource areas through set-aside, management, and buffering requirements;
  - b. Installation of native vegetation landscaping and removal of invasive trees and shrubs; and
  - c. Setbacks.

## II. Land Acquisition and Conservation

- The City shall keep in force land development regulations that require new
  developments to dedicate land and easements, within federal constitutional guidelines,
  particularly for the creation of buffers along and around surface waters and natural
  reservations and to facilitate the development of greenways and other open space.
- 2. The City shall allocate a minimum of \$300,000 per year for the purchase and/or management of environmentally significant open space and of active and passive recreation sites.
- 3. The City shall maintain a registry of real properties owned by the City of Gainesville that are acquired or used for conservation, recreation or cultural purposes, and that are

deemed by the City Commission to be worthy of the highest level of protection based on presence and quality of environmentally significant resource and community need.

# III. Stormwater Management

- 1. The City shall require stormwater quality treatment facilities for redevelopment.
- 2. The City's land development regulations shall include provisions to reduce the amount of impervious parking surface allowed.
- 3. The City's land development regulations shall include provisions that meet or exceed best management practices for stormwater management.
- 4. The City shall maintain guidelines for the design of stormwater basins that require the use of native vegetation and basin slopes suitable for stormwater treatment that promote highly diverse plant and animal habitats, particularly within stream-to-sink basins, and that enhance the hydrological and ecological functions of related wetland areas.
- 5. To enhance the quality of water entering Sweetwater Branch, the City shall complete the construction of a master stormwater basin to treat flow from downtown Gainesville.
- 6. The City shall complete the Payne's Prairie Sheet Flow Restoration project during the planning period.
- 7. The LOS standards for all stormwater management facilities shall be the 100-year critical duration storm. The LOS standard for water quality treatment shall be treatment of "first one (1) inch" of runoff and compliance with the stormwater management facility design and performance standards established by the applicable water management district to ensure that the receiving water quality standards of Chapter 62-302 F.A.C. are met and to ensure that receiving surface waters maintain their classifications as established in Chapter 62-302 F.A.C. These standards shall apply to all new development and redevelopment. Any exemptions, exceptions, or thresholds in the Florida Administrative Code (F.A.C.) citations are not applicable.
- 8. The City shall continue to comply with the adopted Land Development Regulations that establish and apply uniform design standards and procedures to the development of water quantity and quality control facilities.
- 9. The City shall continue to comply with the adopted Land Development Regulations that provide standards for the design of facilities in volume sensitive drainage basins.
- 10. Master stormwater basin plans shall be updated for each creek watershed. Such plans shall address:
  - a. The potential for infill development within each basin;
  - b. Potential climate change impacts on rainfall and flooding;
  - c. The encroachment of existing developed areas in the 100-year floodplain;
  - d. Identify projects to improve resiliency to climate change;
  - e. Identify potential sub-regional stormwater treatment facilities;
  - f. Prioritize flood resiliency and water quality improvement projects that promote restoring the natural drainage patterns of watercourses and wetland areas.

