

CONSERVATION ELEMENT

The purpose of the Conservation Element is to provide for the conservation, appropriate use, and protection of natural resources within Hendry County.

GOAL 1:

The purpose of the Conservation Element is to provide for the conservation, appropriate use, and protection of natural resources within Hendry County. The goal is to conserve and enhance the quality of the natural resources in Hendry County for current and future population.

OBJECTIVE 1.1:

The Policies under this Objective describe the categories shown on the Conservation maps, and describe the nature and applicable criteria and requirements related to each category. The categories require various levels of treatment concerning conservation, use, and protection as noted in the Policies below.

Because of their dynamic natures and their often conflicting definitions among agencies and professionals, the environmental categories illustrated as part of the Conservation Element Map series must be considered generalized. These maps act to flag general areas in which an environmental category likely exists; however, a more detailed examination must be conducted for specific locations on a case by case basis to reveal the full extent and actual locations of each environmental category.

 During the planning period, the County shall provide for the conservation and appropriate use of mineral resources to ensure that the water quality and quantity of wetlands, surface waters, or aquifers shall not be degraded or reduced by development activities, including mining, and that there will be no net loss of or impairment of natural functions of wetlands or surface waters resulting from development activities, including mining. This objective will be accomplished through the implementation of the policies set forth below

Policy 1.1.1:

Wetlands: Wetlands are areas identified by plant communities commonly associated with lands inundated by water for a significant period each year. The Land Cover map provides general location for wetlands. Wetlands serve an important ecological function for flood control, water quality, and water management. Therefore, the potential for development within wetland areas shall be regulated to limit impacts according to the following provisions:

Jurisdictional determination of wetlands by the appropriate state agency shall be conducted and submitted with applications for a final permit issued by Hendry County.

a) In order to protect and conserve wetlands, impacts to jurisdictional

| 46 47 | | wetlands shall be avoided to the greatest extent possible through clustering. |
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| 48 | | ordistoring. |
| 49 | | b) On parcels that contain jurisdictional wetlands, development is to be |
| 50 | | clustered and located on disturbed land or land deemed to be of |
| 51 | | the lowest quality vegetative community available according to a |
| 52 | | professional environmental assessment consistent with state and |
| 53 | | federal methodologies. Subdivisions shall also be designed to |
| 54 | | preserve jurisdictional wetland areas and create lots containing |
| 55 | | disturbed land or land of the lowest quality vegetative community |
| 56 | | available according to a professional environmental assessment |
| 57 | | consistent with state and federal methodologies. |
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| 59 | | c) If development within jurisdictional wetlands is unavoidable, |
| 60 | | development within wetlands shall be minimized to the greatest extent |
| 61 | | possible. Hendry County shall discourage incompatible uses within |
| 62 | | wetlands. Permissible uses shall be limited to single family and two- |
| 63 | | family residential dwellings. All other uses will be directed away |
| 64 | | from wetlands. Residential density within wetlands is limited to one |
| 65 | | unit per 20 acres. |
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| 67 | | d) If development within jurisdictional wetlands is unavoidable, all uses |
| 68 | | in wetlands shall meet applicable state and Federal regulations and |
| 69 | | permitting requirements. |
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| 71 | Policy 1.1.2: | The County shall support the Everglades CERP Plan as implemented by the |
| 72 | | Water Management District. Such support shall consist of, but not be limited |
| 73 | | to, review of the CERP Plan to determine which portions should be |
| 74 | | incorporated into the County's Comprehensive Plan, distribution of |
| 75 | | information on the CERP Plan to landowners, developers, and staff who are |
| 76 | | affected by its provisions, and provision of available information to the |
| 77 7 0 | | District to assist the District in its own implementation efforts. |
| 78 70 | D.P. 112 | |
| 79 | Policy 1.1.3: | Hendry County shall work towards the establishment of mitigation areas |
| 80 | | within the County to ensure that local impacts to protect wildlife are |
| 81 82 | | mitigated locally. |
| 83 | Policy 1.1.4: | Groundwater Protection: |
| 84 | , | No areas have currently been designated as Groundwater Protection for lack |
| 85 | | of appropriate locational data and information. Map titled, Oil Well Fields, |
| 86 | | and Cones of Influence is provided to illustrate areas identified as cones of |
| 87 88 | | influence. |
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| 89 | | Any land use proposed for development within one-half mile of any potable |
| 90 | | water well designated on Map: Oil Well Fields, and Cones of Influence is to |
| 91 | | be reviewed as a Special Exception in order to determine impact on |

