

9.0 General Infrastructure

Goal 1: To Design, Construct and Maintain a Safe, Sustainable, Economical and Environmentally Sound Stormwater Management System that Reduces the Potential of Flooding, Protects Natural Drainage Features, and Preserves and Enhances Desirable Water Quality Conditions.

Objective 1.1: Meet or exceed all applicable federal and state regulatory requirements for stormwater management and water quality protection.

Policies	Status	Benchmarks	Recommendations
Policy 1.1.1: The University shall continue to comply with the regulations set forth in the Clean Water Act, Title 40 CFR as applicable.	Ongoing	The university complies with the Clean Water Act	No Change
Policy 1.1.2: The University shall maintain water quality standards for stormwater quantity and quality that are consistent with the St. Johns River Water Management District (SJRWMD), Suwannee River Water Management District and Department of Environmental Protection standards for stormwater management systems as outlined in Section 120.373 and Chapter 403, Florida Statutes and Chapters 62-3, 62-25, 62-40, 40B-1, 40B-2, 40B-4, 40C-1, 40C-4, 40C-8 and 40C-40 through 40C-44, of the Florida Administrative Code.	Ongoing	The university maintains these standards as applicable and complies with permits issued from the St. Johns River and Suwannee River Water Management Districts	No Change
Policy 1.1.3: The University shall obtain a Standard General or Individual Environmental Resource permit from the appropriate water management district for construction that is located outside of the Lake Alice Basin and UF Depressional Basins 1-3 and 5-9 as required, and shall coordinate with the City of Gainesville and Alachua County on these construction projects.	Ongoing	The university obtains permits as required.	No Change
Policy 1.1.4: The University shall provide stormwater management facility capacity and the capital improvements required to meet future service demands on campus.	Ongoing	The university provides stormwater facilities as required.	No Change

Policies	Status	Benchmarks	Recommendations
Policy 1.1.5: The University shall abide by all requirements and conditions of the current Master Stormwater Permit by the SJRWMD and shall seek renewal of the permit in 2020. Those conditions include reporting water levels in monitoring wells quarterly and submission of groundwater and surface water monitoring tests to the water management district.	Ongoing	The Facilities Services Division maintains the master stormwater permit and reporting. The permit was renewed in 2010 and is in the process of being renewed for 2020.	Modify – change renewal of the permit “in advance of its expiration”.
Policy 1.1.6: The University shall submit an annual report to the SJRWMD that includes details of specific construction projects and update the proposed construction plan with changes in impervious surface by basin within the Lake Alice Basin and depressional basins 1-3 and 5-9. Additionally, the University shall provide as-built plans or certification by a Florida Registered Engineer that all facilities have been constructed in accordance with the design approved by the water management district. Plans for any construction on the main campus within 50 feet of a jurisdictional wetland shall be submitted to the SJRWMD for review and approval.	Ongoing	The Facilities Services Division maintains the master stormwater permit and annual reporting. Construction within 50 feet of a jurisdictional wetland has been very minimal but permits were obtained as required.	No Change

Objective 2.1: Maintain existing stormwater management infrastructure and provide sufficient infrastructure capacity to meet the future needs of the University.

Policies	Status	Benchmark Data	Recommendations
<p>Policy 1.2.1: Stormwater management facility improvements shall be implemented based on the following ranked priorities:</p> <ol style="list-style-type: none"> 1. Eliminating existing system deficiencies and deferred maintenance, particularly those that may affect life safety and property protection; 2. Maintaining the existing system through routine preventive maintenance activities; and 3. Expanding the system to accommodate new stormwater management needs. 	Ongoing	<p>The Facilities Services Division is responsible for prioritizing deficiencies and maintaining current facilities. Recent stormwater planning efforts have focused on condition assessments of the conveyance systems, priority pipe replacement to protect properties from flooding, and relocating pipes to align utilities under roadways and sidewalks minimizing landscape impacts. The Division coordinates improvements with the Planning Design and Construction Division for projects requiring enhanced or new treatment infrastructure.</p>	No Change
<p>Policy 1.2.2: The Physical Plant Division shall appropriately size stormwater facilities to meet anticipated future demand (based on the 10-year capital improvement list) when doing routine upgrades, replacements or new installations including provisions to account for anticipated landscaping that could displace function and consider the addition of stormwater pretreatment systems within the Lake Alice basin, where feasible.</p>	Ongoing	<p>The Facilities Services Division continues to manage the stormwater treatment and conveyance system consistent with this policy and existing permits.</p>	Modify - Change Physical Plant to Facilities Services

