

D. C. DRAINAGE SUB-ELEMENT

GOAL I-4: WALTON COUNTY SHALL MANAGE STORMWATER TO PREVENT FLOOD DAMAGE AND PROTECT WATER QUALITY.

Objective I-4.1: Walton County shall attempt to minimize the occurrence of flooding as a threat to human health or property .

Policy I-4.1.1: Walton County shall require any new development proposed to be constructed within a designated flood hazard area to include mitigation measures as identified in the applicable regulations to overcome an identified flood hazard within the limits of or impacted by the proposed construction.

Policy I-4.1.2: Walton County shall require all new stormwater management systems be designed and installed to provide adequate flood protection for all primary structures and to protect the structural integrity of all roadways.

Policy I-4.1.3: Walton County shall require that all new stormwater management systems safely handle all stormwater run-off that flows into, across, and/or is discharged from the site without creating any additional flooding to adjacent property owners.

Policy I-4.1.4: Walton County shall have the authority to require the design of stormwater management systems to be compatible with natural terrain or landscape barriers that protect the site against flooding.

Policy I-4.1.5: Walton County shall require that retention/detention areas be designed and located so that they do not adversely reduce the existing flood storage of the floodplain.

Policy I-4.1.6: Walton County shall provide a system to monitor and coordinate the flood elevations for all unnumbered FEMA A zone areas within basins as master stormwater ~~master~~ plans are completed. Walton County shall continue to make progress in establishing flood elevations for the remaining area A zone areas through FEMA, localized studies, and the remaining basin studies. Based upon new information, the County shall revise, as necessary, the minimum building pad elevations and modify the Land Development Code.

Matrix Analysis Comment: Revised term to be consistent with remainder of document.

Policy I-4.1.7: Walton County shall investigate reports of flooding in a timely manner. Response times, frequencies, durations, and locations shall be noted and reported annually to the Board of County Commissioners.

Policy I-4.1.8: Walton County shall, where feasible, require through easements or acquisition access to major outfall areas for maintenance and inspection.

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Policy I-4.1.9: Walton County shall strive to participate in the Community Rating System of the National Flood Insurance Program and shall strive to attain maximum flood insurance discounts for the citizens of Walton County.

Objective I-4.2: Walton County shall improve its ability to manage stormwater to minimize the degradation of surface water.

Policy I-4.2.1: Walton County shall maintain and improve the design standards, construction, and maintenance requirements of all stormwater retention/detention systems and ensure compliance with these requirements to prevent degradation of receiving surface water bodies.

~~**Policy I-4.2.2:** Walton County shall continue to identify and prioritize the need for designated riverine management plans for systems such as the Choctawhatchee River on an ongoing basis. These should be conducted through interlocal agreements with neighboring counties and in collaboration with the appropriate departments and water management districts. Related land use planning and programmatic approaches shall be adopted after the management plans are completed.~~

Policy I-4.2.3-2: Walton County shall require Best Management Practices to minimize contributions of poor quality stormwater run-off to both surface water bodies and water supply aquifers from injection well pumping or recharge areas.

Policy I-4.2.4-3: Walton County shall continue to require that plans for expansion, modification, or replacement of existing development provide an effective form of stormwater treatment where the current stormwater treatment is inadequate.

Policy I-4.2.5-4: Walton County shall continue to implement a program that monitors the effectiveness of County maintained stormwater treatment systems to allow identification of possible system deficiencies. As part of this program, the possibility of including privately maintained facilities shall be evaluated. If there are deficiencies, Walton County shall develop a plan to improve its compliance and maintenance procedures. This information shall be noted and included when the Engineering Public Works Department reports annually to the Board of County Commissioners.

Policy I-4.2.6-5: Walton County shall continue to require erosion and sediment control plans be submitted and approved prior to a pre-construction conference as regulated through the Land Development Code. These plans shall be developed in accordance with water management district's Best Management Practices.

~~**Policy I-4.2.7:** Walton County shall participate with other involved agencies to develop and implement lake management plans for those water bodies determined to be in greatest need. If stormwater is determined to be a major water quality problem for a lake, planning shall be undertaken for corrective measures as part of the master stormwater planning process.~~

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Policy I-4.2.8-6: Walton County shall require all new development use Best Management Practices to retain and treat stormwater on site. For water that cannot be treated on site, stormwater runoff shall be directed into a centrally located stormwater quality and quantity treatment system that discharges into a public drainage system or a drainage system as established by historic flow patterns. If no downstream drainage system as established by historic flow patterns is available with adequate capacity, the site shall be classified as being in a “Closed Basin” with stormwater runoff retained onsite to the Level of Service as noted in I-4.5.8.A.

