

Evaluation &
Appraisal Report
of the
Comprehensive Plan

Adopted July 14, 2004

Hernando County,
Florida

www.co.hernando.fl.us

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EVALUATION AND APPRAISAL REPORT

HERNANDO COUNTY, FLORIDA

**LOCAL PLANNING AGENCY RECOMMENDATION
HEARING: APRIL 28, 2004**

**ADOPTED BY THE HERNANDO COUNTY BOARD OF
COUNTY COMMISSIONERS: JULY 14, 2004**

SCHEDULE FOR ADOPTION OF EAR BASED COMPREHENSIVE PLAN AMENDMENTS

The EAR based comprehensive plan amendments are scheduled to be processed during the second cycle of 2005, beginning in April 2005, with adoption scheduled for December 2005.

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EXECUTIVE SUMMARY

PREFACE

The Evaluation and Appraisal Report (EAR) is a process for assessing the effectiveness of the *Hernando County's Comprehensive Plan* (hereafter referred to as the "Plan") since the last EAR in 1996. The EAR is required by Florida Statutes and takes place about once every seven years. The EAR is strongly based in public participation. It provides recommendations for amending the Comprehensive Plan to address any shortcomings and to address the important community issues identified during the process.

Hernando County began this EAR process in March 2002 with a growth management workshop. Public participation activities consisted of a community planning survey, a series of community planning workshops held in various parts of the county by the Board of County Commissioners (BCC), and an analysis of identified issues by a Policy Advisory Committee appointed by the BCC, with documents and other information posted on the Planning Department Internet web page and available at all Hernando County Public Libraries and at the Planning Department. Hernando County's EAR is due at the Florida Department of Community Affairs (DCA) by August 1, 2004.

The goals of the EAR process and resulting report are primarily two-fold. First, it endeavors to measure how well the existing Plan has been followed and utilized in directing growth and development. Hence, whether the Plan, as written, was successful or not in directing growth and development in accordance with the Plan's stated goals, objectives and policies. Second, the EAR seeks to identify important community issues through public participation, and present recommendations for amending the Plan to address those issues. In this regard, important community issues may include reaffirming key elements of the existing Plan; however, these issues may also include making major changes to the current plan based upon the community wanting to reinvent itself or change how it wants to grow and look in the future.

These two distinct goals of the EAR can lead to subjective differences in the way people perceive the success or failure of the Plan. An example would be a comprehensive plan that is very successful at directing growth and development consistent with its stated goals, objectives and policies and yet not meet the present wants of the community. Accordingly, these distinctions should be kept in mind while reading this report.

GENERAL ASSESSMENT OF THE CURRENT PLAN

The seemingly most reasonable projections of population growth for the County indicate adding 15,000 new residents over the next 5 years, 30,000 over the next 10 years, and at least 60,000 over the next twenty years to total about 205,000 people. These projected 60,000 new

residents will require about 30,000 new dwelling units at the rate of about 1,500 per year. While growth rates will vary over time based on changes in economic and other factors, these estimates based on the BEBR medium projections may be conservative, especially in consideration of Hernando County's completion of 2399 new residential dwelling units in the twelve month period from April 1, 2003 to March 31, 2004.

As currently written, the Plan provides adequate land to accommodate this projected growth. The supply of land available for residential development presently contains an inventory of about 32,000 vacant existing residential lots with potential for about 35,000 dwelling units, plus about 16,000 dwelling units approved and in various stages of the development process, about 7,000 potential additional dwelling units in Rural areas, and about 94,000 potential additional dwelling units on vacant land in and adjacent to the Residential areas on the Future Land Use Map (FLUM). These potential additional dwelling units could add about 150,000 dwelling units at buildout, which is adequate to meet the projected demand of 30,000 new dwelling units over the next 20 years.¹

Based upon the numbers above (see discussion in Part II) this translates into an estimated potential capacity of about 220,000 dwelling units and potentially 440,000 people at buildout beyond the 20 year planning horizon. Accordingly, the Plan has been very effective in directing residential development into areas designated for urban development on the FLUM. The Plan has also been effective in directing very low density residential development into the Rural areas on the FLUM and providing a very low density residential/rural lifestyle alternative.

In terms of commercial development, the Plan has provided an adequate supply of commercial land available for development, with a total of about 2,240 commercial zoned parcels comprising 4,626 acres. Of these parcels about 956 are occupied, comprising about 43% of the total commercial zoned parcels and about 34% of total commercial zoned acreage. About 1,284 commercial zoned parcels are vacant, comprising about 57% of the total commercial zoned parcels and about 66% of total commercial zoned acreage. Accordingly, the Plan has been effective in directing commercial development into commercial nodes and infill areas, but additional direction is needed for managing commercial infill and commercial development in the Residential Land Use Category on the FLUM.

Industrial development has been directed into areas designated as Industrial on the FLUM. Further, the Plan has provided land for industrial development, with about 159 industrial zoned parcels comprising 2,394 acres, and of these, about 93 are occupied, comprising about 58% of the total parcels and about 62% of total acreage. About 66 parcels are vacant, comprising about 42% of the total parcels and about 38% of total acreage. Additional industrial land may be needed to provide balance and diversity in the local economy and to provide adequate revenues

¹The numbers generated by this analysis have been presented herein as round numbers to make clear that they are not exact numbers, but estimates. The precise numbers are not important as they will change over the decades ahead. It is the magnitude of the total estimate that is important in determining if the Plan provides adequate land for projected future growth. Further, these numbers must be read in the context of the discussion in Part II, Section D, *infra*.

to balance service demands for local government over the long term, especially considering the magnitude of the potential residential growth contemplated by the Plan as discussed above.

The Plan has also been effective in providing infrastructure to support planned growth and development as needed. The annual update of the Capital Improvements Element and Capital Improvements Plan have provided guidance for the timing and funding of capital projects. Levels of service have been maintained as growth has taken place, with regular evaluations based in the Concurrency Management System and impact fee update analyses.

The discussions of issues address a number of environmental issues, including groundwater quality and quantity, development in closed drainage basins, development in karst areas, and wildlife habitat issues. While these are important issues to the County's residents, Hernando County is not the primary regulatory authority in these areas. These environmental issue areas are the primary responsibility of several state agencies (Department of Environmental Protection (DEP), Southwest Florida Water Management District (SWFWMD), and Florida Fish and Wildlife Conservation Commission). The County has addressed gaps in state regulation with its own rather extensive array of environmental ordinances and regulatory processes, but prefers to utilize coordination and cooperation with the appropriate state agencies to attain environmental protection in those agencies' respective areas of responsibility. While the County regulates the land use, the larger responsibility rests with the state. Although environmental quality issues are persistent, particularly with respect to increasing nutrient levels in groundwater, these issues are not the sole responsibility of the County and are not regarded as shortcomings of the Plan.

EAR RECOMMENDATIONS

Recommendations are made in Part IV following the discussion of each of the respective issues. These recommendations will be the basis for amendments to the Plan which must follow within 18 months after completion of the EAR process. ***These recommendations must be considered as part of the larger discussion of the issues, with mindful recognition that comprehensive planning is a very long term process, and that these recommendations are firmly based in substantial and meaningful public participation as the backbone of the EAR process.***

Growth and Development Issues

Growth and development issue discussions address growth rate and planning time horizons, the distribution and intensity of land uses, future uses of mined areas, open space, public facility siting, and school siting criteria. The EAR includes recommendations for improving timing and coordination of infrastructure planning; continuing to direct growth to areas indicated in the Plan; developing guidelines for transition of mined lands to other uses as mining is completed; improved provision of open space in urban areas; planning for a network of multi-purpose corridors including bicycle, pedestrian, wildlife movement corridors, greenways

and open space, and guidance for designating scenic corridors; and, cooperation with the school district to develop workable concepts for neighborhood schools.