Policies	Status	Benchmark Data	Recommendations
<p>Policy 1.2.3: The Physical Plant Division shall be charged with reviewing all proposed development projects to ensure that increases in impervious surface can be accommodated in the capacity of the existing and/or committed drainage system. Any proposed increase in campus impervious surfaces shall be implemented only upon a finding by the Physical Plant Division that existing facility capacity is already on-line to accommodate the increased need, or that additional capacity will be funded and on-line at the time of need.</p>	<p>Ongoing</p>	<p>The Facilities Services Division reviews proposed project impacts to the stormwater infrastructure and permits.</p>	<p>Modify - Change Physical Plant to Facilities Services</p>
<p>Policy 1.2.4: The University Design and Construction Standards shall maintain standards for retention facilities that are natural and curvilinear in outline, with variable side slopes, smooth transitions, and landscape treatments.</p>	<p>Ongoing</p>	<p>This policy has been incorporated into the General Requirements of the UF Design and Construction Standards, but additional clarification may be needed.</p> <p>In more intensely developed parts of campus, structured stormwater retention may be constructed as a Low Impact Design and landscape feature as was done at the Hawkins Center. These features must be designed to facilitate easy maintenance including weeding.</p>	<p>Modify - Policy 1.2.4: The University Design and Construction Standards shall maintain standards for retention facilities <u>and associated landscapes including those that are natural and curvilinear in outline with variable side slopes, smooth transitions, and those that are constructed in densely developed areas to be a structured part of the pedestrian hardscape features.</u></p>

Policies	Status	Benchmark Data	Recommendations
<p>Policy 1.2.5: The University Design and Construction Standards shall maintain standards for landscape treatment for retention facilities that respects maintenance and access setbacks but otherwise be set into a natural, existing vegetative context or planted with native material.</p>	<p>Ongoing</p>	<p>Retention facilities including the pond near the Harn Museum and the bioswale constructed at the SW Recreation Center reflect the intent of this policy. In more intensely developed parts of campus, structured stormwater retention may be constructed as a Low Impact Design and landscape feature as was done at the Farring Hall Addition. These features must be designed to facilitate easy maintenance including weeding.</p>	<p>Modify - include urban treatment options and emphasize maintenance requirements.</p> <p><u>“...facilities that shall be planted with native material and provide access for ease of maintenance whether set into a natural, existing vegetative context or urban hardscape.</u></p>
<p>Policy 1.2.6: Implement infrastructure improvement projects identified in Figure 9-1 to reduce stormwater erosion, and to reduce the quantity and improve the quality of stormwater discharge based on priorities established in 1.2.1 as feasible.</p>	<p>Ongoing</p>	<p>Expansions at the Cultural Plaza have used all available capacity in the current ponds. No other projects were completed that were reflected on Figure 9-1 Potential Stormwater Improvements.</p>	<p>No Change</p>
<p>Policy 1.2.7: The University shall work with the City of Gainesville and Florida Department of Transportation to ensure that stormwater issues that can include water quality, trash, erosion, and flooding are controlled at points where off-campus stormwater is accepted into the University’s stormwater system and water bodies or when the University’s stormwater system adversely impacts the stormwater systems and water bodies under control of the City of Gainesville or the Florida Department of Transportation.</p>	<p>Ongoing</p>	<p>The university continues to coordinate with the City and FDOT to address issues that arise from on-campus systems that flow into off-campus areas.</p>	<p>No Change</p>

Objective 1.3: Protect the natural functions of hydrological areas, maintain water quality and control sedimentation.

Policies	Status	Benchmark Data	Recommendations
<p>Policy 1.3.1: The University shall not allow stormwater discharge to cause or contribute to a violation of water quality standards in Waters of the State.</p>	<p>Ongoing</p>	<p>The university monitors water quality and ensures compliance with all applicable standards. The UF Clean Water Campaign, operated through the UF Soil and Water Sciences Department, performs these services and partially satisfies requirements of the National Pollutant Discharge Elimination System (NPDES).</p>	<p>No Change</p>

Policies	Status	Benchmark Data	Recommendations
<p>Policy 1.3.2: The University shall continue to mitigate University generated stormwater and to minimize stormwater borne pollutants in new and existing facilities through implementation of Best Management Practices (BMPs) that includes, but is not limited to:</p> <ul style="list-style-type: none"> • Incorporating stormwater management retention and detention features into the design of parks, trails, commons and open spaces, where such features do not detract from the recreational or aesthetic value of a site. • Using slow release fertilizers and/or carefully managed fertilizer applications timed to ensure maximum root uptake and minimal surface water runoff or leaching to groundwater. • Conducting regular training for maintenance personnel about issues such as motor vehicle maintenance in order to prevent leakage of oil, grease and other fluids, collection and proper disposal of yard debris, disposal of paint and cleaning products (including their empty containers) and collection of suitable recyclable materials. • Avoiding the widespread application of broad spectrum pesticides by involving only purposeful and minimal application of pesticides, aimed at identified targeted species. • Coordinating pesticide application with irrigation practices to reduce runoff and leaching. • Using pervious materials to minimize impervious surface area. • Incorporating features into the design of fertilizer and pesticide storage, mixing and loading areas that are designed to prevent/minimize spillage. • Using vegetative management (e.g., planted buffers and minimal mowing). 	<p>Ongoing</p>	<p>The university continues to assess, train, and monitor implementation of these BMPs sustained efforts of UF’s Environmental Health and Safety, Office of Sustainability, and the Facilities Services Division. The University continues to be a Certified Audubon Cooperative Sanctuary by Audubon International. This certification requires documentation of several BMPs outlined in this policy. Pervious asphalt has been used in all bicycle path construction projects on campus between 2006 and 2019.</p>	<p>No Change</p>

