

City of Marco Island
2035 Comprehensive Plan
Infrastructure Element
DRAFT

A. POTABLE WATER SUB-ELEMENT

GOAL A-1: ASSURE A SUFFICIENT, DEPENDABLE, AND HIGH-QUALITY POTABLE WATER SUPPLY TO MEET THE NEEDS OF MARCO ISLAND'S EXISTING AND FUTURE DEVELOPMENT ON A TIMELY BASIS, AT A REASONABLE COST, AND, AT A MINIMUM, THAT COMPLIES WITH ALL FEDERAL AND STATE REQUIREMENTS TO PROTECT THE HEALTH AND SAFETY OF THE PUBLIC.

Commented [BDM1]: PB: Consider replacing word "Development" with "Needs"

OBJECTIVE A-1.1: The City of Marco Island shall locate and develop potable water supply sources to meet the future needs of the City of Marco Island, and as necessary to meet or exceed the minimum Level of Service (LOS) standards established by the City's Ten-Year Water Supply Facilities Work Plan (dated September 4, 2013), the City's Utility Master Plan, and the Lower West Coast Water Supply Plan prepared by the South Florida Water Management District.

Commented [BDM2]: PB: Consider whether additional areas need to be added.

Policy A-1.1.1: The City has developed and adopted a Ten-Year Water Supply Facilities Work Plan, (dated September 4, 2013) and authored by the City of Marco Island Utilities, in accordance with the Water Supply Guidelines of the South Florida Water Management District's Lower West Coast Water Supply Plan. The policies and recommendations are hereby incorporated by reference.

Policy A-1.1.2: The City of Marco Island will require that public potable water facilities and services meet or exceed adopted LOS standards. The Ten-Year Water Supply Facilities Work Plan should evaluate the existing and projected potable water LOS standard(s) based on the following:

- An identification of the existing standard(s) by service area and/or facility.
- A comparison of the existing standard to current use and ensured consistency with LOS standard.
- The need for revising standards for residential uses and additional standards for non-residential uses.

Policy A-1.1.3: The City shall continue to provide potable water facilities and services sufficient to accommodate and maintain projected growth and development through build-out.

Policy A-1.1.3.5: The City will apply concurrency with LOS standards when determining the issuance of building permits to insure service is adequate and available.

OBJECTIVE A-1.2: The City shall maximize the use of existing facilities and coordinate future expansion plans consistent with projected needs to accommodate development at the densities proscribed in the Future Land Use Plan Element, and consistent with the Capital Improvements Plan and the Ten-Year Water Supply Facilities Work Plan.

Policy A-1.2.1: Require that the Utilities produce an engineering report for all LOS-based potable water system expansion projects prior to the issuance of a Development Order, showing that the projects are consistent with this Objective.

Policy A-1.2.2: Maximize the use of existing facilities prior to the expansion of non-LOS based potable water system expansion projects.

Policy A-1.2.2.5: The City shall require new construction or redevelopment to connect to Marco island Utilities.

Policy A-1.2.3: The City will thoroughly review all non-LOS based potable water system expansion project proposals to ensure that the project is designed consistent with development densities ~~proscribed~~ ~~prescribed~~ in the Future Land Use Map Plan to curtail the potential over-sizing of facilities to encourage urban sprawl.

Policy A-1.2.4: Should any non-city entity responsible for potable water services approach 80% of capacity in their adopted LOS standard during the five-year planning period, such entity must notify the City in writing as to how and when the entity will take action to increase capacity to ensure continued compliance with the adopted LOS.

OBJECTIVE A-1.3: The City will investigate, support and encourage efforts to reduce the use of potable water for non-household consumptive uses.

Policy A-1.3.1: The City will continue to implement a conservation program and will maintain quarterly monitoring reports to track water usage.

Policy A-1.3.2: The City will regularly review and revise, as necessary, the landscape ordinance to incorporate best practices and encourage the use of native and drought tolerant plants permitted in conjunction with new development.