Environmental Issues

Environmental issue discussions address groundwater quality, groundwater quantity, water use patterns, level of service for potable water, development in closed drainage basins, development in karst areas, integrity of wildlife habitats and natural communities, air quality, light pollution, noise pollution, urban vegetation, and levels of service in floodplains. The EAR includes recommendations for education, minimizing the use of polluting fertilizers, and other strategies for protecting groundwater quality; protecting groundwater quality to ensure adequate supplies of potable groundwater; reducing irrigation demands on potable water supply systems; developing guidelines to protect groundwater quality as development occurs in closed drainage basins; identification of karst features in areas proposed for development and minimizing the long term impacts of karst features on infrastructure dedicated to the County; improved protection of critical wildlife habitats; improved lighting standards to reduce light pollution; improved noise regulation and consideration of noise impacts in reviewing developments proposed adjacent to conservation areas; additional emphasis on conserving and replanting native vegetation in landscaping; and development of level of service standards for floodplains.

Intergovernmental Coordination Issues

Intergovernmental coordination issue discussions address joint planning with the City of Brooksville, coordination with the school district, the Southwest Florida Water Management District (SWFWMD), the Withlacoochee Regional Planning Council (WRPC), adjacent counties, and changes in Florida Statutes, Rules of the Florida Administrative Code (F.A.C.), the State Comprehensive Plan, and the Withlacoochee Strategic Regional Policy Plan. The Plan is considered adequate as written to provide for intergovernmental coordination with all entities listed. Recommendations address changes required by modifications to Statutes and Rules with respect to ten year water supply planning and coordination with SWFWMD's adopted Regional Water Supply Plan (which does not cover the part of the district including Hernando County), and transportation planning.

Economic Issues

Economic issue discussions address the financial costs and benefits for various types and intensities of land use and development of tourism, and economic and tourism development indicators and objectives. Recommendations address development of the indicators currently required by the Plan.

Culture and the Arts Issues

Culture and the arts discussions and recommendations address adding guidance for County involvement in culture and the arts.

Transportation Issues

Transportation issue discussions address the adequacy of the functionally classified network, defining characteristics of roads that are not functionally classified (local roads, major local roads, and frontage roads), the airport, alternate (mass) transportation, railroads, and bicycle and pedestrian access and facilities. Recommendations address: better guidance for planning and acquiring rights-of-way; defining and clarifying the role of local, major local and frontage roads; updating to reflect the latest update to the MPO's Long Range Transportation Plan; adding guidance for considering railroads as part of the transportation system; and improving planning for bicycle and pedestrian facilities, including a network of multi-use corridors.

PART I INTRODUCTION

A. COMMUNITY PROFILE AND OVERVIEW

Hernando County is historically a rural county which has developed a dual character with both urban and rural characteristics. County government provides rural, county services to a large area of rural property in the eastern and northern parts of the county, while also providing city type services to the substantial urban areas of the county. The County is located on the west central Gulf coast of the Florida peninsula. It is bordered on the north by Citrus County, on the east by Sumter County, on the south by Pasco County, and on the west by the Gulf of Mexico. Hernando County comprises 473.8 square miles in area.

The estimated 2002 population was 136,484 and growing. Hernando County is part of the Tampa Bay Metropolitan Area and part of the 9-county Nature Coast. Hernando County's landforms chiefly consist of well-drained sand hills, coastal swamps and marshes, the Big Hammock hills and forests of the Brooksville Ridge, and the swamps and forests of the Withlacoochee River system. The County is mostly drained by subsurface drainage within closed basins, with a general absence of surface drainage features. The County is underlain by porous, honeycombed limestones containing the Floridan Aquifer which is the principal source of water for the area. More than 27% of the County's land area is in conservation areas, chiefly the Withlacoochee State Forest and coastal swamps and marshes of the Chassahowitzka National Wildlife Refuge and Weekiwachee Preserve.

B. PURPOSE OF EVALUATION AND APPRAISAL REPORT

Chapter 163, Part II, Florida Statutes (F.S.), the Growth Management legislation, contemplates comprehensive planning as an ongoing process and requires periodic review and assessment of the effectiveness of comprehensive plans through a process named for the report it yields, an Evaluation and Appraisal Report, typically described as the EAR. The EAR is followed within 18 months by any comprehensive plan amendments needed to implement the recommendations of the EAR. Hernando County's last EAR was completed in 1996 and followed by amendments to the Plan in 1998. The report on the current EAR process is due to be submitted to the Florida Department of Community affairs (DCA) on August 1, 2004.

Hernando County's Comprehensive Plan (hereafter referred to as the Plan) was adopted November 14, 1990. It was amended in 1991, 1992, 1993, 1994, 1995, 1997, 1998, 1999, 2000, 2001, 2002, and 2003, with amendments currently in process for 2004. Currently, the Capital Improvements Element is updated annually. Other recent amendments have addressed updated transportation maps, modified policies regarding groundwater protection, and incorporation of an airport master plan. In Hernando County, comprehensive planning has been a continuing process. The EAR provides a mechanism for improving public involvement in and awareness of comprehensive planning, and an opportunity to increase public participation in Hernando County's ongoing comprehensive planning processes.

The purpose of the EAR for Hernando County is to review changes and trends since the last EAR, describe how the Plan could be modified to reflect changes, and address current and future issues for the community. Specifically, the purpose of the EAR process is to:

1. Identify the major social, environmental, and economic issues for the community;
2. Review the past actions of the local government in implementing the Plan since the last EAR in 1996;
3. Assess the degree to which Plan objectives have been achieved;
4. Assess both successes and shortcomings of the Plan;
5. Identify ways that the Plan should be changed;
6. Respond to changing conditions and trends affecting the County;
7. Respond to the need for new data;
8. Respond to changes in state requirements regarding growth management and development;
9. Respond to changes in regional plans; and,
10. Ensure effective intergovernmental coordination.

C. PUBLIC PARTICIPATION PROCESSES AND ACTIVITIES

In 1995, the Hernando County Local Planning Agency adopted and amended a Public Participation Process (See Appendix A.1) for comprehensive planning in Hernando County in accordance with Chapter 163, F.S., Chapter 9J-5 and Chapter 9J-11 Florida Administrative Code (F.A.C.). This process provides minimum requirements for: public workshops/meetings; public hearing requirements; dissemination of public information via local news media, newsletters/leaflets; opportunity for written comments; and, placement of draft documents and other information at public libraries and the Hernando County Planning Department for availability to the public.

Hernando County formally initiated the EAR process with a Growth Management Workshop in March 2002 which featured guest speakers and was attended by many local government officials. The workshop was videotaped and re-broadcast repeatedly on the Hernando County Government Broadcasting cable television channel.

In late 2002, the Hernando County Planning Department conducted a survey to identify planning issues. The survey was distributed by mail, E-mail, placement in public libraries and customer service locations in county offices, and interactive on the County's website. More than seven hundred survey responses were received. Survey results are attached in Appendix A.2.

From February to April 2003, the Hernando County Board of County Commissioners (BCC) held a series of five community workshops in various locations around the County to solicit public comments regarding comprehensive planning issues. A compilation of public comments from the workshops is attached as Appendix A.3.

In June 2003 the BCC appointed an EAR Policy Advisory Committee to provide policy input to the EAR process. The Committee was composed of 19 members including the members and alternates of the Planning & Zoning Commission plus twelve additional interested citizens chosen to obtain representation for a broad and diverse group of interests. All meetings of the Committee were advertised in accordance with the adopted Public Participation Plan. The Committee reviewed and commented on the List of EAR Issues prior to its approval by the BCC and transmittal to DCA with a request for a Letter of Understanding that the listed issues would be the focus of Hernando County's EAR. No written

response was received from DCA regarding the List of Issues. The Committee also provided policy and implementation recommendations for comprehensive planning. A report containing the Committee's recommendations is attached as Appendix A.4.

On March 27, 2003, Hernando County held a Scoping Meeting to solicit comments from governments and agencies with respect to identifying important issues for the EAR, agency concerns, and assistance available to prepare the EAR. Representatives attended from the City of Brooksville, Citrus County, Hernando County, Pasco County, the Southwest Florida Water Management District (SWFWMD), DOT District 7, DCA, the Hernando County School District, the Division of Forestry, and the Withlacoochee Regional Planning Council (WRPC). Scoping meeting documentation is included in Appendix A.5.