- 11. The City will conduct a city-wide self-guided vulnerability assessment process with FloodWise Communities, which will work to identify critical assets vulnerable to flooding.
- 12. The Level 1 capital improvements for 2020 through 2025 shall be as follows:
  - a. Lake Forest Creek Basin Management Plan as shown in the 5-Year Schedule of Capital Improvements
  - b. Lake Forest Creek Watershed Management Plan
  - c. Little Hatchet Creek Bank Stabilization
  - d. Tumblin Creek Gabion Wall and Headwall repairs
- 13. The City shall continue to conduct assessments on an as needed basis, to determine the performance of design standards and stormwater management projects with regard to maintaining and/or reducing the elevation of the 10-year flood channel and 100-year floodplain, especially where such elevations would indicate inundation of existing developed areas. If the assessment indicates that the flood potential has increased, new development shall be restricted until such time as additional standards are implemented and/or stormwater management improvements are provided to meet the impact of such development.
- 14. The City shall continue to inventory all city-maintained stormwater management facilities, conveyance systems and structures.
- 15. The City shall continue to study existing deficiencies identified in the needs assessment and proposed capital improvements shall be prioritized.
- 16. The City shall continue to coordinate with Alachua County and other governmental entities to maintain the existing capacity and function of shared watersheds and to design floodplain elevation standards at or below the 10-year flood channel and 100-year floodplain as established by the most recent Flood Insurance Rate Map (FIRM) of the Federal Emergency Management Agency (FEMA) or a localized study that uses FEMA-approved analyses and that is reviewed and approved by the City of Gainesville Public Works Department.
- 17. The City shall continue to comply with adopted stormwater quantity and quality design standards for the redevelopment of existing sites that have substandard or no on-site stormwater management facilities.
- 18. The City shall continue to review information required for site plan submittal for completeness and revise these requirements to reflect current engineering practice.
- 19. The City shall continue to comply with the procedure for amending the 10-year flood-channel and 100-year floodplain elevations as may be determined by a site-specific engineering study that uses FEMA-approved analyses and that is reviewed and approved by the City of Gainesville Public Works Department.
- 20. The rate of stormwater runoff from any development shall be limited to the predevelopment (conditions existing at the point of adoption of this Plan) rate for a site, and shall not degrade the capacity of existing stormwater facilities.
- 21. In conjunction with the Record of Decision as finalized by the Environmental Protection Agency (EPA) and the National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit issued by the Florida Department of Environmental

- Protection, stormwater runoff from the Cabot-Koppers Superfund site shall be treated on-site so that it does not pose a danger to the community.
- 22. The City shall continue to have a regular inspection program for all surface drainage systems that are the responsibility of the City. Stormwater management facilities shall be inspected during construction and periodically after construction to determine that proper construction, operation and maintenance are ongoing.
- 23. The Stormwater Management Utility Program shall include a maintenance schedule for the regular repair and/or replacement of stormwater facilities for which the City has responsibility.
- 24. Projects to correct existing deficiencies will be prioritized based on social vulnerabilities. Projects shall be reviewed in accordance with the following priorities in the development of the Stormwater Management Utility Capital Improvement Program:
  - a. Projects designed to reduce or eliminate structure flooding in known problem areas;
  - b. Projects designed to improve the quality of water flowing into receiving creeks, lakes and sinkholes;
  - c. Projects designed to reduce street flooding during storm events ranging up to the 25-year storm;
  - d. Projects designed to reduce or eliminate flooding potential of structures in the 100-year floodplain;
  - e. Projects designed to reduce the channelization of creeks, and to restore habitat and wetlands;
  - f. Projects designed to reduce maintenance costs.
- 25. The City shall implement Land Development Regulations that allow shared or joint-use stormwater facilities, including public or private master stormwater basins.
- 26. The City may allow the use of off-site stormwater management facilities to meet the applicable stormwater quality and/or quantity standards required by the Public Works Design Manual.
- 27. The City shall continue to comply with adopted Land Development Regulations that restrict activities known to adversely affect water quality within the Murphree Wellfield Protection Zones.
- 28. The City shall continue to comply with adopted Land Development Regulations that regulate erosion and sedimentation both during and after construction.
- 29. The City shall continue to comply with code enforcement procedures and penalties that help obtain compliance with the approved facility design and function.
- 30. The City shall continue to comply with adopted Land Development Regulations that protect the intrinsic functions of wetlands and accommodate a variety of wetland conditions, such as size of wetland areas, maintenance or restoration of natural hydroperiods, and diversity of vegetation.
- 31. The City shall acquire rights to wetlands and other environmentally sensitive areas in order to further the open space objectives of the Conservation, Open Space and Groundwater Recharge Element of this Plan, and to retain the intrinsic stormwater management functions of these areas. The hydrological and ecological functions of