Policy A-1.3.3: The City will regularly review and revise, if necessary, the amount of lawn area required for new development.

Policy A-1.3.4: The City will continue, to the greatest extent possible, the installation of reclaimed water facilities to provide cost-effective services to consumers.

Policy A-1.3.5: The City will encourage the continued expansion of storage and distribution facilities for reclaimed water to commercial and residential properties in an effort to reduce the use of potable water for irrigation purposes.

Policy A-1.3.6: The City will continue irrigation restrictions consistent with the City's Code of Ordinances. The City will consider modification of restrictions as appropriate

Commented [BDM3]: PB: Clarify language

Commented [BDM4]: PB: Remove if no longer relevant

Commented [BDM5]: PB: What does Council want to do about the use of non-potable water?

Commented [BDM6]: PB: Consider whether the Council wants to retain the policy about reclaimed water.

and necessary to coordinate with the South Florida Water Management District's water conservation initiatives and requirements that are consistent with the City's interests.

Commented [BDM7]: PB: Is this necessary?

OBJECTIVE A-1.4: The City will ensure thoughtful, thorough, pre- and post-storm planning to ensure minimal disruption in potable water service to customers.

Policy A-1.4.1: To provide the public with essential information concerning plans in the event of a storm event, Marco Island Utilities will provide essential information in order to maintain and update the City of Marco Island's Comprehensive Emergency Management Plan.

Policy A-1.4.2: The City will seek full recovery of service within two (2) weeks of any hurricane, category 3 or greater, for 80% of their customers on Marco Island.

OBJECTIVE A-1.5: The City will implement and update its Ten-Year Water Supply Facilities Work Plan every five (5) years consistent with water supply sources identified within and in coordination with the South Florida Water Management District's Lower West Coast Water Supply Plan.

Policy A-1.5.1: The City shall participate in the planning process with South Florida Water Management District with the objective to assist in the development of a regional water supply plan that will reasonably assure adequate quantity and quality of potable water resources needed to meet future demands without creating water use conflicts or unacceptable impacts to natural resources.

B. SANITARY SEWER SUB-ELEMENT

GOAL B-1: TO PROTECT THE HEALTH AND SAFETY OF THE PUBLIC BY ENSURING WASTEWATER TREATMENT FACILITIES AND SERVICES ARE ENVIRONMENTALLY SOUND, COST EFFECTIVE, AND MEET THE COMMUNITY'S PRESENT AND FUTURE DEMANDS.

OBJECTIVE B-1.1: The City of Marco Island will require that the entities providing wastewater collection, treatment, and disposal facilities and services meet or exceed adopted LOS standards as established by the City's Utility Master Plan.

Policy B-1.1.1: Should any non-city entity responsible for wastewater services approach 80% of capacity in their adopted LOS standard during the five-year planning period, such entity must notify the City in writing as to how and when the entity will take action to increase capacity to ensure continued compliance with the adopted LOS.

Commented [BDM8]: PB: Consider adding CIP into language for clarification

Policy B-1.1.2: Non-city entities responsible for wastewater collection, treatment and disposal will be required to prepare and submit a report evaluating opportunities for expansion, replacement and/or siting of new facilities to ensure that the provision of wastewater facilities and services will be sufficient to accommodate projected growth and development through build-out.

Policy B-1.1.3: The owner of each lot or parcel of land upon which lot or parcel of land any improvement is now situated or shall hereafter be situated, shall connect or cause such improvements to be connected at the time a permit (development order) is approved.

OBJECTIVE B-1.2: The City will encourage and promote the use of treated wastewater effluent for irrigation purposes in order to provide an environmentally sound disposal method and to conserve potable water supplies.

Commented [BDM9]: PB: Consider removing – does Council want to do this?

Policy B-1.2.1: The City will support Florida Water Services Corporation (FWS) installation of effluent storage tanks and distribution lines to enhance and expand the delivery capacity of an estimated 1.5 to 2.0 mgd of effluent from the existing wastewater treatment plant.