On April 28, 2004, the Local Planning Agency (LPA) for Hernando County conducted a public hearing concerning the Draft Evaluation and Appraisal Report (EAR). The Draft EAR encompassed the compilation of the public participation, recommendations of the EAR Policy Advisory Committee and Planning Staff. At the conclusion of the public hearing, the LPA voted to recommend approval of the Draft EAR (draft dated April 20, 2004) as a Proposed EAR to the Board of County Commissioners. The LPA further authorized distribution of this report to the governmental agencies and affected parties as provided for under Chapter 163, Florida Statutes. This document is that Proposed Evaluation and Appraisal Report.

PART II CURRENT CONDITIONS AND TRENDS

A. POPULATION GROWTH ESTIMATES

For nearly five decades, steady population growth has impacted decision-making in Hernando County, Florida. Located on the central west coast of Florida, and now part of the Tampa-St. Petersburg metropolitan area, the County has continued to receive retirees migrating from other nations, other states, and other parts of Florida. The recent completion of the Suncoast Parkway, a toll road providing relatively quick and easy access from Spring Hill to the Tampa Airport area, has provided an additional impetus for growth, bringing new residents who are probably (but as yet uncertain) different demographically from prior retiree migrants.

At the 1960 Census with a population of 11,205, Hernando County leadership was located in the county seat and traditional southern community of Brooksville. With a population of 3,301, the centrally located City of Brooksville was surrounded by 470 square miles of rural land. The County had just grown 69% in the 1950's probably due in no small part to military veterans who trained in Florida and decided to return to build a home. The Hernando County Airport was constructed during World War II as a B-17 bomber training base.

In the mid 1960's the Deltona Corporation's suburban vision of a master-planned community began to transform the sand hills of southwestern Hernando County. The real estate promotions for the community of Spring Hill literally included flying prospective buyers free from the northeast United States. And the promotions succeeded. By the 1970 Census, population had jumped 52% to 17,004. But, in a very real sense, the growth had only just begun.

By the 1980 Census, local decision makers were grappling with a growth spurt of 162% to 44,469 and by the 1990 Census population had more than doubled again to 101,115, a 127% increase. This rapid growth presented huge challenges to what had previously been a small county. (See Table 1.01A POPULATION BY DECADE.)

A combination of factors contributed to slow the rate of growth in the 1990s to "just" 29%. For Hernando County, this was the slowest growth rate by decade since the 1940's. Although the growth rate in the period was lower, the number of new residents requiring county services grew by nearly a third, to 130,802 at Census 2000.

Since budget size is often related to the size of the population served, it is noteworthy that of 473 city and county governments in Florida, Hernando County ranked #30 as of April 1, 2003. At the Census 2000, 123,526 of 130,802 permanent residents, or 94.4% lived in unincorporated Hernando County. Many of the Florida counties with a larger overall population have it distributed among numerous small to large city governments, with the remainder in unincorporated areas. By contrast, Hernando County has only two cities, Brooksville, population 7,297 and Weeki Wachee, population 8. In other words, only 6.3% of Florida local governments serve a larger population than Hernando County--thus the #30 ranking.

Any psychological remnant of picturing Hernando County as strictly rural would seem to be fading. A comparison to other United States counties is noteworthy. Of 3,141 counties in the United States at the Census 2000, Hernando County, Florida ranked # 409 in population size with its total of 130,802 people. Only 13% of U.S. counties served larger populations.

For more than 25 years, 100% of the County's population growth has been attributed to those moving in--since the number of deaths each year exceeds the number of births. The Census 2000 median age of 49.5 provides evidence of the large retiree population in the County. Compare this to the 40.0 median age of the overall Tampa-St. Petersburg area--or the 38.7 and 35.3 median ages for Florida and the United States, respectively.

Although the definition for retiree may be somewhat ambiguous, the statistics for those age 65-and-over are not. At the Census 2000, 30.7% of County residents were age 65+ yielding a #5 ranking of 67 Florida counties. By contrast, the 65+ percentages were 19.2% for Tampa-St. Petersburg, 17.6% for Florida, and 12.4% for the United States.

B. POPULATION PROJECTIONS

In the 1996 EAR, the population of Hernando County, Florida was estimated at 116,830 for 4/1/95. Also in the 1996 EAR, the population for the year 2000 was projected to be 143,400, a growth rate of 22.7% over 5 years. What really happened? (See Graph entitled "Hernando County Population Projections: 1985-2015") The 4/1/00 population was 130,802 for a growth rate of less than 12% over 5 years. So, why such a big discrepancy? Quoting that 1996 text, "The County was the fastest growing county in Florida in the 1980's."

The BEBR low, medium, and high projection methodology is not designed for statistical outliers that grow by 127% over 10 years. The crystal ball for projecting what happens next for an outlier is particularly dark and difficult. Since the growth rate for Hernando County was much more in line with the rest of Florida during the 1990's, perhaps the use of the 1980's outlier data should be minimized for current projections. (See Table 1.63 entitled "BEBR MEDIUM AND HIGH POPULATION PROJECTIONS")

The year by year downward revisions of the BEBR medium projections for Hernando County can be compared to a pendulum. The inertia of the methodology did not catch up to the slower growth of the 1990's until the end of the decade. As it happens, in the current decade, the pendulum for projecting population in Hernando County appears to be swinging back.

In almost all of the annual projections during the 1990's, the medium projection was too high. Finally, in February 2002, the BEBR medium projection for 2005 was revised as low as 143,100, a figure likely to be eclipsed at least one year earlier. In other words, the medium projection was now too low. It would be an acceptable compromise, for the County to use the medium BEBR projections as a guide to future population growth.

C. PROJECTED DEMAND FOR DWELLING UNITS

In February 2004, the Bureau of Economic and Business Research (BEBR) issued Bulletin #138: Projections of Florida Population by County, 2003-2030 which facilitates a current discussion of Hernando County population projections for a 5-year, 10-year, and a 20-year planning period. The BEBR has a contract with the Florida Legislature to produce official population estimates. For Hernando County, based upon population trends of the past decade, the BEBR Medium population projections seems most reasonable.

For the period 2005 to 2010, the BEBR Medium population increase is 15,000. For the period 2010 to 2015, the BEBR Medium population increase is 14,600. For discussion purposes, the rounded figure is 30,000 new residents over 10 years. In like manner, the projected population increase from 2015 to 2025 is 28,200. So the 20-year Medium population increase would be 57,800.

Thus, the rounded population growth for Hernando County could be projected at 15,000 new residents over 5 years, 30,000 new residents over 10 years and at least 60,000 over 20 years. To estimate the corresponding number of dwelling units several factors need to be considered: Based upon Census 2000, 5.7% of Hernando County dwelling units are seasonal, and another 5.9% in aggregate are held for estate, for sale, for rent, or otherwise vacant.

The seasonal figure can be used to calculate a Functional Population. The Functional Population is the year-round permanent population added to a prorated seasonal population. For example, in 2005, instead of the BEBR medium figure of 146,800, the Functional Medium Projection becomes 155,146 for a year round planning figure of an additional 8,000 people. Homes owned by seasonal residents require some services (fire and police protection, road maintenance, drainage system maintenance, etc.) even when the homeowners are living elsewhere. Some services such as provision of potable water may decline when these homeowners are away, but their seasonal demand must be included in the design capacities of infrastructure systems and service delivery mechanisms.

The actual Census 2000 ratio of permanent population to dwelling units was 130,802 to 62,727 or 2.09. For discussion purposes and knowing the demonstrable error-margins of population projections, a 2 to 1 ratio of population to dwelling units might be valid. Based on the population projections above, this rough 2 to 1 ratio leads to an estimated summary demand for 7500 new dwelling units over 5 years, 15,000 units over 10 years, and 30,000 new dwelling units over 20 years, or about 1,500 new dwelling units per year. While growth rates will vary over time based on changes in economic and other factors, these estimates based on the BEBR medium projections may be conservative, especially in consideration of Hernando County's completion of 2399 new residential dwelling units in the twelve month period from April 1, 2003 to March 31, 2004.