Policy I-4.2.9-7: Walton County shall require all stormwater facilities for a specific phase or section of a development to be completed prior to final release of any portion of the surety. This shall include clearing and placing any compacted fill material necessary for the proper function of the stormwater system as designed. All disturbed and filled areas shall require permanent or temporary erosion control devices be in place and maintained by the Homeowners Association or other legally established entity responsible for stormwater facility operation and maintenance prior to release of any surety.

Objective I-4.3: Walton County shall continue to monitor, protect and enhance one of the world’s extremely rare and unique water features in the series of coastal dune lake watersheds through responsible stormwater management.

Policy I-4.3.1: Walton County shall continue to participate in inter-agency Dune Lake work groups and committees such as but not necessarily limited to the Walton County Coastal Dune Lake Advisory Board, the Choctawhatchee Basin Alliance and the Florida LAKEWATCH task force that includes representatives from the Florida Department of Environmental Protection, the United States Geological Survey, the Walton County Environmental Department, and the NFWFMD. The Florida Department of Transportation shall also be invited to become a member. At a minimum, this policy shall focus on the following:

- A. Support the Choctawhatchee Basin Alliance and the Florida LAKEWATCH tasks;
- B. Identify, within coastal dune lake watersheds, the surrounding land uses and their proximity to stormwater conveyance systems;
- C. Identify potential adverse impacts resulting from outlet management;
- D. Prioritize, with dates of completion, of the needed improvements to correct or mitigate the potential for adverse impacts;
- E. Recommend future changes to the Land Development Code that may become necessary to accomplish Objective 4.3;
- F. Maintain the dune lake monitoring program; and
- G. Complete management plans for each coastal dune lake.

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Policy I-4.3.2: Walton County shall mitigate or eliminate identified public or private stormwater threats by targeting the portion of each coastal dune lake watershed of greatest concern, by point source and non-point source pollutant identification, and master stormwater planning.

Policy I-4.3.3: The monitoring program shall include stormwater sampling so that the county can prioritize those areas with the highest degrees of contamination and implement effective pollution abatement strategies.

Objective I-4.4: **Walton County shall identify and correct existing stormwater/drainage facility deficiencies on a priority basis. Public health and safety shall be the foremost priority.**

Policy I-4.4.1: Walton County shall continue to complete a formal listing that indicates the priority of drainage improvements identified within the County, and coordinate any actions necessary to facilitate the completion of drainage improvements which may be required by private entities that maintain significant stormwater facilities.

Policy I-4.4.2: Walton County shall investigate a stormwater utility ordinance, to identify other alternative funding sources for drainage improvements, facility maintenance and master stormwater planning. These new funding sources can be utilized to meet additional drainage demands such as implementing master drainage planning or mitigating threatened drainage wells.

Policy I-4.4.3: Walton County shall complete primary and secondary drainage facility inventories for basins within the County and continue the completion of more detailed inventories through the development of drainage basin master stormwater ~~master~~ plans.

Matrix Analysis Comment: Revised term to be consistent with remainder of document.

Policy I-4.4.4: Walton County shall ~~complete all of the~~ develop master stormwater master plans to address priority drainage improvements pursuant to identified in Stormwater Management Policy I-4.4.1. These master plans shall be completed ~~by December of 2020~~ with the assistance of the NFWFMD and adjoining local governments. ~~These master stormwater plans shall include, at a minimum, all the data and analysis required by Chapter 9J-5.011 (1) (a) through (f), Florida Administrative Code.~~ To make these planning efforts more efficient, the level of detail for a specific basin can be targeted toward the prioritized needs referenced in Stormwater Management Policy I-4.4.7.

Matrix Analysis Comment: Policy revised to clarify that master stormwater plans address improvements identified as a result of Policy I-1.4.4.1 since Policy I-1.4.4.1 does not identify stormwater plans. Revised terminology "master stormwater plan" to be consistent with language in Element. Also struck reference to Chapter 9J-5 F.A.C. since this has been repealed.

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Policy I-4.4.5: As a master stormwater plan phase is completed, Walton County shall prioritize strategies to correct or mitigate the facility deficiencies that impact the public's health and safety. These existing facility deficiencies shall be upgraded based upon adopted levels of service standards appropriate for each basin. Deficiencies shall include flooding or degradation of surface and groundwater quality.

Policy I-4.4.6: Walton County shall prioritize and correct the deficiencies identified in the master stormwater plans through the stormwater section of the Capital Improvements Program, with consideration given to the following criteria.