Policy B-1.2.2: The City will coordinate with FWS, to the greatest extent possible, regarding the installation of reclaimed water and sewer collection lines and facilities to be most cost effective.

Commented [BDM10]: PB: Out of date. Consider removing.

Commented [AC11R10]: Reference to FWS to be removed.

Policy B-1.2.3: The City will implement an educational campaign to promote water conservation by implementing the use of reclaimed water for irrigation, toilets, construction dust control, fire hydrants, etc.

OBJECTIVE B-1.3: Surface waters in canals in the vicinity of public sewers will be monitored for compliance with criteria cited in Chapter 62-302.530 F.A.C. for Class III waters.

Commented [BDM12]: PB: clarify this applies to canals in the vicinity of public sewers and related infrastructure such as lift stations.

Policy B-1.3.1: The City shall maintain a surface water quality monitoring program. Such program shall involve monthly monitoring of sampling sites that have been selected to represent historical sampling sites, waterway tidal exchanges, sewer areas, and stormwater outfalls. The program is designed to conduct long term monitoring of the Total Coliform, Fecal Coliform, and Total Nitrogen(Nitrate/Nitrite) levels.

Commented [BDM13]: PB: Consider taking out monthly and consider broadening for what quality is testing for.

Policy B-1.3.2: Sample results will be provided to the City after analysis for microbiology and Total Nitrogen. If sample(s) results exceed permissible levels re-sampling of the location(s) shall occur within 48 hours. Should the re-sampling results continue to exceed permissible levels the City shall immediately contact the Collier County Department of Health and request prompt investigation and corrective action by Department officials.

Policy B-1.3.3: The City shall promptly respond to citizen requests for water quality sampling at other non-designated locations.

Commented [BDM14]: PB: Consider removing

Policy B-1.3.4: Remaining ~~hoot~~-Hoot systems will be eliminated by 2025.

Commented [BDM15]: PB: Consider removing. Short term policy.

C. STORMWATER MANAGEMENT SUB-ELEMENT

GOAL C-1: TO PROTECT THE HEALTH AND SAFETY OF THE PUBLIC FROM FLOODING DUE TO RAINFALL BY ENSURING STORMWATER MANAGEMENT FACILITIES ARE PROPERLY MAINTAINED, COST EFFECTIVE, MEET THE COMMUNITY'S PRESENT AND FUTURE DEMANDS, AND ARE CONSISTENT WITH THE COMMUNITY'S CRITERIA FOR THE PRESERVATION OF ENVIRONMENTAL VALUES AND THE CONSERVATION OF NATURAL RESOURCES.

Commented [BDM16]: PB: Do we need to add reference to MS-4?

OBJECTIVE C-1.1: The City of Marco Island will operate and maintain a stormwater management system that will meet or exceed adopted Levels of Service (LOS) design standards.

Policy C-1.1.1: The LOS design standard for new stormwater management facilities will be according to the City of Marco Island's adopted standards for a ten (10) year, one (1) hour storm event, with a 3.3 inches/hour intensity duration.

Policy C-1.1.2: With respect to proposed developments, post-development stormwater runoff shall, at a minimum, not exceed pre-development conditions. Existing stormwater management systems, public or private, that are proposed for expansion and/or reconstruction shall, to the greatest degree that is reasonable, meet current stormwater management regulations for quantity discharges.

Commented [BDM17]: PB: Consider replacing with processes.

Policy C-1.1.3: Water quality for development runoff from existing sites proposed for redevelopment or expansion shall, to the greatest degree that is reasonable, comply with the more stringent permitting standards and policies of the South Florida Water Management District or the City of Marco Island.

Commented [BDM18]: PB: Consider removing.

Policy C-1.1.3.5: All new development shall comply fully with the more stringent permitting standards and policies of either the South Florida Water Management District, per F.A.C. Chapter 40E-41, or the City of Marco Island.