92 groundwater resources from the proposed use and specific development. 93 Such review shall address, but is not limited to: restrictions on land uses which involve pollutants and/or restrictions on handling and storage of 94 95 hazardous/toxic materials in order to minimize the opportunity for contamination. In addition, the following standards shall apply to the 96 97 location of certain activities within close proximity to public potable water 98 wells: (a) septic tanks shall be prohibited within two hundred (200) feet of a 99 well; (b) any generation, use, storage, transfer, treatment, or disposal of 100 hazardous materials (including hazardous waste, agricultural chemicals, and 101 petroleum products) shall be prohibited within four hundred (400) feet of a 102 well. 103 104 **Policy 1.1.5:** Work with the SFWMD to identify new water sources in the County, as 105 provided within the Lower West Coast Water Supply Plan and Hendry County's Ten-Year Water Supply Facilities Plan, as updated. 106 107 108 **Policy 1.1.6: Historic Resources**: 109 There are many historic and archeological places in Hendry County, 110 including various Indian mounds, historic fort locations, and the Hendry 111 County Courthouse, which are listed in the Florida Master File of historic 112 and archaeological places. The locations are indicated on the Historical and Archeological Sites map. 113 114 115 Any development proposal which encompasses a historic and/or archaeological site which is listed on the Florida Master File or on the 116 Historical and Archeological Sites map shall be reviewed for historic 117 118 significance by professionals in appropriate agencies with requisite 119 experience on the request of Hendry County staff. 120 121 **Policy 1.1.7:** Soils and Topography: 122 Soils classifications are included on the map titled Soils. Extensive 123 development potential rating of soils in Hendry County is not yet available. 124 A rating system that pertains to the septic tank suitability of soils is 125 available, and has served as a guide for the location of land use categories 126 and densities. 127 128 **Policy 1.1.8:** The septic tank permitting process shall be conducted by the Hendry County Environmental Services Department and shall be consistent with the 129 130 Department of Health. 131 132 **Policy 1.1.9:** A rating system that indicates the potential for leaching and runoff of 133 pesticides for the soil types present in Hendry County is available from The 134 University of Florida Institute of Food and Agricultural Sciences (IFAS) Cooperative Extension Service, which provides the publication titled 135 136 "Hendry County: Soil Ratings for Selecting Pesticides." This publication is 137 a resource that indicates soils with high runoff potential are present in

138 Hendry County. This publication shall be used in conjunction with the maps 139 provided in the "Hendry County Soil Survey Report" by the IFAS Cooperative Extension Service as reference for operators of agricultural 140 141 activity to guide the selection of which pesticides are appropriate according to site specific soil types. 142 143 144 **Policy 1.1.10:** Minerals: 145 Possible commercially valuable minerals are not specifically mapped due to 146 the lack of specific locational information. It is noted on the maps that 147 Hendry County has extensive areas of mineral resources including sand, sand shell and marl, and some peat, covering nearly the entire land area of 148 149 the County. 150 151 **Policy 1.1.11:** Mining: 152 The removal of mineral resources, earthen materials or deposits by means of 153 excavation, stripping, grading, or by any other process for use off-site shall constitute mining and shall require County approval. Excavation activities 154 that do not constitute mining are excavations required for: onsite water 155 156 management, onsite backfilling or grading, foundations of swimming pools, fences, walls, and small ponds not exceeding five percent of the total land 157 158 area. 159 160 **Policy 1.1.12:** Proposed mining activities require approval by Hendry County according to the development regulations set forth in the Land Development Code, which 161 162 are intended to address issues such as groundwater monitoring, screening, access, and compatibility with adjacent uses. At a minimum, a request for 163 approval of a mining activity must include a master plan indicating the 164 limits of the proposed mining activity, the potential impacts of the proposed 165 166 mining activity on listed species and native vegetation (with demonstrated adherence to the policies under Objectives 1.1 and 1.2), the proposed 167 mechanism for extraction, the proposed timeframe for the mining activity, 168 and a restoration plan. No conflicting land uses shall be permitted within the 169 limits of the mine during the period of the mining activity. In addition to the 170 171 requirements put forth in these policies, all mining activities and restoration 172 shall be consistent with state law. 173 174 **Policy 1.1.13:** Environmentally sensitive lands, including wetlands, surface waters, upland 175 habitat adjacent to wetlands and surface waters, floodplains, and listed species habitat must be restored after mining to their condition prior to 176 177 mining, or an equivalent area onsite must be created, according to function, type, extent, and quality. Mining shall be prohibited in such environmentally 178 179 sensitive lands where such restoration of the natural functions to their prior 180 type, extent, quality and location, or equivalent created area onsite, is not

feasible.