- A. The first priority should be given to those deficiencies that threaten health, safety, and welfare. This policy shall be interpreted to include drainage wells identified to be a public threat to the aquifer or public drinking well water supply.
- B. The second priority should be given to those improvements that represent opportunities to participate on joint projects with other public or private entities that will result in more efficient construction or replacement of stormwater improvements over time.

Policy I-4.4.7: Walton County shall cooperate and consult with the NFWFMD, other municipalities, and adjoining governments on the completion and updates of ~~the identified~~ master stormwater plans and the subsequent improvements to these systems. This cooperation shall include provision of information and technical assistance, participation on joint technical committees, and attendance at appropriate meetings.

Matrix Analysis Comment: Eliminated redundant language.

Policy I-4.4.8: ~~Walton County shall, as~~ Walton County shall continue to consider funding for priority drainage projects, ~~as part of the budget process.~~

Matrix Analysis Comment: Cleaned up policy language for improved readability.

Policy I-4.4.9: Walton County shall amend the comprehensive plan, including the stormwater management level of service, to incorporate the pertinent findings, data and analysis, and recommendations of all master drainage studies as they are completed.

Objective I-4.5: Walton County shall manage and coordinate its stormwater review and implementation process to meet future needs and protect the functions of natural drainage features.

Policy I-4.5.1: Walton County shall require that nonstructural management practices be utilized to solve existing drainage problems where it is economically and/or physically possible. Where structural approaches must be utilized, the

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County shall ensure that environmental damage is minimized.

Nonstructural BMPs

1. Public education
2. Good “housekeeping”
3. Street sweeping
4. Recycling
5. Maintenance practices
6. Soil stabilization
7. Other similar BMP’s not listed here

Structural BMPs

1. Low-impact development plans
2. Grassed swales/vegetated filter strips and hedge rows
3. Extended detention and sedimentation ponds
4. Wet ponds and constructed wetland areas
5. Filtration basins
6. Infiltration basins or trenches
7. Porous pavement
8. Hydrodynamic devices
9. Construction-related devices
10. Other similar BMP’s not listed here

Policy I-4.5.2: Walton County shall continue to ensure the stormwater management regulations in the Land Development Code protect natural drainage features by requiring compensatory storage, nonstructural techniques when feasible, erosion and sediment control, maintenance of natural hydro periods, and maximization of on-site detention/retention where feasible.

Policy I-4.5.3: As part of the development review process, the county may require an impact evaluation that addresses the effects of new development on surrounding existing stormwater management systems.

Policy I-4.5.4: Walton County shall continue to evaluate the effectiveness of current surface water management criteria in the Land Development Code.

Policy I-4.5.5: Walton County shall monitor and update the regulations in the Land Development Code to ensure the following criteria are met:

- A. Where economically feasible and physically possible, a nonstructural approach shall be utilized to meet the County's surface water quantity and quality needs;
- B. In new developments, Walton County shall require a retention/detention system that limits peak discharge of a developed site to the peak discharge from the site in an undeveloped condition for a specified design storm frequency;
- C. Stormwater collected in any development must be disposed of in a manner that will not cause personal or property damage to upstream or downstream property owners;
- D. Any segment of a drainage system, public or private, shall be designed to

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- accommodate upstream flows through the system; and,
- E. Each phase of any development shall exist as an independent unit capable of having its surface water management needs met by the drainage system design.

Policy I-4.5.6: Walton County shall continue the acquisition of drainage rights-of-way necessary for the operation and maintenance of the County's drainage system.

Policy I-4.5.7: Walton County shall require that all stormwater management devices constructed and dedicated to the County shall be designed to be maintained at a minimal cost to the taxpayer where feasible.

Policy I-4.5.8: Walton County shall maintain a level of service standard, for new and existing development, based on the following stormwater quantity and quality criteria:

- A. Design storm Frequency and Water Quality Treatment Volumes.

<u>FACILITY</u>	<u>ATTENUATION / DESIGN STORM</u>	<u>WATER QUALITY TREATMENT</u>
Bridges	50 Year	N/A
Canals, ditches, or culverts for drainage external to the development	25 Year	N/A
Cross drains, storm sewers	10 Year	N/A
Roadside swales for drainage internal to the development	10 Year	N/A
Detention/Retention basins with positive outfall	25 Year ^{1,2}	1" / 0.5" ^{3,4,5}
Detention/Retention basins without positive outfall	100 Year ¹	1" / 0.5" ^{3,4,5}

¹ See Policy I-4.5.8.B

² See Policy I-4.5.8.C

³ See Policy I-4.5.8.D

⁴ See Policy I-4.5.8.E

⁵ See Policy I-4.5.8.F

- B. Attenuation of Pre versus Post, with the approval of the County Engineer or designee, may not be required if the project will have a direct discharge to the Bay or another tidally influenced water body. In addition, if there are limited or no alternatives and it can be demonstrated that no downstream impacts will

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occur from not attenuating the pre versus post development discharge an exception may be made to the above attenuation requirement with the approval of the County Engineer or designee.