D. EXTENT OF VACANT AND DEVELOPABLE LAND; POTENTIAL DWELLING UNITS AND POPULATION AT BUILD-OUT

A Geographic Information System (GIS) was utilized to generate a reasonable estimate of potential dwelling units and population at build-out under the scenario of the current Plan. The technical characteristics of the database and the GIS make it possible to produce calculations which are very close to actual numbers, but there are certain imprecise features that make it necessary to regard the results as very good estimates rather than precise calculations. **The numbers generated by this analysis have**

been presented herein as round numbers to make clear that they are not exact numbers, but estimates. The precise numbers are not important as they will change over the decades ahead. It is the magnitude of the total estimate that is important in determining if the Plan provides adequate land for projected future growth.

1. **Existing Dwelling Units (DUs)** – The number of existing dwelling units in Hernando County, Florida is 69,564 as of April 1, 2004, up from 62,737 at the Census 2000. These existing dwelling units occupy about 74,679 acres.
2. **Existing Vacant Residential Lots/Single Family (Infill)** – There are about 32,000 vacant residential lots in recorded and unrecorded subdivisions. These dwelling units range in size from small residential lots to 10 acres or more in some cases. While it is realistic to project utilization of most of these parcels at one DU per parcel, that expectation is unrealistic for larger parcels which seem likely to be further divided or more intensively developed to yield more than one DU per parcel on average.

In recognition of this likelihood, about 32,000 parcels smaller than 5 acres in size are projected at one DU per parcel, and 134 parcels five acres or larger in size (comprising 1,130 total acres) have been considered separately, with potential dwelling unit numbers for these parcels estimated at about 3,000 DUs based on three (3) units per gross acre, which is on average the typical density seen in recent development approvals. (It is assumed that parcels larger than five acres are likely to be further divided or developed with multiple dwelling units).

As a comparison methodology, the percentage of multi-family DUs in the existing housing stock can be trended forward. The multi-family component increases the existing dwelling units total by about 9.3% over the total number of built parcels. Adding 9.3% to the total number of about 32,000 vacant residential lots would add about 3,000 units to the total, which is consistent with the additional number yielded by the acreage calculation above. As land prices escalate and available land for development becomes scarcer, it is probable that over the long term both the number of multi-family units and overall residential densities will tend to be higher than estimated here.

Using these methods, the estimated potential DUs on existing residential lots totals about 35,000. It should be noted that the lots identified here are mostly standard lots for single family detached dwelling units and, hence, may not satisfy demand for other types of housing such as townhouses, villas, communities developed around a unifying theme (*i.e.* golf course communities, water/lake communities, etc.), or higher density multi-family housing. However, substantial vacant acreage (about 15,000 acres in parcels 20 acres and larger) exists in the Residential Land Use Category on the FLUM to provide alternative choices in housing, lifestyles, density and land use mixes.

It should also be noted that the total number of vacant residential lots includes Royal Highlands and Ridge Manor Estates, both located in areas not currently experiencing significant development trends. While it is reasonable to expect that the actual number of DUs realized in these areas over the long term will be somewhat below the number of actual lots, those lots are in private ownership and their DUs are currently vested, making it necessary to include them in the totals.

3. **Dwelling Units Approved** – Another 15,923 dwelling units on 5,864 acres have been approved by the Board of County Commissioners (BCC) over recent years plus an additional 2500 dwelling units recently approved by the City of Brooksville for 1600 acres recently annexed. Several of these projects were approved in the 1980s but have not yet been built. More than 2000 multi-family units are included in the approved, but as yet unbuilt, total.
4. **Rural Subdivisions and Lot Splits** – The Hernando County Comprehensive Plan and the LDRs allow for rural subdivision/lot splits to allow very low residential development in the Rural Land Use Category on the FLUM. These lots are created under subdivision rules for rural "Class B/C/D" subdivisions. About 1,400 rural subdivision lots currently exist occupying about 10,000 acres. Since the subdivision regulations were amended in 2001 to include requirements for more costly access roads, only a handful of new rural subdivisions have been created, although additional development of this type is permitted by the Plan and must be considered. While not all rural properties qualify to be split at the immediate time, it is reasonable to expect that most will be divided over the long term of decades to build-out. Based on policies in the Plan, the acreage (about 45,000 acres) in the Rural Land Use Category on the FLUM could be divided to yield parcels for about 6400 additional DUs.
5. **Vacant FLUM Residential Acreage** – Within the Residential Land Use Category areas on the FLUM there are significant amounts of undeveloped land. These Residential areas are the parts of the county designated for urban development in the Plan. In order to estimate the number of potential DUs in these areas, the GIS was utilized to identify all undeveloped parcels twenty (20) acres or larger in size, and calculate their total acreage at about 14,600 acres. If current development patterns continue, these undeveloped Residential areas could be developed to produce about 44,000 additional DUs. It should be kept in mind that the densities allowed by the Plan can be significantly higher in appropriate places, and that rising land costs and scarcity of suitable parcels will tend to yield higher densities over time, indicating this estimate may be conservative.
6. **Dwelling Unit Potential in Residential/Rural Interface Areas** – Further, the Plan permits urban development intensities to extend one quarter mile (1,320 feet) from the Residential Land Use Category into the Rural Land Use Category on the FLUM. These units are difficult to estimate since it is unlikely that all of these acres will be deemed suitable for development at urban intensities, and it is probable that in some cases development will occur at both higher and lower densities than the current density trend of about three DUs per acre. However, the Plan permits the conditional extension of urban development into these interface areas and their potential contribution to build-out must be considered. At three DUs per acre, the Residential/Rural interface areas comprising about 17,000 acres) could accommodate about 50,000 potential additional DUs.
7. **Total Estimated Potential DUs and Population at Build-out** –These components to potential build-out yield an estimated total of about 222,000 DUs, with about 119,000 of these already approved in some form, plus about 103,000 potential new DUs occupying about 92,000 acres of vacant and developable land (counts and estimates rounded to the nearest thousand). This total is about three times the number of existing DUs (69,564), and could accommodate about 152,000 new DUs added to the current housing supply. With an estimated 1500 DUs per year needed to meet projected population growth, the Plan provides the ability to meet the dwelling unit needs of future growth for the foreseeable future. At the 2 persons per DU discussed above, the Plan as currently composed would allow a build-out population of about 444,000 people. Again, it is

important to regard the estimates in this section as potential totals at build-out, and not as exact numbers. Changes in trends, such as persons per household and development density, will modify actual realized DUs and population over the decades to build-out. In conclusion, based upon current growth rates and BEBR medium population projections, the amount of developable land indicated by the current Plan is adequate to accommodate Hernando County's projected growth well beyond the twenty year planning horizon.

E. LOCATION OF EXISTING DEVELOPMENT AS ANTICIPATED BY FUTURE LAND USE MAP AS AMENDED AFTER LAST EAR

1. COMPREHENSIVE PLAN AMENDMENTS TO FLUM SINCE 1998

There have been three comprehensive plan amendments to the FLUM since the last EAR (and the EAR based FLUM which was adopted December 22, 1998). See Map entitled "Comprehensive Plan Amendments to FLUM 1998-2003. The first amendment was adopted December 21, 1999 (DCA #99-1) and amended the FLUM by changing approximately 40 acres of the existing World Woods development from residential to commercial. The second amendment was adopted June 7, 2000 (DCA #00-1) and amended the FLUM by changing approximately 48 acres from Mining to Industrial, and by changing approximately 130 acres from Rural to Mining. The third amendment was adopted December 11, 2002 (DCA #02-2) and consisted entirely of "housekeeping" changes, including five recent annexations by the City of Brooksville and correction of six mapping inaccuracies, or scrivener's errors.