Policy C-1.1.4: The City will allocate sufficient funds in the Capital Improvement Element (CIE/CIP) Plan to address stormwater concurrency deficiencies identified and ensure that such funds are budgeted.

OBJECTIVE C-1.2: To limit public expenditures for stormwater facilities that would have the effect of directly subsidizing private development.

Policy C-1.2.1: The City shall limit its funding of public stormwater facility expansion if such funding and such expansion would have the effect of directly subsidizing a specific private development in the City.

Commented [BDM19]: PB: Consider adding systems instead of limiting only to facilities.

Policy C-1.2.2: The objective shall in no way limit the City's ability to fund and construct public improvements in order to provide adequate stormwater facilities to

serve the Future Land Use Plan development pattern or development for which rights were vested prior to enactment of this Plan.

OBJECTIVE C-1.3: Surface water in canals will meet the criteria cited in Chapter 62-302.530, F.A.C. for Class II and Class III waters where applicable.

Policy C-1.3.1: The City may require, when deemed necessary, the testing of adjacent water bodies before, during, and immediately after, the installation of any new or improvement stormwater outfall structure.

Policy C-1.3.2: The City will coordinate with Collier County Health Department to request that FDEP conduct bi-annual water quality tests in and adjacent to waterways for bacteriological information for public notification. The test will determine fecal coliform and fecal strep counts and also determine the source if results are positive. The tests will be taken in areas with all units connected to sewer and areas with limited development to provide baseline data. The test results will be made available to the public.

OBJECTIVE C-1.4: The City will implement a proactive maintenance program to ensure that all current and future stormwater management facilities operate at designed capacity.

Policy C-1.4.1: The Public Works Department will regularly review and update the City of Marco Island Stormwater Management Program to ensure timely maintenance of existing and future stormwater facilities.

Policy C-1.4.2: The City will ensure adequate funding to support review and update the City of Marco Island Stormwater Management Program through annual budget allocations.

Policy C-1.4.3: The City will conduct annual inspections of stormwater facilities consistent with requirements and obligations in the City's Community Rating System (CRS) Plan.

D. SOLID WASTE SUB-ELEMENT

GOAL D-1: PROMOTE THE EFFICIENT AND ECONOMICAL BALANCE OF PUBLIC AND PRIVATE SOLID WASTE COLLECTION AND DISPOSAL SERVICES FOR THE CITY OF MARCO ISLAND THAT WILL MEET ESTABLISHED REQUIREMENTS IN A MANNER THAT WILL PROTECT THE PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL RESOURCES OF THE COMMUNITY.

OBJECTIVE D-1.1: Collier County, the entity responsible for Solid Waste Disposal, shall manage and maintain a safe, dependable, economic and efficient solid waste collection system pursuant to adopted LOS standards.

Commented [BDM20]: PB: Consider responsibility of County versus City. Consider removing.

Policy D-1.1.1: Monitor County efforts to maintain and regulate collection costs to ensure efficient, dependable, and cost effective service to Marco Island users.

Policy D-1.1.2: Should any non-City entity responsible for solid waste disposal services approach 80% of capacity of the adopted LOS standard, such entity must notify the City in writing as to how and when the entity will take action to increase capacity to ensure continued compliance with the adopted LOS.

Policy D-1.1.3: Advocate continuation of the mandatory collection of solid waste pursuant to Collier County Ordinance 90-30 as amended.

Policy D-1.1.4: Support Collier County efforts to assure public awareness and participation in solid waste collection issues by requiring all issues to be addressed in advertised public meetings.

OBJECTIVE D-1.2: The County shall utilize safe and efficient methods for environmentally sound disposal of solid waste in accordance with local, State and Federal regulations and encourage investigation of improved methods and best management practices that further this objective.

Commented [BDM21]: PB: Consider removing as not within City control.