- related wetland areas should be preserved, restored, or enhanced as appropriate to the extent feasible.
- 32. There shall not be any decrease in the capacity of floodplains nor any destruction of creeks regulated by the "Regulation of Development Near Creeks" ordinance.
- 33. The City shall develop guidelines in the Land Development Regulations and the Public Works Engineering Design Manual that encourage or require Low Impact Development (LID) concepts and other environmentally sensitive design guidelines for stormwater management facilities.
- 34. The City shall continue to comply with adopted Land Development Regulations that promote increased volumes of groundwater recharge, for all new development, where soil conditions permit. The City shall incorporate Low Impact Development (LID) guidelines consistent with those by the state Water Management Districts or the Florida Department of Environmental Protection.
- 35. The City shall have guidelines that promote the following:
  - a. Joint use of retention and detention basins for habitat, open space, and passive recreation, including the establishment and use of trails;
  - b. Use of native and non-invasive vegetation, in retention and detention basins to enhance stormwater management objectives;
  - Integration of on-site retention and detention facilities with other elements of a development through aesthetically sensitive design and appropriate landscaping;
  - d. Maintenance and, where possible, enhancement of the existing hydrological and ecological function of stream or drainage corridors, and of wetland areas which serve stormwater facilities; and
  - e. Removal of invasive vegetation.
- 36. Stormwater management facilities shall be designed to minimize the need for maintenance.
- 37. The City shall provide at least \$200,000 annually for Stormwater Projects.

## IV. Hazardous Materials Management

- 1. The City's land development regulations shall require the handling of hazardous materials in such a way as to prevent degradation of the natural environment. At a minimum, this shall be achieved by complying with the Alachua County Hazardous Materials Management Code and the Alachua County Murphree Wellfield Protection Code, which:
  - a. Prohibit certain new hazardous materials facilities and underground storage tank systems from siting within the unconfined zone of the Floridan aquifer;
  - b. Prohibit new hazardous materials facilities from siting within the primary and secondary wellfield protection zones of the Murphree wellfield, and establish requirements for siting of hazardous materials facilities within the tertiary protection zones of the Murphree wellfield. Within the secondary zone, vehicular fuel storage subject to Section 376.317, F.S., may be allowed;

- Require new Class C and D hazardous materials facilities, as identified in the Alachua County Hazardous Materials Management Code, to maintain large setbacks from surface waters, wells, and floodplains; and
- d. Require stringent hazardous materials storage and containment designs, periodic monitoring, inspections, a management plan, fees, and penalties for non-compliance.
- 2. The City shall coordinate with the Alachua County Environmental Protection Department and other governmental agencies in identifying pollution problems and providing documentation and other relevant assistance as appropriate and feasible towards the mitigation and remediation of pollution problems, including assistance as necessary in cases where sanctions may be imposed for violations of applicable environmental regulations.
- 3. The City shall remain actively engaged as a stakeholder in the cleanup of the Cabot Carbon/Koppers Superfund Site.
- 4. The City shall continue to coordinate with the Florida Departments of Transportation and Environmental Protection regarding the transportation of hazardous wastes within City limits.
- 5. The City shall continue to coordinate with the Alachua County Department of Environmental Protection, which requires submission of a hazardous materials management plan as a contingency for all development approvals for sites where hazardous materials may be handled.
- The City will continue to promote responsible handling of hazardous waste by residents and low quantity producers by working with Alachua County EPD and Solid Waste Department

## V. Water Quality & Conservation

- 1. The City's land development regulations shall supplement the standards of the applicable Water Management District to promote the maintenance of water quality in surface waters. Such standards include:
  - a. Protecting the surface water resource by prohibiting excavation, filling, channelization, mechanized land clearing, and other development activities, except as may be authorized by the Land Development Code;
  - b. Requiring sedimentation controls during and after construction;
  - c. Protecting creek banks and vegetation;
  - d. Requiring treatment of the first "one inch" of stormwater runoff; and
  - e. Restoring previously channelized creeks identified for restoration by the City, when feasible.
- 2. The City shall coordinate with the Alachua County Environmental Protection
  Department, the Florida Department of Environmental Protection (FDEP), the Water
  Management Districts, and the Environmental Protection Agency (EPA) and shall
  support the appropriate agencies with efforts to:
  - a. Identify areas of pollution to surface waters and groundwater;