Policies	Status	Benchmark Data	Recommendations
<p>Policy 1.3.3: The University shall require appropriate methods of controlling soil erosion and sedimentation to help minimize the destruction of soil resources used or disturbed during site development as outlined in NPDES Phase II requirements. Such methods shall include, but not be limited to:</p> <ul style="list-style-type: none"> • Phasing and limiting the removal of vegetation; • Minimizing the amount of land area that is cleared; • Limiting the amount of time bare land is exposed to rainfall; • Using temporary ground cover on cleared areas if construction is not imminent; • Using silt fencing, hay bales, or other appropriate sediment barriers adjacent to water bodies, wetlands and areas of slope; and • Maintaining vegetative cover on areas of high soil erosion potential (i.e., banks of streams, steep or long slopes, stormwater conveyances, etc.), where feasible. 	Ongoing	The Environmental Health and Safety Division continues to provide enforcement of NPDES requirements.	No Change
<p>Policy 1.3.4: The University shall implement the latest advances in agricultural BMPs in all campus agricultural areas, unless the BMPs directly interfere with the research being done at the site. These BMPs shall include, but are not limited to, the use of buffer strips, soil erosion control measures, fertilizer recommendations based on research and soil sampling, efficient manure management, barnyard and/or feedlot runoff control, water diversions, fencing, grade stabilization structures, grass waterways, and ponds/sediment basins.</p>	Ongoing	The university continues to assess, train, and monitor implementation of these BMPs for agricultural areas.	No Change

Policies	Status	Benchmark Data	Recommendations
<p>Policy 1.3.5: The University shall provide the City of Gainesville the opportunity to review and comment on proposed development and construction projects within the Hogtown Creek/Bivens Arm Lake Drainage Basins. The University shall ensure that any potential adverse impacts to the Hogtown Creek Drainage Basin are identified and that any increase in volume of runoff over the pre-development volume for a 72-hour period shall be accommodated in the site design for the development.</p>	<p>Ongoing</p>	<p>University development projects in the Hogtown Creek and Lake Alice Drainage Basins comply with this policy. University development occurs in the Bivens Arm Lake Drainage Basin and complies with elevated requirements in this impaired water body for which the Florida Department of Environmental Protection designated Total Maximum Daily Load requirements in 2014. Requirements for development evaluation in both of these watersheds should reference the City of Gainesville Land Development Regulations in order to remain current over time.</p>	<p>No Change</p>
<p>Policy 1.3.6: The University shall cooperate with the City of Gainesville and Alachua County on efforts to restore the natural functions of Tumblin Creek prior to its discharge into Bivens Arm Lake.</p>	<p>Ongoing</p>	<p>The University continues to coordinate with the City and County regarding issues related to Tumblin Creek and Bivens Arm. In 2015 FDOT installed a sediment /trash trap to help alleviate sedimentation into Bivens Arm.</p>	<p>No Change</p>

Policies	Status	Benchmark Data	Recommendations
<p>Policy 1.3.7: Considering different use expectations for Lake Alice, which is also the university’s permitted stormwater treatment facility, the University shall continue to monitor Lake Alice and other surface water bodies for compliance with existing standards for water quality and strive to meet Class III-Limited water quality standards in Lake Alice and report findings to the Lakes, Vegetation and Landscape committee biannually starting in 2015.</p>	<p>Ongoing; not complete</p>	<p>Water quality monitoring has been conducted and reveals high levels of phosphorous in many campus waters, although some of these levels may be naturally occurring. Class III is defined for water bodies for Recreation, Propagation and Maintenance of a Healthy, Well-Balanced Population of Fish and Wildlife. Lake Alice is a permitted stormwater treatment facility, and as such, is not subject to the standards set for natural waterbodies. Since 2005, state standards have been modified to allow for a “Class III – Limited” standard. The UF Clean Water Campaign monitors for NPDES permit and has reported findings to LVL periodically but has not made a report since the last update to the Master Plan.</p>	<p>No Change</p>

Objective 1.4: Implement sustainable stormwater practices in all campus site development incorporating Low Impact Development techniques where physically, economically, and practically possible.