The first amendment referenced above changed future land use within an existing development, the second allowed development of industrial facilities ancillary to an existing mining operation and added acreage to another existing mining operation, while the third consisted of maintenance updates. Although some jurisdictions amend their comprehensive plans regularly to allow development not anticipated by their plans, this has not been the case in Hernando County. The small number of amendments to the FLUM since the last EAR is strong evidence that *Hernando County's Comprehensive Plan* has been effective in directing new development into areas where urban development has been anticipated. The analysis of residential and commercial rezonings discussed below indicates that new developments approved through land development review processes have been consistent with the Plan, supporting the conclusion that the Plan has been effective in directing new development into planned development areas.

2. EXISTING LAND USE MAPS, 1999 AND 2004, COMPARED TO 1998 FLUM

A June 2004 Existing Land Use Map is included along with a 1999 Existing Land Use Map and the FLUM adopted in 1998 as part of the EAR based amendments following the last EAR. Due to differences in mapping categories between the ELUMs and the 1998 FLUM, procedural differences in manual correction processes, and evolution of the GIS since 1998, it is not technically practical to perform a numerical comparison of land use categories on the two maps.

In general, vacant land has decreased in area while all urban land use categories have increased in areal extent. The increase in agricultural acreage is thought to be a product of the systematic differences in map creation listed above rather than a real increase in agricultural

acreage. The residential category on the ELUMs consists of parcels ten acres or smaller in size and occupied by residences, which includes the very low density residential subdivisions allowed by the Plan in the Rural FLUM category. A visual comparison of the two ELUMs indicates some increase in very low density residential acreage in the Rural areas on the FLUM, as anticipated by the Plan. Similarly, the amount of vacant acreage has been reduced in the Residential, Commercial and Industrial categories on the FLUM as development has taken place. While considerable growth has taken place since 1998, the similarity of the 1999 and 2004 ELUMs is remarkable, and both indicate strong locational correlations between the 1998 FLUM and development that has occurred between 1998 and 2004.

To summarize, the number of FLUM amendments since 1998 is small, and the ELUMs verify that development since the last EAR has occurred where the Plan anticipated. In conclusion, the location of development since the last EAR is not an issue for Hernando County, except as otherwise indicated in the identified EAR issues.

3. IMPACT OF SUNCOAST PARKWAY

In preliminary comments, DCA expressed interest in knowing how the opening of the Suncoast Parkway has affected the location and amount of growth in Hernando County. To our knowledge, no studies have been conducted to address the impacts of the Suncoast Parkway on Hernando County. In the absence of research, we can only speculate about such impacts. There are no apparent impacts on growth patterns from the opening of the Suncoast Parkway. The area of Spring Hill near the Parkway has experienced significant residential and commercial building activity since the opening of the Parkway, but that activity probably would have taken place in the absence of the new road, since the remainder of Spring Hill is mostly built and it was expected that building activity would shift to the lesser developed part, which is coincidentally near the Parkway. While the Parkway may have stimulated or accelerated building activity, or encouraged the building of additional multifamily dwelling units, or changed the demographics of new residents to include more commuters to the Tampa Bay area, or accelerated commercial development, we have no substantiation of any potential Parkway impacts on the location and amount of growth in Hernando County. The growth that has occurred near the Parkway is in areas anticipated for urban development by the Plan, and no Plan amendments have been needed (or are anticipated) as a result of the opening of the Suncoast Parkway.

F. LOCATION OF APPROVED DEVELOPMENTS

1. RESIDENTIAL

An analysis of rezoning locations was conducted using the GIS to determine consistency with the FLUM adopted in 1998 following the last EAR. Of 22 rezoning petitions for residential development that have been approved since the last EAR, all of them intersect the Residential areas indicated on the FLUM, for 100% consistency. Numerous very low density subdivisions have been created in the Rural areas of the FLUM, indicating Plan has also been effective in directing very low density residential development into the Rural areas on the FLUM and providing a very low density residential/rural lifestyle alternative.

2. COMMERCIAL

A GIS analysis of commercial rezonings since the last EAR indicated that the Plan has generally been effective in directing commercial development into areas contemplated for commercial development. About half of commercial rezonings were in commercial nodes, with the remainder in Planned Development Land Use Categories on the FLUM, extensions of existing commercial development around the Cities of Brooksville and Weeki Wachee, and infill in existing strip commercial areas as contemplated by the Plan.

G. INVENTORY OF COMMERCIAL PROPERTIES

In terms of diversifying the Hernando County economy, training a ready labor force and providing living wage jobs, the questions are frequently asked: How many commercial/industrial properties currently exist? How many are vacant? How many more are needed? What constraints are inhibiting expansion for existing organizations or relocation to Hernando County for new ones?

A GIS analysis was conducted to evaluate the supply of commercial property. The county currently has about 2,240 commercial zoned parcels comprising 4,626 acres. Of these, about 956 parcels are occupied, comprising about 43% of the commercial parcel inventory and about 34% of commercial acreage. About 1284 parcels are vacant, comprising about 57% of the commercial parcel inventory and about 66% of commercial acreage. There appears to be an adequate supply of commercial property to meet the demands of growth in the foreseeable future.

H. INVENTORY OF INDUSTRIAL PROPERTIES

In a similar GIS inventory, industrial zoned parcels were examined. In four industrial zoning districts there were a total of about 159 parcels on about 2,089 acres. Of these, about 93 parcels comprising about 1,290 acres are occupied with structures. In addition, there were about 66 parcels without structures comprising about 799 acres. About 58% of industrial parcels (comprising about 62% of industrial zoned acreage) are occupied with the remaining 42% of parcels (comprising 38% of total acreage) vacant. Since all vacant parcels are not necessarily available to prospective industrial businesses at any given time, the relatively small current inventory of industrial parcels is cause for concern with respect to economic development in the County.

I. DEMANDS OF GROWTH ON INFRASTRUCTURE

To date, Hernando County has been able to achieve and maintain all adopted levels of service through the use of LDRs, impact fees, and development exactions. Annual plan amendments are prepared to update the Capital Improvements Element. This process prioritizes projects with respect to need and funds availability. Portions of County Line Road and State Road 50 are apparently nearing their level of service standards and may become backlogged in the near future (See discussion in transportation issues, Section 4). While growth demands for infrastructure have been met, and the CIE is annually updated to ensure financial feasibility, it is

unclear whether the land use mix anticipated by the Plan is fiscally sustainable for the long term, especially considering the magnitude of residential development anticipated by the Plan. See Economic Issue No. 1 for a discussion and recommendations for fiscal impact analysis to evaluate long term fiscal sustainability of the Plan.

J. COORDINATION OF SCHOOL LOCATIONS

Population projections are provided by the Hernando County Planning Department to the Hernando County School District (HCSD) for use in school planning. Currently, HCSD planning staff contact County Planning staff for input when potential school sites are under consideration for acquisition by HCSD. The school siting coordination process is established by an interlocal agreement (included in the Appendices to this report) between the City of Brooksville, Hernando County, and HCSD. The interlocal agreement is too new to evaluate its effectiveness in guiding school siting coordination.

K. CHANGES IN LAND AREA--MUNICIPAL ANNEXATIONS

The City of Brooksville has added six annexations to the City since the last EAR. Five of these, comprising approximately 71 acres, were removed from the FLUM by amendment DCA #02-2 adopted Dec. 11, 2002. The sixth, comprising 1600 acres, has not yet been deleted from the FLUM, but will be deleted when the FLUM is revised as part of the EAR based amendments to follow this report.

The City of Weeki Wachee has annexed a five acre parcel that was already indicated as part of the City of Weeki Wachee on the FLUM, obviating any need for an amendment to the FLUM. In 2004, the Florida Legislature passed a bill which was subsequently signed into law which removed certain powers from the City of Weeki Wachee, including its annexation authority.

No other changes in land area have occurred since the last EAR.