- b. Provide on-going monitoring programs that include periodic reports that describe environmental conditions and cleanup status; and
- c. Identify parties responsible for polluted areas, and require such parties to mitigate pollution problems.
- 3. The City shall allow new development in commercial, institutional, and industrial districts to only place septic tanks:
  - a. In compliance with the Wellfield Protection Special Use Permit process of the City's Land Development Code, and if the development is in compliance with the Alachua County Hazardous Materials Management Code; and
  - b. In areas not identified as regulated surface waters or wetlands.
- 4. The City shall maintain water conservation programs that are consistent with the Water Management District's plans (Sections 373.175 & 373.246, F.S., and Chapters 40B-21 & 40C-21, F.A.C.). These programs shall include strategies to: deal with emergency conditions; implement public education campaigns regarding the nature of groundwater resources and the need to protect and conserve them; provide the public with information on water reuse systems; and employ potable water rate structures to encourage water conservation.
- 5. The City shall cooperate with the water management districts during declared water shortage emergencies by conserving water resources and by assisting with the implementation of water shortage emergency declarations, orders, and plans.
- 6. Pursuant to Section 373.0397, F.S., Water Management Districts have mapped groundwater recharge areas for the Floridan aquifer. City land development regulations shall protect the Floridan aquifer groundwater resource through recognition of geographic areas of relative vulnerability and high aquifer recharge characteristics. Mapping of these high aquifer recharge areas shall include surface waters that convey flow directly to groundwater via sinkholes (stream-to-sink surface water basins) and areas where the Floridan aquifer is otherwise vulnerable or highly vulnerable to degradation through recharge from land surfaces.
- 7. Final development orders shall require compliance with State, County, and City septic tank rules.
- 8. The City shall inform the public of the requirements of Section 373.62, F.S., regarding automatic lawn sprinkler systems.
- 9. The City shall require construction design consistent with existing terrain by discouraging contouring, cut and fill, or other practices that cause soil erosion.
- 10. The City shall maintain land development regulations for regulated surface waters and wetlands that require:
  - a. Buffers and/or setbacks from regulated surface waters and wetlands;
  - b. Development to minimize erosion and sediment pollution to regulated surface waters and wetlands;
  - c. No net increase in the rate of runoff from development sites adjacent to surface waters and wetlands;
  - d. Retention or detention of runoff from developments adjacent to regulated surface waters and wetlands, through on-site filtration in accordance with the Public Works Design Manual;

- e. Retention of vegetation integral to the ecological value of regulated surface waters and wetlands;
- f. Compliance with the City's adopted criteria for controlling sediment and erosion;
- g. Allowance of transfer of development intensity and density from lower to higher elevations of a site; and
- h. Prohibition on the installation of all septic tanks.
- 11. The City shall protect floodplains and flood channels through land development regulations that at a minimum meet all applicable State and federal requirements and regulations.
- 12. The City shall maintain its National Pollutant Discharge Elimination System (NPDES) permit from FDEP in order to improve surface water quality.
- 13. The City shall explore projects for improving water quality in its watersheds.
- 14. The City shall continue to offer water conservation education and information to residential and non-residential customers through its Energy/Water Survey Program.
- 15. The City shall continue to minimize water losses from unaccounted sources through its ongoing water loss reduction program.
- 16. The City shall continue its conservation rate structure as an economic means of promoting water conservation throughout the year.
- 17. The City shall continue to include water conservation techniques, including "Florida Friendly" landscaping, in the City landscape ordinance.
- 18. The City shall continue to offer free water conservation information as part of at least one utility billing statement per year.
- 19. The City shall require use of reclaimed water in reclaimed water service areas.
- 20. The City shall continue to require low-volume plumbing devices, consistent with applicable building codes.
- 21. The City will work with Alachua County and the water management districts to develop a model ordinance or plan to better regulate private irrigation wells.
- 22. The City will conserve water on City properties by maximizing the use of "Florida Friendly" landscaping to the extent feasible in new landscaping projects.