Policies	Status	Benchmark Data	Recommendations
<p>Policy 1.4.1: Consistent with the University Design and Construction Standards, the University shall strive to incorporate stormwater improvements into all new building sites and into modification of existing sites. These improvements include, but are not limited to, rain gardens, roof-top gardens, porous soil amendments, hardscape storage, pervious pavement and other innovative stormwater techniques.</p>	<p>Ongoing</p>	<p>These aspirations area also reflected in the university’s Design and Construction Standards and green building program. Project examples include bioswale rain gardens incorporated into the Farrior Hall Addition and to the Harrell Medical building. The university works to incorporate pervious asphalt on new bicycle paths, where suitable. Maintenance of stormwater interventions such as impervious pavements and rain gardens needs to be addressed.</p>	<p>Modify – Policy 1.4.1: The University shall strive to incorporate stormwater improvements into all new building sites and into modification of existing sites. These improvements include, but are not limited to, rain gardens, roof-top gardens, porous soil amendments, hardscape storage, pervious pavement and other innovative stormwater techniques as depicted in Figure 9-2 with a commitment to funding proper maintenance of their appearance and function.</p>
<p>Policy 1.4.2: The University shall identify opportunities for retrofitting existing open space (i.e. land use classifications of Buffer, Urban Park and Conservation) to incorporate rain gardens and other multi-use detention practices that maintain the primary use, but with the added benefit of slowing water discharges into the stormwater system. Examples include: lowered flower beds (i.e. instead of raised beds), curb openings (i.e. brick and other hardscape removal in edging and seat wall footings) that allow water to enter vegetated areas, use of lawn areas for incorporating slight depressions that retain rainfall, and elevating storm drains where water detention is acceptable so that they are not at the lowest elevation.</p>	<p>Ongoing</p>	<p>The Landscape Master Plan includes examples of incorporating stormwater treatment into landscape and roadway projects. As the campus rebuilds its underground utility infrastructure, new opportunities will be identified to incorporate these ideas.</p>	<p>Replace - reference the LMP Policy 1.4.2: The University shall follow the examples and recommendations in the Landscape Master Plan to incorporate stormwater treatment techniques in the existing landscape through identified utilities and roadways projects and other project opportunities to be identified.</p>

Policies	Status	Benchmark Data	Recommendations
Policy 1.4.3: All proposed stormwater projects on campus that involve the use of designated open space (land use classifications of Green Space Buffer, Urban Park and Conservation) shall seek approval from the Lakes, Vegetation and Landscape committee, during the design phase. These projects must be in conformance with the primary function of the open space.	Ongoing	No projects have used designated open space for stormwater treatment in the last five years.	No Change

Objective 1.5: Inform faculty, staff, students and visitors on stormwater issues through outreach and demonstration projects.

Policies	Status	Benchmark Data	Recommendations
Policy 1.5.1: The University shall strive where practicable to include interpretive information and educational opportunities that go along with the University's efforts to integrate innovative structural stormwater design and BMP concepts.	Ongoing	The SEEP at the NATL continues to update its informational kiosk. No other examples have been completed in the last five years.	No Change
Policy 1.5.2: The University shall maintain financial and personnel support of stormwater related education and awareness programs for the campus community.	Ongoing	The University funds the UF Clean Water Campaign implemented through the Department of Soil and Water Sciences.	No Change
Policy 1.5.3: The University shall pursue grants and other opportunities to fund implementation, outreach and study of stormwater best management practices on campus.	Ongoing	University administrative units have worked with faculty and students of the Department of Landscape Architecture to pursue innovative stormwater grants from the U.S. Environmental Protection Agency.	No Change

Goal 2: To Provide a Reliable, Sustainable, Safe, and Efficient Potable Water System to Meet the Current and Future Demands of the University.

Objective 2.1: Coordinate with the provider of potable water service to ensure that adequate capacity and levels of service are maintained to meet current and future demands of the University.

Policies	Status	Benchmark Data	Recommendations
Policy 2.1.1: The potable water distribution system shall be designed to provide for at least one hundred percent (100%) of the combined maximum daily demand rate and required fire flow for said rate, or peak hour demand, whichever is greater.	Ongoing	The Facilities Services Division maintains the water system to this standard. This policy is not required to be in the CMP by the Florida Board of Governors and is addressed through other UF policy requirements.	Delete
Policy 2.1.2: Flow demands for housing development shall be designed and calculated based on full or projected ultimate development. Flow demands for public or special developments shall be based upon the type of development, with calculations submitted to the University for approval prior to final system design.	Ongoing	The Facilities Services Division maintains the water system consistent with this policy. This policy is not required to be in the CMP by the Florida Board of Governors and is addressed through other UF policy requirements.	Delete

