
Infrastructure Element

1 **INFRASTRUCTURE ELEMENT**

2
3 **GOAL 1:** To provide for environmentally efficient and financially feasible wastewater
4 systems that fulfills the policies and desires of Hendry County and the
5 requirements of all regulatory agencies.
6

7 **OBJECTIVE 1.1:**

8
9 Maintain acceptable Level of Service Standards for the sanitary service areas of the county to
10 ensure that adequate removal and disposal of wastewater is available for both current and future
11 population demands and coordinate with service providers to remove existing sanitary sewer
12 system deficiencies.
13

14 **Policy 1.1.1:** Appropriately designed septic tanks or package treatment plants may be
15 utilized to support development in areas where centralized sewer systems
16 are not available or cost effective, as long as the soils are adequate to
17 support such alternative systems. Adequacy of soils shall be determined
18 using applicable state standards for septic systems.
19

20 **OBJECTIVE 1.2:**

21
22 Within the County’s Five- and 10-Year Capital Improvement Plan, areas identified for sewer line
23 extensions shall be coordinated in a manner to ensure capacity service is available in high growth
24 areas and that capacity is available. Some unincorporated areas near Clewiston remain a priority
25 over the next five years.
26

27 **Policy 1.2.1:** The County will continue to coordinate with the City of Clewiston to assure
28 that extensions are made in areas of greatest growth and in areas where the
29 soils are least capable of supporting septic tanks. This coordination shall
30 include, but is not limited to, initiatives to be made by the County to share
31 land use information with the City, and an initiative to review soils data (as
32 it relates to sewer needs). The County shall request the opportunity to
33 review the City’s capital improvement plans and shall provide comments
34 and recommendations.
35

36 **OBJECTIVE 1.3:**

37
38 The County shall maximize use of existing sewer facilities and discourage urban sprawl with
39 infill development. In addition, limit the extension of sewer service to areas designated for urban
40 development on the Future Land Use Map. This Objective shall be implemented through the
41 following policies:
42

43 **Policy 1.3.1:** The Future Land Use Element and Map allows the greatest density and the
44 most flexibility for development in the areas near the cities where sewer
45 facilities are available, or are more feasible for sewer extensions than the

46 more remote areas.

47

48 **GOAL 2: Potable Water**

49 The County will ensure potable water is supplied and distributed to
50 consumers in Hendry County in order to maintain public health and safety.
51

52 **OBJECTIVE 2.1:**

53

54 The following standards shall be used to ensure adequate potable water capacity.

55

56 **Policy 2.1.1:** Properly drilled wells or package water treatment plants may be utilized to
57 support development in areas where centralized potable water systems are
58 not available, as long as adequate water quality is available or can be
59 achieved through home treatment.

60

61 **Policy 2.1.2:** There are no present deficiencies in the existing facilities. In the event future
62 deficiencies in any existing facility are identified, the County will participate
63 with the entity having jurisdiction over the facility to remedy the
64 deficiencies. Participation may include (but is not limited to) sharing
65 information on development activity within the service area and in nearby
66 areas.

67

68 **Policy 2.1.3:** County operated facilities that use water shall comply with all water
69 conservation measures imposed by federal, state, and South Florida Water
70 Management District laws and regulations.

71

72 **Policy 2.1.4:** The County shall require that all future residential and commercial
73 construction comply with the latest Florida Building Code with respect to
74 water conserving features.

75

76 **Policy 2.1.5:** The County shall cooperate with the South Florida Water Management
77 District by providing locations for display of water conservation exhibits and
78 for distribution of water conservation literature in public buildings.

79

80 **OBJECTIVE 2.2:**

81

82 The County shall continue to assist in the coordination of water system extensions and/or
83 increases in capacity and water reuse to meet future needs.

84

85 **Policy 2.2.1:** The highest priority for extensions to the potable water system shall be in
86 areas adjacent to the cities and identified in the Five-and Ten-Year Schedule
87 of Capital Improvements with special attention given to areas where well
88 water quality problems may exist.

89

90 **Policy 2.2.2:** The County shall continue to monitor development activities and water
91 system capacities to determine if extensions of lines in the Clewiston and
92 LaBelle areas are necessary through the next planning period, including
93 development of alternative water supplies, which are identified as necessary
94 to serve existing and new development.
95

96 **Policy 2.2.3:** The County shall strengthen synchronization of water supply planning and
97 local land use planning by utilizing state comprehensive plan requirements
98 including coordination with the Regional Water Supply Plan with
99 maintenance of a 10-Year Water Supply Facilities Work Plan identifying
100 needed water supply facilities for a planning horizon of no less than 10
101 years.
102