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Policy 1.1.14:

Caloosahatchee River: The Caloosahatchee River (also designated canal number C-43) is rated a Class III river according to the surface water quality classification system of the Florida Department of Environmental Protection (FDEP). This classification represents benefits from the river for recreation, fish and wildlife, and is a middle range classification in the DEP system which runs from Class I (potable water) to Class V (industrial). The Caloosahatchee River is under the management of the South Florida Water Management District (SFWMD) and Army Corps of Engineers (ACOE).

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Policy 1.1.15:

Nonpoint source pollution occurs when stormwater runoff carrying pollutants flows into water bodies. In order to protect the Caloosahatchee River from improperly managed runoff, the County shall limit land uses and activities on property abutting the river that result in water quality degradation. Hendry County staff will coordinate with the SFWMD and FDEP and will monitor the development of Total Maximum Daily Load (TMDL) and Basin Management Action Plan (BMAP) for the Caloosahatchee River. State Agency regulations, once adopted, will guide Hendry County's evaluation and application of development standards on property abutting the Caloosahatchee River and its tributaries.

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Policy 1.1.16:

Agricultural activities and keeping of livestock occur on properties designated in both Residential and Agriculture categories on the Hendry County Future Land Use Map. Hendry County shall encourage Best Management Practices established by the Florida Department of Agriculture and Consumer Services (FDACS) Office of Agricultural Water Policy for property owners abutting the Caloosahatchee River and its tributaries engaged in agricultural activities and keeping of livestock. FDACS's Water Ouality/Ouantity Best Management Practices for Florida Equine 2008 Edition (Draft Date: 12/09/08) provides the following examples of practices to minimize water quality impacts: maintaining vegetative cover; managing manure; controlling density of livestock; incorporating planned grazing systems; encouraging animals away from the river with structural barriers, buffers and feeding area setbacks; and preventing direct flow of stormwater runoff into the river by using swales, constructed wetlands, and stormwater retention ponds.

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For property owners along the river and its tributaries engaged in existing agriculture or keeping of livestock, Hendry County shall implement an educational program outlining the importance of maintaining water quality and associated Best Management Practices. The educational program may include public meetings, brochures, website information, tours, and a hotline for reporting activities that threaten water quality.

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An example of a stocking rate standard from FDACS's Water Quality/Quantity Best Management Practices for Florida Equine 2008

| 228 | | Edition (Draft Date: 12/09/08) is as follows: | |
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| 229 230 231 232 | | An example of a stocking rate standard from FDACS Best Management Practices for Florida Equine (2008 Edition Draft) is as follows: | |
| 232 | | Pasture Acres Required = (# horses) x (average body weight in pounds) x (.03) x (# grazing days) | |
| 222 | | Average forage production, in pounds per acre | |
| 233 234 | | | |
| 235 | Policy 1.1.17: | Hendry County shall coordinate with and assist the SFWMD, ACOE and | |
| 236 237 | | other private and public entities in efforts to restore and ensure the long- term stability of the Caloosahatchee Oxbows. | |
| 238 | | term stability of the Caloosanatence Oxbows. | |
| 239 | Policy 1.1.18: | The County shall coordinate with the University of Florida Institute of Food | |
| 240 | | and Agricultural Sciences Extension Office to promote the Florida Friendly | |
| 241 242 | | Landscapes Program and shall utilize, whenever possible, Florida Friendly Landscape techniques and plants for county-owned property. Florida | |
| 243 | | friendly landscapes use native vegetation that require low levels of irrigation | |
| 244 | | and fertilization. | |
| 245 | D.P. 1110 | | |
| 246 247 | Policy 1.1.19: | The County shall develop and adopt criteria and standards in the Land Development Code including building design standards that consider solar | |
| 248 | | orientation, low impact development standards, and use of native | |
| 249 | | landscaping. | |
| 250 | ODJECTIVE 14 | | |
| 251 252 | OBJECTIVE 1.2 | 2: WILDLIFE HABITAT OF ENDANGERED AND THREATENED SPECIES AND SPECIES OF SPECIAL CONCERN/VEGETATIVE | |
| 253 | | COMMUNITIES | |
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| 255 | The County shall coordinate with State and Federal wildlife agencies to ensure that critical | | |
| 256 257 | habitat for listed species is protected consistent with State and Federal agency guidance. This Objective shall be implemented by a program of activities which includes the following: | | |
| 258 | objective shan be | implemented by a program of activities which includes the following. | |
| 259 | Policy 1.2.1: | It shall be the policy of Hendry County to protect habitat for threatened or | |
| 260 | | endangered species or species of special concern from destruction by | |
| 261 262 | | development. | |
| 263 | Policy 1.2.2: | State and Federal wildlife agency requirements shall be followed and | |
| 264 | | evidence of compliance shall be provided with a final permit. | |
| 265 | | Documentation of an approved mitigation and/or management plans must be | |
| 266 267 | | provided prior to issuance of a final permit by Hendry County. | |
| 268 | Policy 1.2.3: | In accordance with State and Federal wildlife agency methodology, Hendry | |
| 269 | - | County shall require a listed species survey for proposed development sites | |
| 270 | | of 20 acres or more, and on development sites with proposed wetland | |