Policies	Status	Benchmark Data	Recommendations
Policy 2.1.3: Water distribution facilities shall be designed to provide an average daily level of service (LOS) of 70 gallons per capita per day.	Ongoing	The Facilities Services Division maintains the water system consistent with this policy.	Modify and Renumber as - Policy 2.1.1: Water distribution facilities shall be designed in accordance with engineering best practices and shall be congruent with Chapter 64E-8, Drinking Water Systems, Florida administrative Code and adhere to an average daily level of service (LOS) as outlined in Table 1 in 64E-6.008 Florida Administrative Code.
Policy 2.1.4: Potable water infrastructure improvements shall be implemented in accordance with the following priorities: 1. Elimination of existing system deficiencies; 2. Maintaining the existing system; and 3. Expanding the system to accommodate new potable water demands.	Ongoing	The Facilities Services Division maintains the water system consistent with this policy.	Renumber as Policy 2.1.2
Policy 2.1.5: The University shall construct new potable water facilities as needed. The timing and phasing requirements for these improvements shall be established in the Capital Improvements Element.	Ongoing	The Facilities Services Division maintains the water system consistent with this policy.	Renumber as Policy 2.1.3
Policy 2.1.6: Design criteria for potable water facilities and level of service standards shall be consistent with those outlined in the Florida Administrative Code, Chapters 62-550 and 62-555.	Ongoing	The Facilities Services Division maintains the water system consistent with this policy.	Renumber as Policy 2.1.4

Policies	Status	Benchmark Data	Recommendations
Policy 2.1.7: The University shall coordinate with the Gainesville Regional Utilities (GRU) to ensure that adequate water service will be available for any proposed development connecting to the GRU system consistent with the University's Consumptive Use permit issued by the St. Johns River Water Management District. The University shall update as necessary, memoranda of understanding or interlocal agreements to ensure that potable water will be supplied to the campus to meet the future needs of the University.	Ongoing	The Facilities Services Division maintains the water system and consumptive use permits consistent with this policy.	Renumber as Policy 2.1.5
Policy 2.1.8: The Physical Plant Division shall appropriately size water infrastructure to meet anticipated future demand (based on the 10-year capital improvement list) when doing routine upgrades, replacements or new installations.	Ongoing	The Facilities Services Division maintains the water system consistent with this policy.	Modify - Change Physical Plant to Facilities Services; Renumber as Policy 2.1.6
Policy 2.1.9: The Physical Plant Division shall be charged with reviewing all proposed development projects to ensure that adequate potable water capacity is available.	Ongoing	The Facilities Services Division reviews proposed project impacts to the potable water system and permits.	Modify - Change Physical Plant to Facilities Services; Renumber as Policy 2.1.7
Policy 2.1.10: Proposed increases in consumptive use of potable water shall be approved only upon a determination that adequate potable water treatment and distribution facility capacity is already on-line to accommodate the increased demand, or that additional capacity will be funded and on-line concurrent with demand.	Ongoing	The Facilities Services Division reviews proposed project impacts to the potable water system and permits.	Renumber as Policy 2.1.8

Objective 2.2: Protect and conserve the potable water supply and sources.

Policies	Status	Benchmark Data	Recommendations
<p>Policy 2.2.1: The University shall maintain a water protection and conservation program for the main campus and satellite facilities in Alachua County through the St. Johns Water Management District, Suwannee River Water Management District and the Gainesville Regional Utility, which outlines various procedures on how to protect and conserve the potable water supply and source. This program shall include measures designed to:</p> <ul style="list-style-type: none"> • Ensure compliance with water management district conservation program requirements; • Irrigate in compliance with conditions of the University’s consumptive use permit from the Water Management District(s); • Use treated wastewater effluent for an expanded campus irrigation system; • Use automated timers and other irrigation flow monitoring equipment; • Use low water demand procedures for new building construction and common areas. • Retrofit existing buildings with water-conserving plumbing fixtures, where feasible. 	Ongoing	The university maintains a water protection and conservation program consistent with this policy, supportive of UF’s green building program, and in compliance with its water use permits. The majority of main campus is irrigated with reclaimed water, and low-flow fixtures are required by the UF Design and Construction Standards.	No Change
<p>Policy 2.2.2: The University shall continue to comply with the potable water regulations and requirements set forth in the Florida Administrative Code, Chapters 62-3, 62-40, 62-550 and 62-555.</p>	Ongoing	The university complies with these requirements.	No Change
<p>Policy 2.2.3: The University shall not undertake activities on campus that could contaminate groundwater sources or designated recharge areas, unless provisions have been made to prevent such contamination.</p>	Ongoing	The university complies with this policy through monitoring and enforcement programs of the Environmental Health and Safety Division.	No Change