Policy D-1.2.1: The County shall ensure that Collier County Landfill operators comply with FDEP regulations, monitor groundwater wells, and continue to closely evaluate test data. Require operators of the Marco Island Transfer Station adhere to FDEP regulations as applicable to that facility.

Policy D-1.2.2: Support County efforts to secure State and Federal grants to improve the operation and environmental compatibility of the Collier County Landfill.

Policy D-1.2.3: Adoption of the Level of Service (LOS) for the Solid Waste sub-element as contained in the most recently adopted Capital Improvements Elements, of the Collier County Growth Management Plan.

Policy D-1.2.4: The City will review County cost calculations for continued landfilling service over the next 5, 10 and 20 years taking into consideration all operating, capital, and acquisition costs.

GOAL D-2: ENCOURAGE EXPANSION OF RECYCLING PROGRAM TO INCLUDE OFFICE, COMMERCIAL AND INDUSTRIAL CUSTOMERS TO ENHANCE RE-USE OF WASTE STREAM MATERIALS.

OBJECTIVE D-2.1: Encourage Collier County Solid Waste Management to expand the recycling program to include office, commercial, and industrial customers according to Collier County Policy 3.1, subsection “c”.

Policy D-2.1.1: Request the service provider staff to develop an implementation plan for expanding the current recycling program to include office, commercial, and industrial customers.

Commented [BDM22]: PB: Consider revising policies to encourage recycling, rather than attempting to maintain a policy that is out of the City’s control.

Policy D-2.1.2: Promote public awareness and participation in any discussion to expand recycling programs by requiring all issues to be addressed in advertised public meetings.

GOAL D-3: ABATEMENT OF ILLEGAL DUMPING ACTIVITIES.

OBJECTIVE D-3.1: Maintain and enhance existing codes and enforcement actions to address and abate illegal dumping activities.

Policy D-3.1.1: Ensure diligent monitoring of construction sites and vacant lots by City personnel to prevent or abate illegal dumping activities pursuant to current City Code, Ordinance 98-19.

Policy D-3.1.2: Ensure prompt code enforcement actions against parties responsible for illegal dumping.

Policy D-3.1.3: Increase awareness to the issue of illegal dumping through public outreach efforts such as press releases, pamphlets, and public meetings.

E. NATURAL GROUNDWATER AQUIFER RECHARGE

GOAL E-1: TO CONTINUE TO SUPPORT AND MONITOR STATE, COUNTY, AND REGIONAL WATER MANAGEMENT DISTRICT EFFORTS TO PROTECT, CONSERVE, AND MANAGE THE QUALITY AND QUANTITY OF NATURAL GROUNDWATER RESOURCES.

OBJECTIVE E-1.1: Require the SFWMD, water suppliers, and Florida Department of Environmental Protection service providers to ensure that federal and state standards are met or exceeded for any groundwater storage system (ASR) within the City's service area.

Policy E-1.1.1: The City will coordinate with the service provider to receive copies of monitoring reports as prepared or required by appropriate regulatory agencies.

Policy E-1.1.2: The City will continue monitor to Collier County's Wellfield Protection Ordinance.

OBJECTIVE E-1.2: Continue to support agencies that have programs that monitor underground storage tanks and business hazardous waste storage and disposal through diligent plan review, water quality testing, and proactive response to citizen complaints.

Policy E-1.2.1: Maintain cooperative relationship with the Collier County Public Utilities Department to ensure prompt response to any event relating to the above-mentioned programs.

Commented [BDM23]: PB: Consider adding reference to monitoring / testing and benchmarks

OBJECTIVE E-1.3: Provide appropriate land use and development regulations to protect the functions of natural groundwater aquifer recharge areas and natural drainage features.

Policy E-1.3.1: Require, where applicable, full compliance with existing City of Marco Island land development regulations and other applicable County, State and Federal agency regulations concerning well construction, site excavation, soil erosion control, and/or groundwater protection, as part of the site development review process.

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