### VI. Air Quality

- 1. The City shall develop new programs and continue existing policies that encourage public transit use, bicycling, walking, and higher urban development densities.
- 2. Except for designated incinerators and landfills, the City shall continue to prohibit the burning of refuse, trash, or garbage, in accord with applicable provisions of Chapters 10 and 27, Gainesville Code of Ordinances.

### VII. Energy Conservation

 The City and GRU shall provide customers with education and incentive programs to encourage natural resource conservation, energy conservation, and pollution prevention. 2. The City shall maintain a Green Building Program that encourages environmentally-friendly and energy-efficient construction.

# VIII. Urban Forestry

- 1. The City shall recognize the Urban Forest Management Plan as the strategic plan for the management of Gainesville's urban forest.
- 2. The City shall plant at least 400 trees (or 650 inch-diameters at chest height) within City limits annually, and encourage developers and citizens to plant at least 600 trees annually. At least 75 percent of the trees should be native to north Florida.
- 3. The City shall adopt land development regulations for new development that require the following:
  - a. Use of "Florida-friendly landscaping" as defined in Section 373.185, F.S., and a reduction in allowable turf area;
  - b. Energy conservation through tree and shrub canopy requirements in the Land Development Code that result in shade for buildings and pavement;
  - c. Species diversity in new plantings in order to reduce the effect of tree species loss due to insect or disease outbreaks. No more than 50 percent of any one genus shall be allowed on any site plan, except within airport flight paths and street tree plantings. Although street tree diversity shall be attained citywide, a given street should be uniform with respect to genus, size, and shape; and
  - d. A plan for the removal of invasive trees and shrubs, which shall be submitted at the time of development review.
- 4. The City shall require that removal of regulated trees that are not subject to development plan approval shall be mitigated by on or off-site tree planting (or an equivalent payment in lieu).
- 5. The City shall promote tree-lined streetscapes that preserve trees and are compatible with existing infrastructure. Strategies such as placing overhead utilities underground, using aerial (tree) cabling, planting trees compatible with overhead utilities, and reserving street right-of-way for trees shall be implemented, when economically feasible. All trimming within the public right-of-way shall follow the standards of the American National Standards Institute (ANSI) A300 and Z133.1, in order to minimize the physical and aesthetic harm to trees that must be pruned.
- 6. The City shall remove invasive trees and shrubs from its rights-of-way and property, and shall inform private property owners of the benefits of removing invasive vegetation.
- 7. The City shall exclude invasive vegetation from plant material permitted in landscape plans, and continue to encourage the use of native plants in landscape plans.
- 8. The City shall maintain land development regulations that protect heritage, champion, and other regulated trees as an important community resource. The regulations at a minimum shall include provisions for:
  - a. Modifications to land development regulations in order to protect and preserve regulated trees;
  - b. Levying of fines for the unlawful removal of trees as provided by the Code of Ordinances;

- c. Setback requirements to protect trees before, during, and after construction; and
- d. Adequate underground space for root development of newly planted trees.