L. TABLES, GRAPHS AND MAPS SECTION

1. Table 1.01A Population By Decade. Source: US Census Bureau Counts and Estimates
2. Table 1.63 BEBR Medium and High Population Projections
3. Table 11.24 Housing Completions
4. Hernando County Population Projections: 1985-2015 (Graph)
5. Comprehensive Plan Amendments to FLUM 1998-2003 (Map)
6. 1998 Future Land Use Map
7. Existing Land Use Map 2004
8. Existing Land Use Map 1999

Table 1.01A Population by Decade				
Year	Earth	United States	Florida	Hernando County
1650	470,000,000			
1750	694,000,000			
1790		3,929,214		
1800		5,308,483		
1810		7,239,881		
1820		9,638,453		
1830		12,860,702	34,730	
1840		17,063,353	54,477	
1850	1,091,000,000	23,191,876	87,445	
1860		31,443,321	140,424	
1870		38,558,371	187,748	
1880		50,189,209	269,493	
1890		62,979,766	391,422	2,476
1900	1,571,000,000	76,212,168	528,542	3,638
1910		92,228,496	752,619	4,997
1920		106,021,537	968,470	4,548
1930		123,202,624	1,468,211	4,948
1940		132,164,569	1,897,414	5,640
1950	2,555,078,074	151,325,798	2,771,305	6,649
1960	3,039,332,401	179,323,175	4,951,560	11,205
1970	3,707,610,112	203,302,031	6,791,418	17,004
1980	4,456,705,217	226,542,199	9,746,324	44,469
1990	5,283,755,345	248,709,873	12,937,926	101,115
2000	6,079,006,982	281,421,906	15,982,400	130,802
2010	6,812,232,913	299,228,000	18,978,400	157,900
2020	7,516,490,493	324,264,000	21,807,100	184,500
2030	8,129,826,136	350,355,000	24,428,300	209,000

Source: US Census Bureau Counts and Estimates

Table 1.63 BEBR* Medium and High Population Projections		
Date	Year 2030 Medium	Year 2030 High
2/2004	217,300	289,000
1/2003	209,000	283,000
2/2002	211,300	284,600
5/2001	218,500	344,700
2/2000	225,300	355,800
Date	Year 2025 Medium	Year 2025 High
2/2004	204,600	259,900
1/2003	197,300	254,700
2/2002	198,800	255,600
5/2001	204,900	303,900
2/2000	210,400	312,400
Date	Year 2020 Medium	Year 2020 High
2/2004	190,800	231,500
1/2003	184,500	227,100
2/2002	185,000	227,300
5/2001	189,900	264,900
2/2000	194,200	271,100
2/1999	197,200	290,300
1/1998	204,900	302,300
2/1997	213,400	343,100
2/1996	221,400	359,200
2/1995	230,900	378,400
2/1994	238,700	392,100
2/1993	235,300	410,100
2/1992	237,000	418,500
7/1991	237,000	397,300
2/1990	204,000	338,600
3/1989	203,300	294,800
1/1988	199,300	269,100
3/1987	184,600	249,200
4/1986	177,600	239,700

6/1985	176,500	238,300
6/1983	135,900	201,100
7/1982	119,600	166,200
7/1981	101,600	120,700
7/1980	96,700	117,400
Date	Year 2005 Medium	Year 2005 High
2/2004	146,800	154,200
1/2003	144,000	152,200
2/2002	143,100	151,300
5/2001	144,900	163,600
2/2000	146,300	165,200
2/1999	148,300	177,100
1/1998	151,300	181,200
2/1997	154,900	195,600
2/1996	159,000	202,000
2/1995	165,400	211,500
2/1994	168,000	216,200
2/1993	170,500	229,800
2/1992	171,800	233,800
7/1991	174,600	231,100
2/1990	156,600	212,900
3/1989	167,500	205,200
1/1988	160,900	193,100
3/1987	156,600	187,900
4/1986	151,400	181,700
Date	Year 2000 Medium	Year 2000 High
Census	130,802	130,802
2/2000	130,600	136,000
2/1999	131,700	145,300
1/1998	133,400	147,600
2/1997	135,600	155,900
2/1996	138,600	160,000

2/1995	143,400	166,600
2/1994	144,500	169,200
2/1993	147,400	180,400
2/1992	148,500	183,400
7/1991	151,800	183,900
2/1990	139,000	175,200
3/1989	146,600	168,400
1/1988	141,500	162,700
3/1987	136,400	156,800
4/1986	132,900	152,900
6/1985	129,800	149,300
6/1983	107,100	132,800
7/1982	98,000	115,600
7/1981	82,800	92,500
7/1980	78,600	90,900
Date	Year 2015 Medium	Year 2015 High
2/2004	176,400	204,300
1/2003	171,200	200,700
2/2002	170,700	200,200
5/2001	174,600	228,300
2/2000	177,600	232,600
2/1999	180,100	248,900
1/1998	186,200	257,900
2/1997	193,500	289,000
2/1996	200,100	301,300
2/1995	208,800	317,100
2/1994	215,100	327,600
2/1993	214,800	344,800
2/1992	216,400	351,600
7/1991	217,400	338,200
2/1990	189,200	295,200
3/1989	193,900	266,600

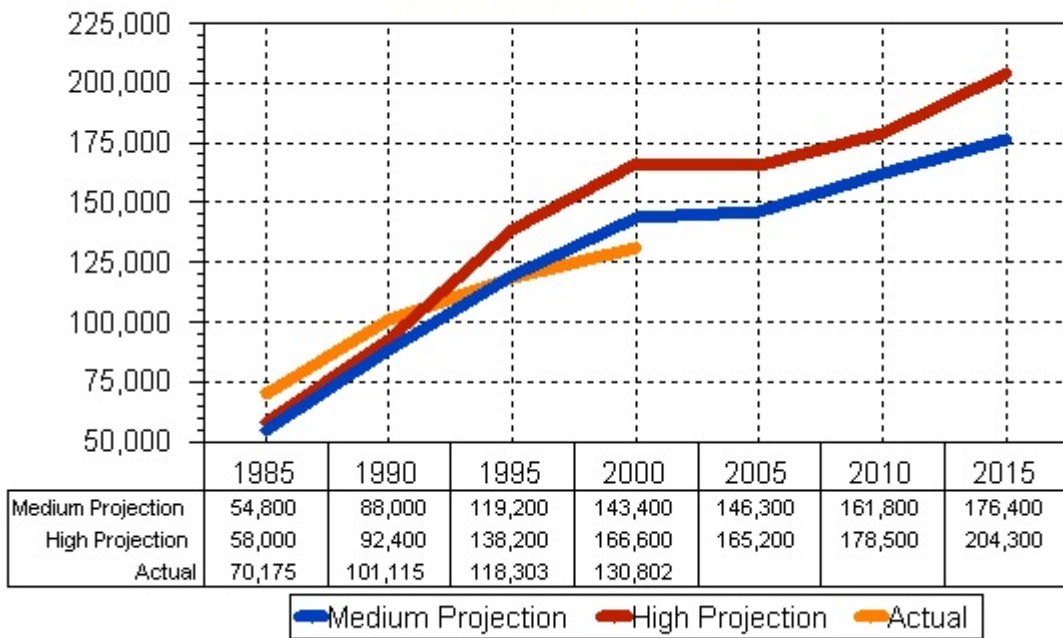
Date:	Year 2010 Medium	Year 2010 High
2/2004	161,800	178,500
1/2003	157,900	175,800
2/2002	156,600	174,700
5/2001	159,400	194,400
2/2000	161,700	197,400
2/1999	163,800	211,200
1/1998	168,300	217,600
2/1997	174,000	239,800
2/1996	179,300	248,900
2/1995	186,900	261,500
2/1994	191,300	268,800
2/1993	192,700	284,300
2/1992	194,100	289,600
7/1991	196,200	282,400
2/1990	173,100	252,700
3/1989	183,500	238,600
1/1988	179,900	224,800
3/1987	166,400	208,000
4/1986	160,500	200,700
6/1985	159,700	199,600
6/1983	122,200	166,200
7/1981	91,400	106,000
7/1980	87,000	103,700
Date	Year 1995 Medium	Year 1995 High
Actual	118,303	118,303
2/1995	119,700	125,900
2/1994	120,600	127,500
2/1993	123,600	136,600
2/1992	124,400	138,500
7/1991	128,100	141,100
2/1990	119,200	138,200

