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. Additionally, the University shall coordinate with the City and the County on all projects outside of the Lake Alice basin and UF depressional basins 1-3 and 5-9.

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	Retain
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	Retain
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.	Ongoing	The university obtains permits as required.	Modify – incorporate City and County coordination moved from the second sentence of Objective 1.1

Policies	Status	Benchmarks	Recommendations
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. Upgrades during this planning period included infrastructure rebuilds at Reitz Ravine and the outfall from SW 13th Street at Diamond Village as well as dredging Graham Pond and a variety of low impact development projects.	Retain
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 2010. 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 Physical Plant Division maintains the master stormwater permit and reporting. The permit was renewed in 2010 and is due for renewal in 2020.	Modify – update renewal year
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 Physical Plant 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. Garage 13 is one project that required such approval.	Retain

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
Policy 1.2.1: Stormwater management facility improvements shall be implemented based on the following ranked priorities: 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	Upgrades during this planning period included infrastructure rebuilds at Reitz Ravine and the outfall from SW 13th Street at Diamond Village as well as dredging Graham Pond and a variety of low impact development projects. This campus master plan update will identify future stormwater project recommendations.	Retain
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.	Ongoing	The Physical Plant Division continues to manage the stormwater treatment and conveyance system consistent with this policy and existing permits.	Retain
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.	Ongoing	The Physical Plant Division reviews proposed project impacts to the stormwater infrastructure and permits.	Retain

Policies	Status	Benchmark Data	Recommendations
Policy 1.2.4: In general, the configuration of retention facilities shall be natural and curvilinear in outline. Rectilinear and pure geometric forms are discouraged. Wherever possible, side slopes shall vary and provide smooth transitions to existing grades. Gentle landforms around the lake shall reinforce the "natural" context. Additionally, landscape treatment for retention and other drainage elements shall appear naturalistic and "non-engineered".	Ongoing	This policy has been incorporated into the General Requirements of the UF Design and Construction Standards. It may be more easily found in Section 02700 Sewerage and Drainage.	Modify – reflect that this policy has been incorporated into the UF Design and Construction Standards.
Policy 1.2.5: Landscape treatment for retention facilities shall respect maintenance and access setbacks but otherwise be set into a natural, existing vegetative context or planted with native material.	Ongoing	Retention facilities including the pond near the Harn Museum and the bioswale constructed at the SW Recreation Center reflect the intent of this policy.	Modify – reflect that this policy may be incorporated into the UF Design and Construction Standards.
Policy 1.2.6: Implement infrastructure improvement projects to reduce stormwater erosion identified in Figure 9-1 based on priorities established in 2.1 as feasible.	Ongoing	Upgrades during this planning period included infrastructure rebuilds at Reitz Ravine and the outfall from SW 13th Street at Diamond Village as well as dredging Graham Pond and a variety of low impact development projects. This figure will be updated during the 2015-2025 CMP cycle. This policy overlaps with Policy 1.2.7.	Modify – correct internal policy reference and combine with 1.2.7
Policy 1.2.7: Implement stormwater facility projects to reduce the quantity and improve the quality of stormwater discharge in locations identified in Figure 9 -1 as feasible.	Ongoing	Upgrades during this planning period included infrastructure rebuilds at Reitz Ravine and the outfall from SW 13th Street at Diamond Village as well as dredging Graham Pond and a variety of low impact development projects. This figure will be updated during the 2015-2025 CMP cycle. This policy overlaps with Policy 1.2.6.	Delete – incorporate with policy 1.2.6

Policies	Status	Benchmark Data	Recommendations
Policy 1.2.8: 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.	Ongoing	In 2008, the University of Florida and City of Gainesville evaluated locations where stormwater flows into the conveyance and treatment facilities of each other's jurisdiction and found parity in impacts. The university designated funds from the Capital Improvement Trust Fund in 2005/06 that were used, in part, to address fencing and trash traps at several stormwater inflow points near major roadways.	Retain

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

Policies	Status	Benchmark Data	Recommendations
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.	Ongoing	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).	Retain

Policies	Status	Benchmark Data	Recommendations
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: • 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).	Ongoing	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 Physical Plant Division. In 2005, the University of Florida was designated 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 2014.	Retain

Policies	Status	Benchmark Data	Recommendations
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: • 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.	Retain
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.	Ongoing	The university continues to assess, train, and monitor implementation of these BMPs for agricultural areas.	Retain

Policies	Status	Benchmark Data	Recommendations
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 Drainage Basin. 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.	Ongoing	University development projects in the Hogtown Creek Drainage Basin comply with this policy. Other university development occurs in the Bivens Arm Lake Drainage Basin and should comply 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.	Modify – include the Bivens Arm Lake Drainage Basin
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.	Ongoing	The City of Gainesville completed a study that has been reviewed by the St. Johns River Water Management District to restore these natural functions in an area west of SW 13th Street. That project is currently envisioned to be completed without requiring use of any UF state lands. However, the university will continue to cooperate in this effort as necessary and feasible.	Retain