Policies	Status	Benchmark Data	Recommendations
<p>Policy 2.2.4: The University shall conserve water resources through the use of low water demand design principles, including:</p> <ul style="list-style-type: none"> • Use of drought tolerant and site-appropriate native plant material to the maximum degree possible; • Use of ultra-low volume irrigation delivery fixtures except where reclaimed water is being used; • Separation of turf and non-turf irrigation zones; • Soil moisture sensors and rain shut-off switches; • Use of drought tolerant ground cover; • Use of canopy trees; and • Use of soil enhancers and mulch to enable soils to retain moisture. 	<p>Ongoing</p>	<p>The university maintains water conservation programs consistent with this policy, supportive of UF’s green building program, and in compliance with its water use permits. The majority of main campus is irrigated with reclaimed water (90% of all irrigated areas), and low-flow fixtures are required in the UF Design and Construction Standards. Tree preservation and Florida-friendly landscapes are supported in the UF Design and Construction Standards and Landscape Master Plan.</p>	<p>No Change</p>

Goal 3: To Provide a Reliable, Sustainable, Safe, Efficient, and Environmentally Sound Sanitary Sewer System and Wastewater Treatment Facility to Meet the Current and Future Demands of the University.

Objective 3.1: Ensure that adequate sanitary sewage treatment and capacity is available to meet the current and future needs of the University.

Policies	Status	Benchmark Data	Recommendations
Policy 3.1.1: New sanitary sewer systems shall be designed to implement the performance standards contained in chapters 62-600, 601, 602, 604, 610, 620 of the Florida Administrative Code and other policies of this master plan.	Ongoing	The Facilities Services Division maintains the sanitary sewer system consistent with this policy.	No Change
Policy 3.1.2: Design criteria for sanitary sewer facilities shall be implemented by evaluating system capacities against projected demand in accordance with the applicable standards set forth in the Florida Administrative Code, Chapter 62-600.	Ongoing	The Facilities Services Division maintains the sanitary sewer system consistent with this policy.	No Change
Policy 3.1.3: Flow demands for commercial or high demand developments shall be based upon the type of development, with calculations submitted to the University for approval prior to design.	Ongoing	The Facilities Services Division maintains the sanitary sewer system consistent with this policy. This policy is not required to be in the CMP by the Florida Board of Governors and is addressed through other UF policy requirements.	Delete

Policies	Status	Benchmark Data	Recommendations
Policy 3.1.4: The leakage into or out of the sanitary sewer shall be determined through a comprehensive engineering assessment of infiltration rates on a regular basis. These assessments shall include recommendations for any repairs or corrections needed to minimize infiltration or exfiltration rates in accordance with accepted industry standards.	Ongoing	The Facilities Services Division maintains the sanitary sewer system consistent with this policy. This policy is not required to be in the CMP by the Florida Board of Governors and is addressed through other UF policy requirements.	Delete
Policy 3.1.5: All wastewater force mains shall be designed to accommodate full development peak flow and shall maintain a minimum velocity of 2 feet per second.	Ongoing	The Facilities Services Division maintains the sanitary sewer system and design peak flow requirements. The Campus Master Plan does not need to identify these specific criteria.	Modify – “...peak flow and <u>maintain minimum standards set by the Facilities Services Division.</u> ”; Renumber as Policy 3.1.3
Policy 3.1.6: The Physical Plant Division shall establish and maintain capacity standards for force mains and pumping stations.	Ongoing	The Facilities Services Division maintains the sanitary sewer system and design peak flow requirements. This policy is not required to be in the CMP by the Florida Board of Governors and is addressed through other UF policy requirements.	Delete
Policy 3.1.7: The University shall implement sanitary sewer facility improvements as needed. The timing and phasing requirements for improvements are established in the Capital Improvements Element.	Ongoing	The Facilities Services Division maintains the sanitary sewer system consistent with this policy.	Renumber as Policy 3.1.4

Policies	Status	Benchmark Data	Recommendations
<p>Policy 3.1.8: Sanitary sewer facility improvements shall be implemented based on the following priorities:</p> <ol style="list-style-type: none"> 1. Elimination of existing system deficiencies; 2. Maintaining the existing system; and 3. Expanding the system to accommodate new sanitary sewer needs. 	Ongoing	The Facilities Services Division maintains the sanitary sewer system consistent with this policy.	Re-number as Policy 3.1.5
<p>Policy 3.1.9: The University shall continue to comply with the regulations and requirements set forth in its wastewater permit from the Department of Environmental Protection.</p>	Ongoing	The Facilities Services Division ensures compliance with its wastewater permit.	Re-number as Policy 3.1.6
<p>Policy 3.1.10: The University shall continue to maintain accurate records of the projected flows to the wastewater treatment plant.</p>	Ongoing	The Facilities Services Division maintains the sanitary sewer system consistent with this policy.	Re-number as Policy 3.1.7
<p>Policy 3.1.11: The University shall provide proper maintenance and ensure adequate capacity of the wastewater treatment plant for future development on campus.</p>	Ongoing	The Facilities Services Division maintains the sanitary sewer system consistent with this policy.	Re-number as Policy 3.1.8
<p>Policy 3.1.12: The University shall coordinate with Gainesville Regional Utilities (GRU) to ensure that adequate sanitary sewer service will be available for any proposed development connecting to the GRU system. The University shall pursue any memoranda of understanding or interlocal agreements necessary to ensure that sanitary sewer will be available to applicable areas of the campus to meet the future needs of the University.</p>	Ongoing	The Facilities Services Division maintains the sanitary sewer system and wastewater permit consistent with this policy.	Re-number as Policy 3.1.9
<p>Policy 3.1.13: The Physical Plant Division shall be charged with reviewing all proposed development projects to ensure that adequate sanitary sewer capacity exists.</p>	Ongoing	The Facilities Services Division reviews proposed project impacts to the sanitary sewer system and permits.	Modify – Change Physical Plant to Facilities Services; Re-number as Policy 3.1.10