3/1989	124,600	133,900
1/1988	121,100	133,200
3/1987	116,900	128,600
4/1986	113,000	124,300
6/1985	109,200	120,200
6/1983	93,100	109,800
7/1982	85,200	98,900
7/1981	75,600	83,500
7/1980	72,600	81,900
Date	Year 1990 Medium	Year 1990 High
Census	101,115	101,115
2/1990	95,600	101,400
3/1989	98,000	102,000
1/1988	96,800	101,600
3/1987	94,900	99,600
4/1986	89,900	94,400
6/1985	88,000	92,400
6/1983	81,200	91,000
7/1982	73,400	81,700
7/1981	68,100	73,900
7/1980	66,100	72,100
Date	Year 1985 Medium	Year 1985 High
Actual	70,175	70,175
6/1983	62,900	66,700
7/1982	59,300	63,900
7/1981	56,500	60,100
7/1980	54,800	58,000
* The Bureau of Economic and Business Research (BEBR) has a contract with the Florida Legislature to produce official population projects.		

Table 11.24 Housing Completions				
Summary by Housing Type				
Hernando County Housing Types	Single Family	Multi Family	Mobile Homes	Total
April 2004	207	12	17	236
May	182	12	18	212
June				
July				
August				
September				
October				
November				
December				
January 2005				
February				
March				
Current Year	389	24	35	448
	86.8%	5.4%	7.8%	100.0%
1990-1991	1,345	83	341	1,769
1991-1992	1,240	37	302	1,579
1992-1993	1,136	26	306	1,468
1993-1994	1,140	74	260	1,474
1994-1995	1,214	80	227	1,521
1995-1996	906	19	212	1,137
1996-1997	904	28	220	1,152
1997-1998	1,088	21	244	1,353
1998-1999	916	34	246	1,196
1999-2000	1,030	36	207	1,273
2000-2001	1,182	111	177	1,470
2001-2002	1,156	168	194	1,518
2002-2003	1,545	149	184	1,878
2003-2004	1,891	285	223	399

Total 4/1/90-5/31/04	17,082	1,175	3,378	21,635
	79.0%	5.4%	15.6%	100%
All Housing Units	52,118	3,638	15,897	71,653
	72.7%	5.1%	22.2%	100.0%
Source: Hernando County Building Division & US Census Bureau				

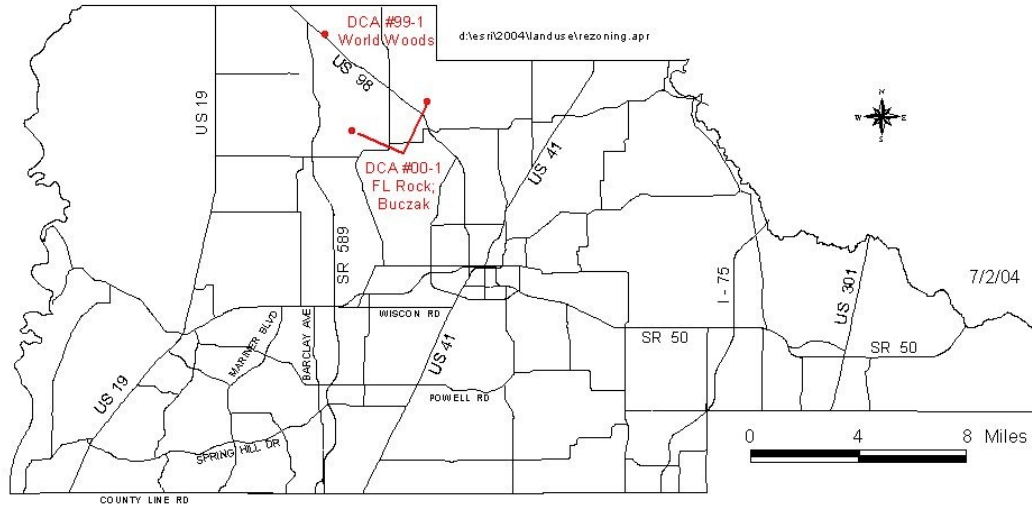
Hernando County Population Projections: 1985-2015
(5 or more years ahead)



Source: BEBR - Bureau of Economic & Business Research; July 1990 - Feb. 2004

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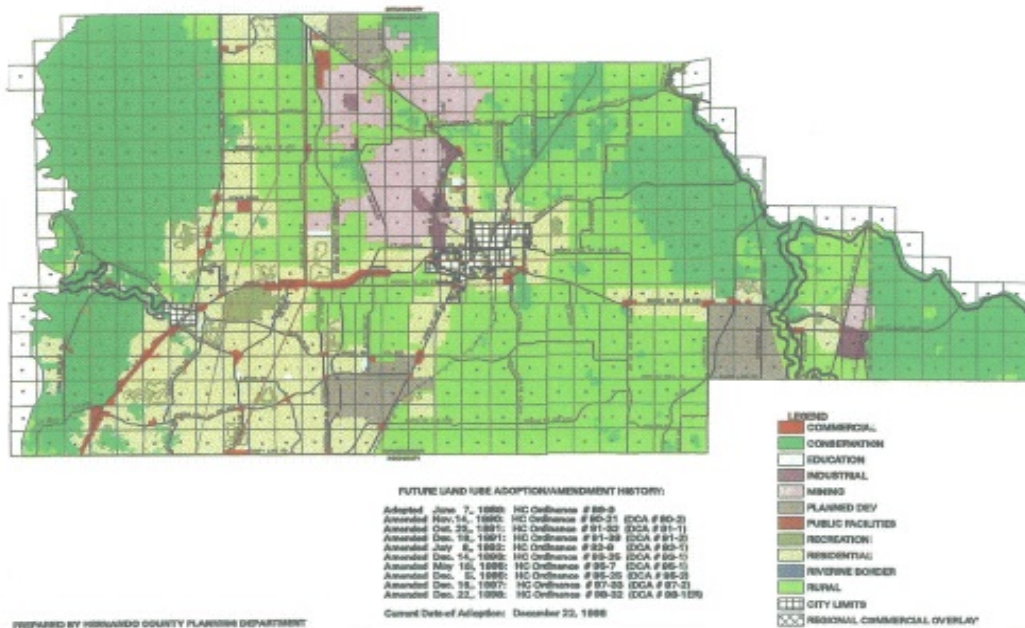
Comprehensive Plan Amendments to FLUM* 1998-2003
Hernando County, Florida