- C. Attenuation of a 100 year design storm frequency event may be required by the County Engineer or designee if downstream flooding has been previously identified and is identified on a County maintained list of problem watershed areas. Walton County shall require stormwater management systems that limit peak discharge from a developed site to the discharge from the site in an undeveloped condition for a frequency storm event as referenced in Policy I-4.5.8.A for the critical duration up to and including the 24 hour storm duration.
- D. 1" / 0.5" indicates where "DRY" Detention/Retention areas are used, a minimum Treatment Volume shall be required equal to the volume of stormwater runoff from 1" of rainfall or ½ " of rainfall over the entire onsite drainage basin, whichever is greater. Alternatively, should "WET" Detention/Retention ponds be used, a minimum Treatment Volume shall be required equal to the volume of 1" of rainfall over the entire onsite development drainage basin along with appropriate Attenuation volume requirements.
- E. Projects located within a coastal dune lake watershed shall require 150 percent of the treatment volume required above.
- F. The County Engineer or designee may allow the use of alternative BMP's to address the stormwater quality criteria outlined above provided the BMP's are commonly accepted methodologies and/or there is sufficient empirical evidence to demonstrate their use can provide an equivalent if not greater level of stormwater quality treatment than standard accepted methodologies.
- G. Walton County shall require that all projects receive, prior to issuance of a Development Permit by staff, appropriate permits from other Federal, State, or Local agencies to comply with the rules and regulations for stormwater facility design, performance, and discharge.

Policy I-4.5.9: Walton County shall provide adequate primary and secondary drainage services to maintain the adopted level of service standards based upon, but not limited to, the following considerations:

- A. The protection and maintenance of the lives and safety of County citizens;
- B. The protection and maintenance of the property of County citizens;
- C. The protection of existing public investment;
- D. Consideration of pollution abatement;
- E. The reduction of operating and maintenance costs; and,
- F. The achievement and satisfaction of regional, State, and Federal regulations.

Policy I-4.5.10: Walton County shall seek from Federal and State sources, additional opportunities for funding and joint projects to facilitate County-wide surface water management programs.

Policy I-4.5.11: Walton County shall continue to establish and strengthen inter-local agreements with other government agencies that are involved in stormwater management practices that affect Walton County. Data sharing and exchange of drainage information shall continue to be emphasized in the interlocal

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agreements. As part of this process, Walton County shall encourage municipalities to enact surface water management criteria that are technically consistent with and meet State, Regional, and County requirements for new development. Actions by municipalities that affect the Walton County drainage system should likewise be communicated to the County.

~~**Policy I-4.5.12:** Walton County shall continue to require sustainable Best Management Practices for capturing, directing, conveying, and dissipating stormwater runoff.~~

~~**Policy I-4.5.13:** Walton County shall implement guidelines to encourage master stormwater planning, Best Management Practices and the reliance on a centralized stormwater management treatment facility rather than a system of many smaller on lot detention/retention treatment areas.~~

~~**Objective I-4.6:** Walton County shall maximize the use of existing stormwater management facilities and available capacity through the implementation of appropriate technology, which assist in reducing urban sprawl.~~

~~**Policy I-4.6.1:** The shift to new technologies and operational procedures and Best Management Practices shall occur as they become feasible.~~

~~**Policy I-4.6.2:** Walton County shall actively participate in the development of innovative stormwater management programs that protect and conserve the County's water resources.~~

~~**Policy I-4.6.3:** Walton County shall continue to investigate alternative management systems for providing efficient stormwater management service.~~

~~**Policy I-4.6.4:** Walton County shall investigate innovative measures to reuse stormwater and for stormwater retention and detention.~~

~~**Objective I-4.7:** Walton County shall adopt Land Development Code provisions that encourage stormwater management systems to be designed, constructed, and maintained giving importance to the aesthetic characteristics of each pond, structure, and other features of the system visible to the public.~~

~~**Policy I-4.7.1:** Walton County shall develop design guidelines for the construction of stormwater systems and ponds.~~

~~**Policy I-4.7.2:** Walton County shall consider providing incentives for developers that design their stormwater systems using Best Management Practices.~~

~~**Policy I-4.7.3:** Walton County shall encourage a stormwater beautification program to integrate existing stormwater ponds with surrounding land uses.~~