Policies	Status	Benchmark Data	Recommendations
Policy 3.1.14: Proposed increases in campus sewer demands shall be approved only upon a finding that existing wastewater collection and treatment plant capacity is already on-line to accommodate the increased need, or that additional capacity is funded and will be on-line at the forecast time of need. It shall be the responsibility of the University's Physical Plant Division to maintain a record of existing and committed project flows in order to determine whether adequate system capacity is available to meet additional demands.	Ongoing	The Facilities Services Division reviews proposed project impacts to the sanitary sewer system and permits.	Renumber as Policy 3.1.11
Policy 3.1.15: The Physical Plant Division shall appropriately size wastewater facilities to meet anticipated future demand (based on the 10-year capital improvement list) when doing routine upgrades, replacements or new installations.	Ongoing	The Facilities Services Division maintains the sanitary sewer system consistent with this policy.	Modify - Change Physical Plant to Facilities Services; Renumber as Policy 3.1.12
Policy 3.1.16: The University shall explore opportunities to use alternative wastewater disposal systems such as composting toilets at remote locations where centralized wastewater collection is not feasible.	Ongoing	Composting toilets are not currently used at any of the Alachua County Satellite Properties but will continue to be evaluated for feasibility.	Renumber as Policy 3.1.13

Objective 3.2: To maximize the use of reclaimed water for campus irrigation.

Policies	Status	Benchmark Data	Recommendations
Policy 3.2.1: The University shall continue to implement and/or upgrade the reclaimed water distribution and storage systems throughout campus as depicted in Figure 9-2.	Ongoing	Currently, 90% of the irrigated areas of main campus are irrigated with reclaimed water as depicted on a new Figure 9-3 with expansions west of SW 34 St and south of SW 16 St.	No Change

Policies	Status	Benchmark Data	Recommendations
Policy 3.2.2: The University shall curtail the use of well water or domestic water for irrigation purposes by increasing the use of reclaimed water.	Ongoing	The university continues to increase the use of reclaimed water wherever appropriate. System expansions have occurred west of SW 34 th Street and south of SW 16 th Avenue since 2015.	No Change
Policy 3.2.3: Investigate the feasibility of supplying additional reclaimed water to operations on-site or to potential customers off-site, in lieu of sending this effluent to deep-well injection.	Ongoing	The Facilities Services Division continues to explore opportunities to utilize reclaimed water when its supply exceeds demand.	No Change

Goal 4: To provide for Safe, Sanitary, Efficient, Economical and Environmentally Sound Solid Waste Management that Assures Public Health and Safety for the Current and Future Demands of the University.

Objective 4.1: Correct existing solid waste collection and disposal facility deficiencies and ensure the provision of adequate facility capacity to meet the future needs of the University.

Policies	Status	Benchmark Data	Recommendations
Policy 4.1.1: The University shall establish and adopt a level of service for solid waste of 2.0 pounds per capita per day, based on total UF students, faculty, and staff population. Higher levels may be required for special use facilities.	Ongoing	The Facilities Services Division manages the solid waste system consistent with this policy.	No Change
Policy 4.1.2: The University shall ensure that the necessary solid waste facilities and services are in place and operational at the adopted level of service at the time of building occupancy.	Ongoing	The Facilities Services Division manages the solid waste system consistent with this policy.	No Change