103 **Policy 2.2.4:** The County will update its 10-Year Water Supply Facilities Work Plan in
104 accordance with Florida law. The County shall maintain consistency with
105 the current SFWMD Lower West Coast Water Supply Plan, as amended,
106 and meet with SFWMD water supply planning staff as needed to provide the
107 latest estimates and projections of potable water use.
108

109 **Policy 2.2.5:** The County shall promote the coordination and information sharing between
110 water suppliers and the County. Water suppliers shall share numbers of
111 connections (residential and commercial), water treatment capacity, South
112 Florida Water Management District permitted allocation, number of
113 anticipated future connections, rate schedule, interlocal agreements, and
114 other pertinent information every five years prior to preparation of the 10-
115 Year Water Supply Facilities Work Plan.
116

117 **OBJECTIVE 2.3:**
118
119 The County shall maximize use of existing potable water facilities and discourage urban and
120 rural sprawl while encouraging infill and cluster development.
121

122 **Policy 2.3.1:** The County shall continue to encourage potable water extensions in areas
123 identified on the Future Land Use Map as high density residential as a way
124 to discourage urban and rural sprawl.
125

126 **Policy 2.3.2:** All development within the West Hendry Area at a density of greater than a
127 net density of two units per acre that is connected to centralized water and
128 wastewater services shall be connected to central reuse water irrigation
129 system service. Once the facilities have been constructed and extended to
130 serve the West Hendry Area, all development must be connected to the
131 central facilities. Irrigation utilizing surface water, groundwater or potable
132 water may be permitted on a temporary basis for sales centers and other
133 temporary uses or if development is more than ¼ of a mile away from the
134 closest line and the density of the development is at less than or equal to one

135 unit per acre.
136
137 Development within the West Hendry Area will be required to utilize reuse
138 water on-site to meet the irrigation needs of the proposed development to
139 the extent reuse water is available. A reclaimed water utility system will be
140 designed and constructed so that landscaped areas and other potential users
141 will have access to the system. Conventional water sources will be used
142 only when an insufficient volume of reclaimed water is available.
143

144 **Policy 2.3.3:** The Port LaBelle Utility System (PLUS) will endeavor to maintain the
145 current 80% efficiency for use of Sandstone aquifer source water within its
146 Hendry County service area and will work towards reducing its raw water
147 consumption. Steps taken to reach this goal may include identification and
148 repair of leaks within the distribution system, and annual system audits to
149 identify other unaccounted for losses.
150

151 **Policy 2.3.4:** The County will continue to coordinate and share information with the City
152 of LaBelle in regard to potable water supply and coordination of future
153 potable water supply service areas for the both the City and County.
154

155 **Policy 2.3.5:** After South Florida Water Management District’s adoption of its most
156 recent update to the Lower West Coast Water Supply Plan, Hendry County
157 will coordinate with Lee County on the subsequent revisions to each
158 County’s 10-Year Water Supply Facilities Work Plan to assure consistency
159 between those plans in order to ensure the Florida Governmental Utility
160 Authority has sufficient water supply to meet the identified needs in its
161 service territories in Lee and Hendry Counties.
162

163 **GOAL 3: Solid Waste**
164 To provide for the removal and disposal of solid wastes generated in Hendry
165 County in a manner that is safe, cost effective, and environmentally sound.
166

167 **OBJECTIVE 3.1:**
168
169 Hendry County shall maintain acceptable level of service capacity standards for the Hendry-Lee
170 County disposal facility, which meet state mandated sanitary landfill use reduction requirements.
171

172 **Policy 3.1.1:** The County shall reduce waste disposal in the Hendry-Lee County landfill
173 through recycling and other waste reduction methods.
174

175 **Policy 3.1.2:** Hendry County shall pursue implementation of the following waste
176 reduction strategies.
177

- 178 1. Curbside recycling for commercial and residential customers.
- 179 2. Mulching facility for residential horticultural material.

180 **Policy 3.1.3:** Hendry County shall evaluate the potential for requiring commercial and
181 residential recycling of all materials including land clearing debris, and
182 construction and demolition debris.
183

184 **OBJECTIVE 3.2:**
185

186 Hendry County shall use the joint solid waste disposal facilities provided for by its Interlocal
187 Agreement with Lee County (known as the Hendry-Lee County landfill) for the disposal of solid
188 waste generated within Hendry County.
189

190 **Policy 3.2.1:** No solid waste management facility (as defined by Chapter 403, Florida
191 Statutes) or hazardous waste facility shall be located within the county
192 unless: (1) the primary sources of wastes are from generators within Hendry
193 County or (2) there is an interlocal agreement recognized as valid by the
194 Hendry County Board of Commissioners between Hendry County and each
195 jurisdiction from which wastes are generated. In addition, any new solid
196 waste management facility shall be required to comply with the standards
197 set forth in Hendry County Ordinance 90-16.
198