#### IX. Potable Water and Wastewater

- 1. The following LOS standards shall be adopted for potable water:
  - a. Maximum Day (Peak) Design Flow: 200 gallons per capita per day;
  - b. Storage Capacity: ½ of peak day volume in gallons. This requirement may be met by a combination of storage and auxiliary power;
  - Pressure: The system shall be designed for a minimum pressure of 40 psig under forecasted peak hourly demands to assure 20 psig under extreme and unforeseen conditions;
  - d. The City shall reserve potable water capacity for the annual water demand projected by the City for the University of Florida and the power plants.
- 2. The following LOS standards shall be adopted for wastewater services: Average Day Standard: 106 gallons daily flow per capita.
- 3. The following LOS standards shall be adopted for water supply: Average Daily Flow: 147 gallons per capita per day.
- 4. Within 18 months of the adoption of water supply plans by the St. Johns River Water and Suwannee River Water Management Districts, the City shall amend the Comprehensive Plan to:
  - a. Identify alternative and traditional water supply projects, and conservation and reuse measures that will meet the water needs identified in the water supply plans;
  - b. Incorporate a work plan for at least a 10-year planning period for the development of water supply projects that will meet the water needs identified in the water supply plans.
- 5. The City shall maintain forecasts of plant flow requirements and provide for plant capacity and other facility expansions in GRU's annually-updated, five-year capital budget to meet the LOS standards.
- 6. The City shall perform ongoing evaluations and studied to determine the water and wastewater systems' needs to meet the requirements of existing and future customers, with the LOS standards to be employed as minimum criteria. The City shall provide financial resources in GRU's operating and annually-updated, five-year capital budgets to renew, replace, improve, and maintain the systems in accordance with prudent utility practice as defined in the Utilities System Revenue Bond Resolution (adopted June 6, 1983).
- 7. The City shall not commit to provide water or wastewater service if sufficient capacities or facilities to serve the proposed project cannot be made available at the time that the system impacts of the project will occur. The City shall maintain, as part of its Concurrency Management System, records of the expected amount of system demand from projects to which commitments are made and expected project lead and completion times in order to monitor capacity and facility requirements.

- 8. Every five years, the City shall hire independent and qualified consulting firms to evaluate the condition of the water and wastewater systems and the adequacy of the financial and facilities planning performed to maintain the system.
- 9. The City shall continue to upgrade and expand water/wastewater facilities, as shown in the 5-Year Schedule of Capital Improvements, to meet established LOS standards. The City shall give priority to correcting existing deficiencies in levels of service prior to expanding facilities to new, unserved areas.
- 10. In order to discourage urban sprawl, Gainesville Regional Utilities shall extend potable water and wastewater facilities outside city limits in accordance with policies in the Alachua County Comprehensive Plan.
- 11. The City shall encourage development of property in close proximity to existing service areas through the continued use of appropriate economic incentives concerning the extension of water and wastewater services as listed below:
  - a. The City shall continue its policy of having all new water and wastewater service connections pay the fully allocated cost of the treatment facilities required to serve them in the form of plant connection fees, and the cost of distribution or collection facilities, unless the service is on a developer-installed system;
  - The City shall continue its policy of having a development contribute the water and wastewater distribution and collection system internal to a development.
     Contributions in aid of construction are paid if the City does not project an adequate return on investment for water distribution or wastewater collection system extensions;
  - c. The City shall continue its policy that all facilities constructed and contributed to the utility system must be approved, inspected, and built to City standards.
- 12. The City shall not reserve potable water or wastewater capacity outside of city limits without a determination that the development order is consistent with the Future Land Use Element of Alachua County.
- 13. All new developments at equivalent residential densities greater than 2 units per acre that require potable water or wastewater treatment, within the City of Gainesville, shall be required to connect to the centralized potable water system and/or the centralized wastewater system, except as specified below. Equivalent development densities shall be determined as estimated by Gainesville Regional Utilities. Non-residential development proposed to be on septic tanks must demonstrate that it will not dispose of toxic, hazardous, or industrial waste in the septic tank.
  - a. New developments of existing lots in platted subdivisions and other existing legal lots of record shall be excluded from the requirements above unless there are existing distribution or collection facilities in the right-of-way easements abutting the property.
  - b. New construction of package wastewater plants must meet the relevant standards established by the State of Florida and the Federal government and must connect to central wastewater treatment facilities within 5 years of central wastewater facilities becoming available. New package plants shall only be permitted when:

- The developer of such temporary package treatment plant is required to enter into a legally binding agreement that dedicates and assigns responsibility for the proper maintenance and operation of the plant to an appropriate agency of local government; and
- ii. Such agreement shall provide adequate compensation by the developer to the local government agency for the proper operation and maintenance of the plant; and
- iii. The package plant is approved by the appropriate government agency assigned plant operation and maintenance as meeting standards for design, operation and maintenance.
- 14. Industrial pre-treatment plants shall be allowed.
- 15. The City shall continue its connection charge installment program, as outlined in the Code of Ordinances, to encourage users to abandon wells and/or package or on-site wastewater treatment systems and to connect to the centralized potable water and wastewater systems.

