



# Stormwater Management Element

**DESIGN, CONSTRUCT AND MAINTAIN A STORMWATER MANAGEMENT SYSTEM THAT REDUCES THE INCIDENCE OF FLOODING, AND PROTECTS, PRESERVES AND ENHANCES DESIRABLE WATER QUALITY CONDITIONS, AND TO THE MAXIMUM EXTENT FEASIBLE, PRESERVES AND UTILIZES THE EXISTING NATURAL SYSTEMS.**

**GOAL 1**

**The City shall implement Level of Service (LOS) standards to diminish the occurrence of new flooding and to protect or improve water quality. The LOS standards for Stormwater Management are in the Concurrency Management Element.**

**Objective 1.1**

1.1.1 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.

**Policies**

1.1.2 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.

1.1.3 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.

## Objective 1.2

**The City shall continue to comply with its stormwater management plan that addresses existing deficiencies and identified needs.**

### Policies

- 1.2.1 Master stormwater basin plans shall be prepared and finalized for each creek watershed. Such plans shall address:
- a. The potential for infill development within each basin;
  - b. The encroachment of existing developed areas in the 100-year floodplain;
  - c. The efficacy of regional stormwater basins and potential locations;
  - d. An assessment of stormwater management facilities with regard to excess and deficiencies in stormwater storage and rate capacity;
  - e. An assessment of stormwater treatment facilities;
  - f. Removal of invasive vegetation from city-owned facilities; and
  - g. Recreating/restoring the natural drainage patterns of watercourses and wetland areas.
- 1.2.2 The Level 1 capital improvements for 2010 through 2020 shall be as follows:
1. Depot Stormwater Basin as shown in the 5-Year Schedule of Capital Improvements. Located south of S.E. Depot Avenue.
  2. Sweetwater Branch Restoration/Paynes Prairie Sheetflow Restoration (General Government portion) as shown in the 5-Year Schedule of Capital Improvements. Located on Sweetwater Branch at Paynes Prairie.
  3. Little Hatchet Creek and Lake Forest Creek Basin Management Plan as shown in the 5-Year Schedule of Capital Improvements.
  4. N.W. 22nd Street Drainage (West Brook) as shown in the 5-Year Schedule of Capital Improvements.
  5. S.W. 35th Terrace Flood Mitigation as shown in the 5-Year Schedule of Capital Improvements.

**The City shall ensure that proper and adequate stormwater management facilities are provided to meet future needs.**

**Objective 1.3**

Policies

- 1.3.1 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.
- 1.3.2 The City shall continue to inventory all city-maintained stormwater management facilities, conveyance systems and structures.
- 1.3.3 Stormwater projects identified in the Stormwater Element shall be included in the Capital Improvements Element of this plan.
- 1.3.4 The City shall continue to study existing deficiencies identified in the needs assessment and proposed capital improvements shall be prioritized.
- 1.3.5 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.
- 1.3.6 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.
- 1.3.7 The City shall continue to review information required for site plan submittal for completeness and revise these requirements to reflect current engineering practice.
- 1.3.8 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.

*Revised 5/24/99, Ord. 980583  
Revised 7/24/00, Ord. 990217  
Revised 3/4/02, Ord. 000904  
Revised 1/19/12, Ord. 110172  
Revised 2/21/13, Ord. 120209*

- 1.3.9 The rate of stormwater runoff from any development shall be limited to the pre-development (conditions existing at the point of adoption of this Plan) rate for a site, and shall not degrade the capacity of existing stormwater facilities.
- 1.3.10 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.

**Objective 1.4**

**The City shall continue the implementation of a maintenance program for all surface drainage systems, that are the responsibility of the City, for the continued effective operation of the stormwater management system.**

Policies

- 1.4.1 The City shall continue to have a regular inspection program for all surface drainage systems that are the responsibility of the City.
- 1.4.2 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.
- 1.4.3 Projects to correct existing deficiencies 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.

*Revised 5/24/99, Ord. 980583  
 Revised 7/24/00, Ord. 990217  
 Revised 3/4/02, Ord. 000904  
 Revised 1/19/12, Ord. 110172  
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**The City shall continue to implement an integrated stormwater management program for redevelopment.**

- 1.5.1 The City shall implement Land Development Regulations that allow shared or joint-use stormwater facilities, including public or private master stormwater basins.
- 1.5.2 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.

**Objective 1.5**

Policies

**The City shall continue to comply with adopted Land Development Regulations that improve inspection procedures and improve coordination with other agencies to protect, and preserve or improve the quality of discharges from stormwater management facilities to natural surface waters and aquifers. Additionally, all new stormwater management facilities shall meet the applicable Water Management District's regulations.**

- 1.6.1 Except as otherwise stipulated in the Stormwater Management Element, water quality LOS standards in all basins shall be consistent with the standards of the applicable Water Management District or shall receive treatment of the first "one inch" of runoff, whichever results in greater water quality improvement.
- 1.6.2 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.
- 1.6.3 The City shall continue to comply with adopted Land Development Regulations that regulate erosion and sedimentation both during and after construction.
- 1.6.4 The City shall continue to comply with code enforcement procedures and penalties that help obtain compliance with the approved facility design and function.
- 1.6.5 Stormwater management facilities shall be inspected during construction and periodically after construction to determine that proper construction, operation and maintenance are ongoing.
- 1.6.6 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.

**Objective 1.6**

Policies

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Revised 7/24/00, Ord. 990217  
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**Objective 1.7**

**The City shall continue to encourage the preservation and protection of existing drainage features.**

Policies

- 1.7.1 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.
- 1.7.2 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.
- 1.7.3 The City shall regulate developments containing wetlands consistent with the Conservation, Open Space and Groundwater Recharge Element policies.
- 1.7.4 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.
- 1.7.5 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.

**Objective 1.8**

**Effective groundwater recharge shall continue to be required where soil conditions permit.**

- 1.8.1 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.

**Objective 1.9**

**The City shall continue to implement stormwater management facility design guidelines that promote dual use and aesthetically pleasing facilities.**

Policies

- 1.9.1 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;
- c. 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.

1.9.2 Stormwater management facilities shall be designed to minimize the need for maintenance.

**The City shall have funds available to pay for the Stormwater Projects listed in the 5-year Schedule of Capital Improvements identified in the Stormwater Management Element.**

**Objective 1.10**

1.10.1 The City shall provide at least \$200,000 annually for Stormwater Projects.

Policy