199 **Policy 3.2.2:** All land use approvals and permits granted by Hendry County for the joint
200 Hendry-Lee County landfill and related facilities shall be conditioned upon
201 compliance by the owner and operators with the restrictions and conditions
202 contained in any existing agreements between Lee County and owners of
203 land within one and one-half miles of the landfill site to the extent that such
204 agreements are consistent with the Comprehensive Plan, as adopted and
205 amended.
206

207 **Policy 3.2.3:** Hendry County shall maximize the use of the shared Hendry - Lee County
208 solid waste disposal facility.
209

210 **GOAL 4: Stormwater Management**
211 To ensure the control of current and future impacts to natural drainage
212 patterns that may increase uncontrolled storm-water run-off to unacceptable
213 levels, and to protect water quality and water supply, as well as the quality
214 and function of existing wetlands.
215

216 **OBJECTIVE 4.1:**
217

218 The County shall continue to implement level of service standards for stormwater management
219 consistent with the South Florida Water Management District.
220

221 **Policy 4.1.1:** For agricultural uses, the Level of Service Standard shall be the
222 requirements of the South Florida Water Management District and the
223 standards for the local water management district in which the proposed
224 agricultural use is located.

225 **OBJECTIVE 4.2:**

226

227 The natural drainage patterns of Hendry County have been considerably disrupted over the years,
228 so that certain areas of residential development do experience some problem with retained water
229 after storms. The desire is to reduce this deficiency by continued coordinating activities with the
230 SFWMD.

231

232 **Policy 4.2.1:** The County shall coordinate with the South Florida Water Management
233 District in correction of problems created by the major state and federal
234 drainage projects in the past. The District has programmed correction of
235 some of the problems.

236

237 **Policy 4.2.2:** Include drainage correction design in the design of any roadway
238 improvements undertaken in the future. Design of new roads or major road
239 improvements shall eliminate flooding conditions which specifically result
240 from past road construction, or which can be relieved by new construction.

241

242 **Policy 4.2.3:** The County shall coordinate land use and development decisions with the
243 plans, studies, and policies of the SFWMD and the U.S. Army Corps of
244 Engineers, including the Caloosahatchee Water Management Plan, to ensure
245 that the natural drainage patterns are not disrupted more than necessary.

246

247 **OBJECTIVE 4.3:**

248

249 Coordinate the extension and increased capacity of stormwater management facilities. This shall
250 be accomplished by carrying out the following activities.

251

252 **Policy 4.3.1:** As referenced in Policy 4.2.2 above, the County shall coordinate the
253 completion of drainage improvements with future road projects where the
254 two projects are tied together geographically. Design of new roads or major
255 road improvements shall eliminate flooding conditions which specifically
256 result from past road construction, or which can be relieved by new
257 construction.

258

259 **OBJECTIVE 4.4:**

260

261 Maximize use of and protect existing drainage facilities and natural drainage features. This shall
262 be accomplished by undertaking the following activities.

263

264 **Policy 4.4.1:** Utilizing the County-wide Surface Water Master Plan, to the County shall
265 coordinate the different drainage basins and coordinate the activities and
266 standards of the local water control districts. Where individual basins are
267 functionally related, plans for these basins shall be coordinated.

268

269 **Policy 4.4.2:** Continue a maintenance schedule for County operated stormwater
270 management facilities as a preventative measure to maximize functionality

271 of the existing facilities.

272
273 **Policy 4.4.3:** The County shall continue to monitor stormwater drainage patterns to
274 ensure that urban development will be designed to maintain pre-
275 development flow characteristics, and that local flooding conditions will be
276 corrected. Where stormwater runs off to a natural drainage feature (such as a
277 lake, stream or wetland), regulations shall provide for retention/detention as
278 necessary to improve water quality and flow. These standards shall be based
279 on applicable SFWMD standards. These regulations shall include provisions
280 to ensure that natural drainage features are not modified or destroyed, except
281 that modifications which do not adversely affect overall drainage functions
282 may be permitted when necessary for the stormwater management system to
283 meet the Level of Service standards.

284
285 **Policy 4.4.4:** Buffers shall be required between development sites and environmentally
286 sensitive areas, including wetlands and other surface waters. The purpose of
287 the buffer is to protect natural resources from the activities and impacts of
288 development. The buffers shall function to:

289
290 a) Provide protection to the natural resources from intrusive activities and
291 impacts of development such as trespass, pets, visual impacts, vehicles,
292 noise, lights, and stormwater. The negative impacts of the uses upon the
293 natural resources must be minimized or, preferably, eliminated by the
294 buffer such that the long-term existence and viability of the natural
295 resources, including listed species populations, are not threatened by such
296 impacts and activities. In other words, incompatibility between the uses is
297 eliminated or minimized and the uses may be considered compatible
298 (which means a condition in which land uses or conditions can co-exist in
299 relative proximity to each other in a stable fashion over time such that no
300 use or condition is unduly negatively impacted directly or indirectly by
301 another use or condition).