#### X. Solid Waste

- 1. The City shall minimize the amount of solid waste that must be disposed of in a landfill. In order of priority, minimization shall be attained by (1) source reduction of waste; (2) re-use; (3) recycling; (4) composting; and (5) landfilling.
- The City shall continue to utilize procurement procedures that Increase the use of recycled materials, reduce the consumption of single use plastics, take into consideration the life cycle costs, and greenhouse gas effects.
- 3. By 2025, the City shall make single family and multifamily waste food diversion available.
- 4. The City shall promote Zero Waste strategies through public education.
- 5. By 2024, 98% of all multi-family residential and commercial properties shall participate in a recycling program.
- 6. The City shall continue to require new multi-family, commercial, and institutional developments to include recycling receptacles Recycling receptacles shall also be placed at public parks, the airport, and other places of public assembly.
- 7. The City shall maintain at least a 75% set out rate for the residential curbside recycling program.
- 8. The City will continue to expand the two-bin program to encourage separation of paper recyclables from plastic, metals, and glass throughout the mandatory collection area of the City by making additional capacity available to neighbors when requested.
- 9. The City shall enforce illegal dumping laws. Such enforcement shall include efforts to clean up existing illegal dump sites, and develop or revise ordinances to increase the feasibility of prosecuting illegal dumpers.
- 10. Through coordination with the County and other waste material handlers, the City will continue to participate in a periodic, convenient special waste collection program for difficult-to-dispose-of wastes, such as tires, used oil, batteries, and asbestos, and will

- utilize the Household Hazardous Waste Center to promote increased reuse and recycling by the general public.
- 11. The City shall continue to receive and publicize an annual report prepared by Alachua County, as set forth by Sec. 403.706(7), F.S., describing trends in the county solid waste management program, including, at a minimum, amounts by type of waste, amount and type of waste recycled, and percent of the population participating in recycling.
- 12. The City, in cooperation with Alachua County, shall continue to sponsor solid and hazardous waste education programs for school students and interested citizens.
- 13. TThe City shall continue to follow the provisions of the source reduction and recycling procurement policy that is intended to increase the recycled content of products purchased and used by the City, reduce waste in the manufacture and use of products purchased and used by the City, and encourage businesses that promote recycling to locate within the Gainesville area.
- 14. The following LOS standard for disposal and collection capacity shall be established: 0.655 tons of solid waste per capita per year disposed (3.6 pounds of solid waste per capita per day disposed). The City shall continue to maintain contracts with solid waste haulers and landfill operators that require replacement and purchase of collection trucks necessary to collect 1.07 tons of solid waste per capita per year (5.9 pounds per capita per day).
- 15. The City shall continue to ensure that waste tonnages being generated within city limits are being accurately monitored by requiring monthly reporting of solid waste tonnages being delivered to disposal facilities as required by Section 403.706(18), F.S. Monthly tonnages shall also be reported for recyclables (including yard trash).
- 16. In accordance with the "Interlocal Agreement for Solid Waste Management Services Between Alachua County and The City of Gainesville, Florida", Alachua County shall develop and maintain solid waste management facilities as necessary for the receipt, processing and/or disposal of all acceptable waste from within city limits. The City shall continue to abide by an interlocal agreement with the solid waste management facility provider(s) (currently Alachua County), effective December 21, 1998, that ensures that disposal capacity is available for the disposal of 3.6 pounds of solid waste per capita per day by City waste generators. This shall include, but not be necessarily limited to, all residential, commercial, industrial, governmental, and institutional waste. The agreement shall remain in effect until (new date). Upon mutual agreement of the parties, the agreement may be renewed for additional five-year periods.

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