Policies	Status	Benchmark Data	Recommendations
Policy 4.1.3: The University shall continue to comply with the regulations and level of service requirements set forth in the Florida Administrative Code, Chapter 62-701.	Ongoing	The Facilities Services Division manages the solid waste system consistent with this policy.	No Change
Policy 4.1.4: The University shall provide solid waste collection and disposal facility service capacity to meet future demands.	Ongoing	The Facilities Services Division manages the solid waste system consistent with this policy.	No Change
Policy 4.1.5: The University shall identify and prioritize any solid waste collection and disposal facility deficiencies. These deficiencies shall be remedied as funding becomes available. Solid waste facility improvements shall be implemented based on the following general priorities: 1. Increase recycling; 2. Elimination of existing system deficiencies; 3. Maintaining the existing system; and 4. Expanding the system to accommodate new refuse/recycling needs.	Ongoing	The Facilities Services Division manages the solid waste system consistent with this policy.	No Change
Policy 4.1.6: Future development on the UF campus that increases the demand for waste collection and disposal shall be approved under the provision of a solid waste collection and disposal system that provides the level of service established and adopted in Policy 4.1.1 above.	Ongoing	The Facilities Services Division manages the solid waste system consistent with this policy.	No Change
Policy 4.1.7: The Environmental Health and Safety Division shall continue to provide hazardous and bio-medical waste collection and disposal service to meet future demands on campus.	Ongoing	The Environmental Health and Safety Office manages the solid waste system consistent with this policy.	Modify - Change Division to Office

Objective 4.2: Continue to expand the recycling program to help minimize solid waste disposal by means of landfill.

Policies	Status	Benchmark Data	Recommendations
Policy 4.2.1: The University shall continue to coordinate with applicable entities or persons on expanding the recycling programs for all new and/or expansion projects.	Ongoing	The Facilities Services, Office of Sustainability, and Planning, Design and Construction Division work together to increase construction site recycling and improve documentation thereof. Construction recycling requirements are specified in construction contracts and green building certification.	No Change
Policy 4.2.2: The University shall continue to provide recycling containers as specified in the University Design and Construction Standards at numerous convenient locations across the campus and look for opportunities to expand the current recycling program to include additional recycling bins and other recyclable materials.	Ongoing	The Facilities Services and Office of Sustainability work closely to standardize and increase the number of recycling containers. These specifications are contained in the UF Design and Construction Standards and Landscape Master Plan.	Modify – “...Construction Standards and <u>Landscape Master Plan</u> at numerous....”
Policy 4.2.3: The University shall promote recycling through increased educational efforts directed toward faculty, students and staff.	Ongoing	The Facilities Services and Office of Sustainability work closely together to increase recycling and to reduce solid waste with partners including the University Athletic Association and Gator Dining.	No Change
Policy 4.2.4: The University shall continue implementing and expanding recycling programs associated with major sporting, entertainment and other large events on campus.	Ongoing	The Facilities Services, Office of Sustainability, O’Connell Center, and University Athletic Association partner on these initiatives.	No Change

Policies	Status	Benchmark Data	Recommendations
Policy 4.2.5: The University shall continue to look at expanding the types of materials that are recycled.	Ongoing	The Facilities Services and Office of Sustainability seek opportunities to expand the type of recycled materials based on industry demand. Currently, the following items are recycled on campus: office paper (all kinds), newsprint, phone books, magazines, junk mail, soft-cover books, corrugated containers (boxes), toner & inkjet cartridges, cans (all), glass bottles & jars, #1 & 2 plastic containers, auto batteries, household batteries, used oil & oil filters, antifreeze, chemicals & solvents, wastewater solids, precious metals, white goods, scrap metal, used pallets, used lumber, yard debris, fluorescent tubes, masonry, compostable food, carpet rolls and carpet squares.	No Change
Policy 4.2.6: The University shall strive to reduce the total volume of solid waste requiring disposal and increase landfill diversion (i.e. reuse, repurpose, recycling, composting) of the remainder by at least 90% in pursuit of a zero-waste goal.	Ongoing	While zero-waste continues to be the university's ultimate goal, incremental increases will be the model as markets and other factors enable 90% landfill diversion to be achievable. This percentage target is the standard definition of an institutional zero-waste goal.	No Change

Objective 4.3: Coordination with Alachua County to ensure that proper service and capacity will be available for future demands.

Policies	Status	Benchmark Data	Recommendations
Policy 4.3.1: The University shall coordinate with Alachua County annually to ensure proper solid waste collection and disposal service for future growth. The University shall pursue any memoranda of understanding or interlocal agreements necessary to ensure that solid waste service and capacity will be supplied to meet the future needs of the University.	Ongoing	The Facilities Services Division manages the solid waste system consistent with this policy, providing collection services and utilizing County facilities for transfer and disposal.	No Change

Policies	Status	Benchmark Data	Recommendations
Policy 4.3.2: Proposed increases in solid waste generating uses shall be approved only upon a finding by the University that existing solid waste disposal capacity is already on-line to accommodate the increased need, or that additional capacity will be funded and on-line at the forecast future time of need. The Physical Plant Division shall be responsible for the review of all development proposals and perform the appropriate coordination efforts with Alachua County to determine that solid waste disposal capacity is available.	Ongoing	The Facilities Services Division manages the solid waste system consistent with this policy.	Modify - Change Physical Plant to Facilities Services