Policies	Status	Benchmark Data	Recommendations
Policy 1.3.7: The University shall continue to monitor Lake Alice and other surface water bodies for compliance with existing standards for water quality in order to meet Class III water quality standards and report findings to the Lakes, Vegetation and Landscape committee annually	Ongoing; not complete	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, but not annually.	Modify – • considering different use expectations for Lake Alice, which is also the university's permitted stormwater treatment facility • recommend striving for Class III – Limited, which requires additional planning and consensus-building to set site-specific criteria • continue monitoring and verify biological impairment, if present • change annual reporting to biannual starting in 2015

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
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.	Ongoing	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 SW Recreation Center expansion and Hough Hall. Pervious asphalt on new bicycle paths. A roof-top garden at the Perry Construction Yard at M.E. Rinker Hall.	Modify – reflect that these treatments are included in the UF Design and Construction Standards
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.	Ongoing	Some passive retrofit projects were completed including curb openings in the Historic District and near Frazier-Rogers Hall. Passive storm water detention concepts are incorporated into the Reitz Lawn Master Plan for re-envisioning that significant open space.	Retain
Policy 1.4.3: All proposed stormwater projects on campus that involve the use of designated open space (land use classifications of 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	Stormwater projects including facility improvements at Reitz Ravine, Harn Museum, and the outfall near SW 13th Street and Diamond Village were reviewed by LVLC.	Retain

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	An interpretive kiosk was installed together with a project to establish native vegetation and floating islands in the ephemeral wetlands at the Solar Park Pond on the east side of SW 23rd Terrace. The project was completed by wetlands ecology students with a mini-grant funded through a Capital Improvement Trust Fund allocation for environmental stewardship in 2005/06.	Retain
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.	Retain
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 purse innovative stormwater grants from the U.S. Environmental Protection Agency.	Retain

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 Physical Plant Division maintains the water system to this standard.	Retain

Policies	Status	Benchmark Data	Recommendations
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 Physical Plant Division maintains the water system consistent with this policy.	Retain
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 Physical Plant Division maintains the water system consistent with this policy.	Retain
Policy 2.1.4: Line sizes shall accommodate simultaneously the peak hour demand plus one fire flow event.	Ongoing	Line sizes are dictated by Florida Building Code.	Delete
Policy 2.1.5: 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 Physical Plant Division maintains the water system consistent with this policy.	Retain
Policy 2.1.6: 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 Physical Plant Division maintains the water system consistent with this policy.	Retain
Policy 2.1.7: 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 Physical Plant Division maintains the water system consistent with this policy.	Retain
Policy 2.1.8: The University shall coordinate with the Gainesville Regional Utilites (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 Physical Plant Division maintains the water system and consumptive use permits consistent with this policy.	Retain

Policies	Status	Benchmark Data	Recommendations
Policy 2.1.9: 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 Physical Plant Division maintains the water system consistent with this policy.	Retain
Policy 2.1.10: The Physical Plant Division shall be charged with reviewing all proposed development projects to ensure that adequate potable water capacity is available.	Ongoing	The Physical Plant Division reviews proposed project impacts to the potable water system and permits.	Retain
Policy 2.1.11: 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 Physical Plant Division reviews proposed project impacts to the potable water system and permits.	Retain

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

Policies	Status	Benchmark Data	Recommendations
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: • 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 in the UF Design and Construction Standards.	Retain
Policy 2.2.2: There shall be no physical connection between the public or University potable water supply and a sewer or appurtenance, which would permit the passage of any sewage or polluted water supply into the potable water supply system.	Ongoing	These standards are dictated by the Florida Building Code and requirements for back flow prevention systems.	Delete
Policy 2.2.3: The University shall require that backflow prevention devices be installed in all lines where the possibility exists of water entering from any other source into the potable water supply infrastructure.	Ongoing	These standards are dictated by the Florida Building Code and requirements for back flow prevention systems.	Delete
Policy 2.2.4: 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.	Ongoing	The university complies with these requirements.	Retain

Policies	Status	Benchmark Data	Recommendations
Policy 2.2.5: 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.	Ongoing	The university complies with this policy through monitoring and enforcement programs of the Environmental Health and Safety Division.	Retain
Policy 2.2.6: The University shall conserve water resources through the use of low water demand design principles, including: • 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.	Ongoing	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.	Retain

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 Physical Plant Division maintains the sanitary sewer system consistent with this policy.	Retain
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 Physical Plant Division maintains the sanitary sewer system consistent with this policy.	Retain
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 Physical Plant Division maintains the sanitary sewer system consistent with this policy.	Retain
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 Physical Plant Division maintains the sanitary sewer system consistent with this policy.	Retain
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 Physical Plant Division maintains the sanitary sewer system and design peak flow requirements.	Modify – require that the Physical Plant Division maintains such standards but these do not need to be campus master plan policy