302
303 b) Types of buffers: The buffers may be a landscaped natural barrier, a
304 natural barrier, or a landscaped or natural barrier supplemented with
305 fencing or other man-made barriers, so long as the function of the buffer
306 and the intent of this policy is fulfilled.

307
308 **OBJECTIVE 4.5:**
309
310 Inventory and prioritize stormwater management facilities needs in the County. This shall be
311 done by implementing the following activities:

312
313 **Policy 4.5.1:** The County shall carry out a survey and evaluation program for stormwater
314 management facilities in the County for drainage problems not being
315 addressed by the South Florida Water Management District, i.e., problems

316 not related to SFWMD facilities.
317
318 **Policy 4.5.2:** Coordinate the survey and inventory mentioned above with the cities of
319 Clewiston and LaBelle, the South Florida Water Management District, and
320 the local water management control districts. Coordination may include (but
321 is not limited to) providing land use and development data and by timing
322 studies to operate in a coordinated time frame.
323
324 **Policy 4.5.3:** Information resulting from the stormwater management facilities inventory
325 shall be used as input to the master drainage and water management plan
326 discussed in Policy 4.4.1 above.
327
328 **GOAL 5: Natural Groundwater Aquifer Recharge Sub-Element to provide for**
329 **the protection and conservation of Hendry County’s ground water**
330 **aquifer recharge areas.**
331
332 **OBJECTIVE 5.1:**
333
334 The County shall coordinate land use and development decisions with the plans, studies, and
335 policies of the SFWMD and the COE, including the LWC Water Supply Plan and the
336 Caloosahatchee Water Management Plan, in order to meet water demands in a manner that is not
337 detrimental to Hendry County.
338
339 **Policy 5.1.1:** Work with the SFWMD and COE to identify and map aquifer recharge
340 areas in the County.
341
342 **Policy 5.1.2:** Work with the SFWMD to identify new water sources in the County.
343
344 **Policy 5.1.3:** Adopt measures that efficiently use the existing water supply by:
345
346 a) Increasing agricultural and urban water conservation;
347 b) Eliminating inefficient water use practices; and
348 c) Working with the SFWMD to identify specific projects and cost-sharing
349 partnerships with other local governments.
350
351 **OBJECTIVE 5.2:**
352
353 The County shall exert its influence to protect and enhance the water quality of Lake
354 Okeechobee and the Caloosahatchee River to meet regional environmental and potable water
355 supply needs in high priority areas.
356
357 **Policy 5.2.1:** The County shall identify geographic areas where water resource problems
358 exist as a result of contamination and increased water usage.
359
360 **Policy 5.2.2:** Land development which affects the recharge functions, discharges into

361 groundwater or injects materials directly underground will be restricted in
362 accordance with applicable regulations of the Florida Department of
363 Environmental Protection and the South Florida Water Management
364 District.

365
366 The following guidelines shall apply to land development in order to ensure
367 adequate recharge and to prevent contamination:
368

- 369 a) Except within two miles of the existing city limits of LaBelle or
370 Clewiston, or within areas identified pursuant to paragraph (b) below as
371 natural aquifer recharge areas, impervious area for non-residential
372 developments over five acres shall be limited to 30%; development
373 under five acres shall be limited to 80%;
374
- 375 b) Within those areas-underlain by the surficial aquifer system (as
376 described in Technical Publications Document 88-12 published
377 September 1988, by the South Florida Water Management District as
378 natural aquifer recharge areas), impervious area for residential
379 developments with densities under two units per acre shall be limited to
380 30%; development with densities of two units per acre or more shall be
381 limited to 80%; and
382
- 383 c) The impervious area restrictions shall be used in conjunction with
384 stormwater retention requirements in order to ensure that development
385 within natural aquifer recharge areas does not reduce aquifer recharge
386 quality or quantity (both volumes and rates) below pre-development
387 conditions, and that subsurface storage and flows simulate pre-
388 development conditions.
389

390 **OBJECTIVE 5.3:**

391
392 Upon the SFWMD identifying high and prime recharge areas for aquifers, the County shall assist
393 the District in protecting the source of these aquifers.
394

395 **Policy 5.3.1:** The County shall assist the SFWMD in its efforts to identify natural
396 recharge areas.
397

398 **Policy 5.3.2:** The County shall adopt the SFWMD Surficial and Intermediate Aquifer
399 Systems Map, which designates high and prime recharge areas, as part of
400 this Element and within the Conservation Element.