271 impacts of one acre or more. However, the Planning Director may 272 determine a development site under these thresholds is of environmental 273 significance due to its site conditions, surrounding site conditions, or 274 proximity to known listed species habitat, and therefore a listed species 275 survey may be required. 276 277 **Policy 1.2.4:** On sites where listed species are identified as likely to occur, sufficient area 278 shall be established on the site and in conjunction with adjacent properties to maintain viable habitat for listed species. All development that proposes 279 impact to listed species habitat must provide evidence of consultation and 280 compliance with applicable USFWS and FFWCC requirements prior to 281 282 issuance of a final permit by Hendry County. 283 284 **Policy 1.2.5:** The County shall seek consultation from the USFWS and the FFWCC, as 285 well as stakeholders, in the consideration of species-specific habitat 286 287 protection policy and criteria. 288 **Policy 1.2.6:** To protect listed species, and particularly migratory birds, from the impacts 289 associated with communication towers, the County shall refer to the U.S. 290 Fish and Wildlife Service (USFWS) Guidance on the Siting, Construction, Operation and Decommissioning of Communication Towers (September 291 2000). For any application for development of a communication tower, the 292 293 County shall require the applicant to provide an analysis of impacts to 294 natural areas, including the project's location within the Panther Primary 295 Habitat Area, and project's location with regard to the core foraging area of known wood stork colonies. Co-location of towers shall be encouraged. 296 297 The County may request technical assistance from the USFWS if the 298 proposed communication tower project does not specifically comply with 299 the Service Guidance on the Siting, Construction, Operation and 300 Decommissioning of Communication Towers. 301 **Policy 1.2.7:** 302 The land development regulations adopted by the County shall continue to 303 state that no final permit will be issued by any agency of Hendry County until the applicant provides evidence that the requirements of state and 304 305 federal law as set forth in policies under Objectives 1.1 and 1.2 have been 306 or will be complied with by the applicant and that the natural functions 307 of designated or otherwise known environmentally sensitive lands will not 308 be adversely affected by the use for which the application is sought. Wetlands, aquifer recharge areas, native vegetation communities, wildlife 309 310 habitat, and potable water well cones of influence shall be regulated in accordance with the applicable Comprehensive Plan policies for these 311 312 313 resources. 314 **Policy 1.2.8:** The County shall coordinate its efforts with the regional hazardous waste 315 program as defined in the Southwest Florida Regional Planning Council's 316 Strategic Regional Policy Plan.

| 317 | OBJECTIVE 1.3: NATURAL RESERVES/RECREATION | | |
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| 318 319 320 321 322 | The County shall seek the preservation of natural areas identified in the Recreation and Open Space Element, as well as proposed natural recreation areas, by implementing the following policies: | | |
| 323 324 325 326 | Policy 1.3.1: | The County will evaluate the feasibility of adopting watershed management provisions, by basin, to protect water quality, supply, and wetlands and listed species habitat. | |
| 327 328 329 330 | Policy 1.3.2: | The County will evaluate the feasibility of implementing Best Management Practices for urban areas to manage stormwater and fertilizer runoff that impacts water quality. | |
| 331 332 333 334 | Policy 1.3.3: | The County shall assess its current and projected water needs and sources for at least a 10-year period, considering the South Florida Water Management District regional water supply plan approved pursuant to s. 373.0361. | |