Policies	Status	Benchmark Data	Recommendations
Policy 3.1.6: Each pumping station shall have the capacity of pumping the design peak flow at the maximum computed total dynamic head with pipe friction loss calculated by the 'Hazen-Williams' Formula. All calculations shall be submitted to and approved by the Physical Plant Division prior to final design.	Ongoing	The Physical Plant Division maintains the sanitary sewer system and design peak flow requirements.	Modify – require that the Physical Plant Division maintains such standards but these do not need to be campus master plan policy
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 Physical Plant Division maintains the sanitary sewer system consistent with this policy.	Retain
Policy 3.1.8: Sanitary sewer facility improvements shall be implemented based on the following priorities: 1. Elimination of existing system deficiencies; 2. Maintaining the existing system; and 3. Expanding the system to accommodate new sanitary sewer needs.	Ongoing	The Physical Plant Division maintains the sanitary sewer system consistent with this policy.	Retain
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.	Ongoing	The Physical Plant Division ensures compliance with its wastewater permit.	Retain
Policy 3.1.10: The University shall continue to maintain accurate records of the projected flows to the wastewater treatment plant.	Ongoing	The Physical Plant Division maintains the sanitary sewer system consistent with this policy.	Retain
Policy 3.1.11: The University shall provide proper maintenance and ensure adequate capacity of the wastewater treatment plant for future development on campus.	Ongoing	The Physical Plant Division maintains the sanitary sewer system consistent with this policy.	Retain
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.	Ongoing	The Physical Plant Division maintains the sanitary sewer system and wastewater permit consistent with this policy.	Retain

Policies	Status	Benchmark Data	Recommendations
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.	Ongoing	The Physical Plant Division reviews proposed project impacts to the sanitary sewer system and permits.	Retain
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 Physical Plant Division reviews proposed project impacts to the sanitary sewer system and permits.	Retain
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 Physical Plant Division maintains the sanitary sewer system consistent with this policy.	Retain
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.	Retain

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.	Ongoing	In 2009, a new reclaimed water storage tank was constructed. Currently, 90% of the irrigated areas of main campus are irrigated with reclaimed water as depicted on a new Figure 9-2.	Modify – reference new Figure 9-2

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.	Retain
Policy 3.2.3: The University shall ensure that all new construction projects requiring irrigation provide a reclaimed water distribution system, when feasible.	Ongoing	New construction projects connect to existing irrigation systems, which typically provide reclaimed water.	Delete
Policy 3.2.4: 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 Physical Plant Division continues to explore opportunities to utilize reclaimed water when its supply exceeds demand.	Retain

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 Physical Plant Division manages the solid waste system consistent with this policy.	Retain (correct policy numbering error)
Policy 4.1.1: 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 Physical Plant Division manages the solid waste system consistent with this policy.	Retain (correct policy numbering error)
Policy 4.1.2: 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 Physical Plant Division manages the solid waste system consistent with this policy.	Retain

Policies	Status	Benchmark Data	Recommendations
Policy 4.1.3: The University shall provide solid waste collection and disposal facility service capacity to meet future demands.	Ongoing	The Physical Plant Division manages the solid waste system consistent with this policy.	Retain
Policy 4.1.4: 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 Physical Plant Division manages the solid waste system consistent with this policy.	Retain
Policy 4.1.5: 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 1.1 above.	Ongoing	The Physical Plant Division manages the solid waste system consistent with this policy.	Modify – correct internal policy reference
Policy 4.1.6: 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 Physical Plant Division manages the solid waste system consistent with this policy.	Retain

Objective 4.2: Continue to expand the recycling program to help minimize the solid waste disposed of 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 Physical Plant Division, 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.	Retain
Policy 4.2.2: The University shall continue to provide recycling containers 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 Physical Plant Division 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.	Modify – reference UF Design and Construction Standards
Policy 4.2.3: The University shall promote recycling through increased educational efforts directed toward faculty, students and staff.	Ongoing	The Physical Plant Division 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.	Retain
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 Physical Plant Division, Office of Sustainability, and University Athletic Association partner on these initiatives.	Retain

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 Physical Plant Division 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.	Retain
Policy 4.2.6: The University shall strive to recycle 100% of solid waste by the year 2015, and continuously increase recycling each year until that target is achieved.		Between 2005 and 2012 the total volume of campus solid waste was reduced by 2,000 tons (21% reduction). In that same time period, the amount of material being recycled from campus has increased by 50% for a total of 38% of the waste stream now being recycled. 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.	Modify – reflect that the ultimate target is zero waste (90%); remove the 2015 target year; emphasize diversion of waste stream rather than just recycling (i.e. reducing the initial volume of waste)

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 Physical Plant Division manages the solid waste system consistent with this policy.	Retain
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 Physical Plant Division manages the solid waste system consistent with this policy.	Retain