* Future Land Use Map

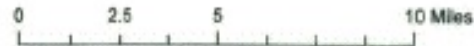
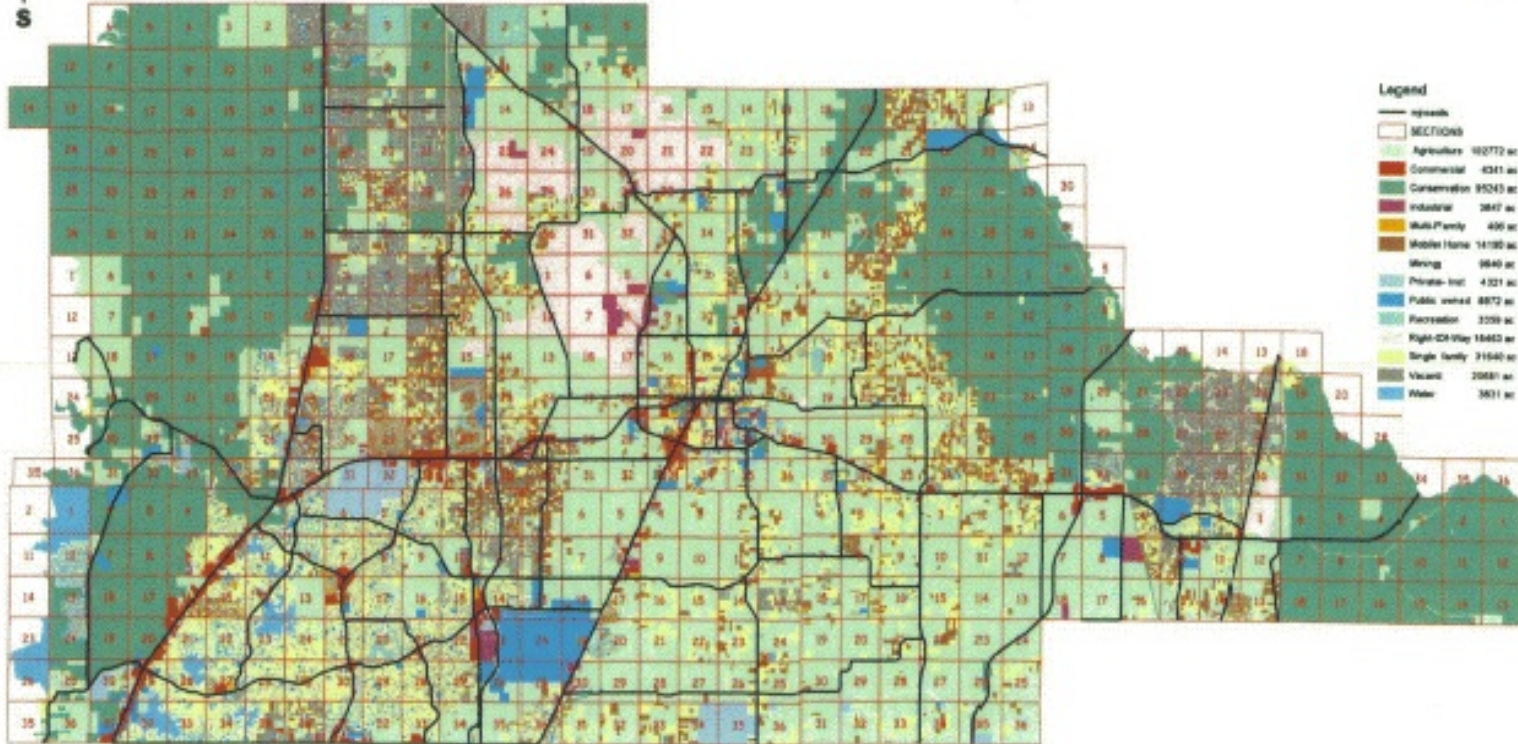
1998

HERNANDO COUNTY COMPREHENSIVE PLAN
FUTURE LAND USE MAP





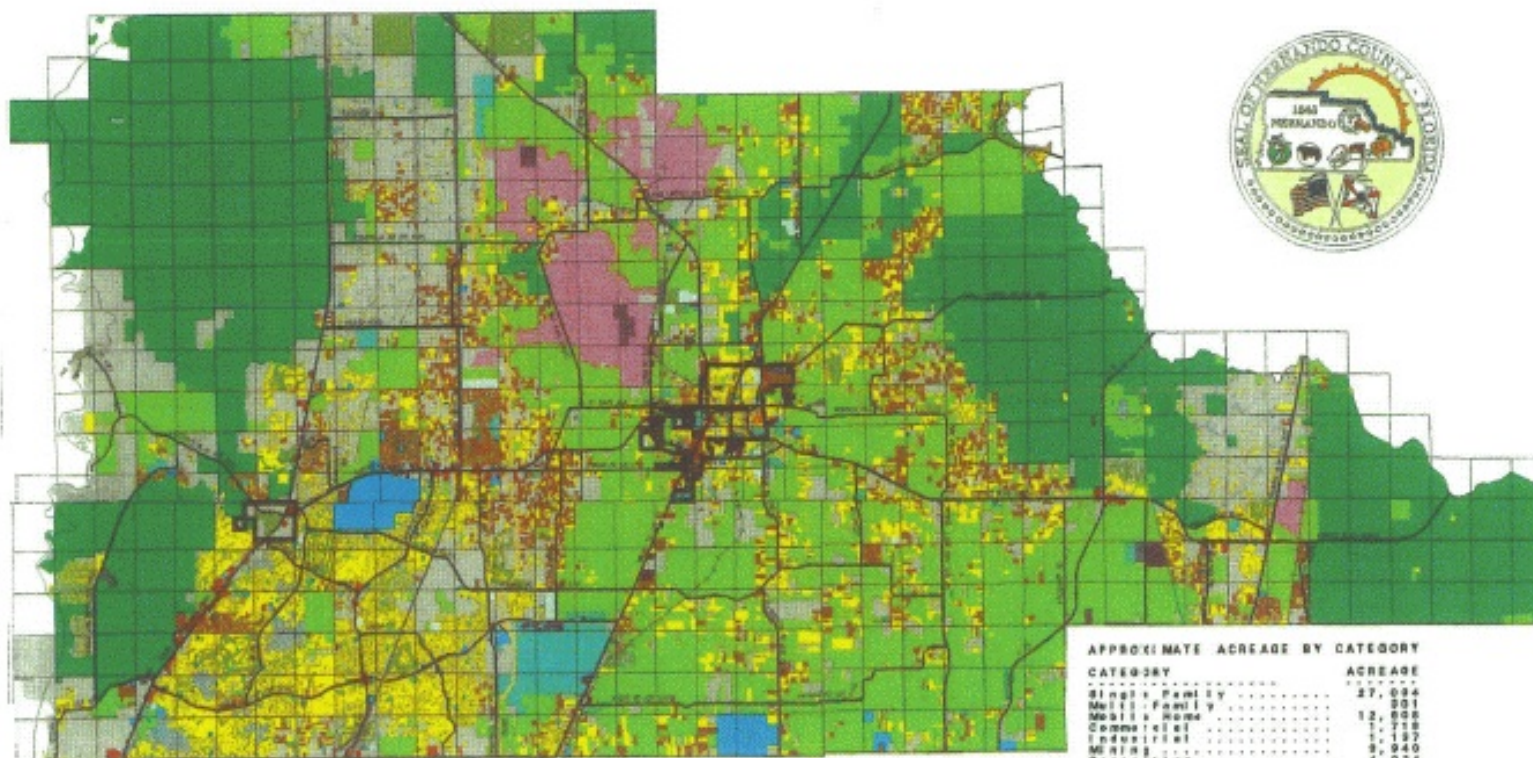
Existing Land Use 06/2004



Prepared by the Hancock County Planning Department

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HERNANDO COUNTY EXISTING LAND USE MAP



LEGEND

SINGLE FAMILY	MINING	PRIVATE INST.
MULTI-FAMILY	RECREATION	PUBLICLY OWNED
MOBILE HOMES	EDUCATION	UTILITIES
COMMERCIAL	AGRICULTURE	VACANT
INDUSTRIAL	CONSERVATION	RIGHT OF WAY
		WATER/DRA



APPROXIMATE ACREAGE BY CATEGORY

CATEGORY	ACREAGE
Single Family	27,084
Multi-Family	12,001
Mobile Home	12,008
Commercial	1,778
Industrial	1,197
Mining	9,940
Education	4,024
Recreation	88,987
Agriculture	88,916
Conservation	3,981
Private Institution	5,218
Publicly Owned	1,188
Utilities	81,313
Vacant	16,756
Right of Way	4,847
Water/DRA	
TOTAL	319,499

PREPARED BY: HERNANDO COUNTY PLANNING DEPT.
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**PART III REVIEW OF EXISTING
PLAN ELEMENTS**

A. FUTURE LAND USE ELEMENT**1. General Description of Element**

Hernando County covers approximately 312,000 acres of area, including the cities of Brooksville and Weeki Wachee. It stretches 37 miles from east to west and 18 miles north to south. The County is bounded on the north by Citrus County, on east by Sumter County, on south by Pasco County, and on the west by the Gulf of Mexico. The central portion of the County includes the County seat and the City of Brooksville which historically (prior to 1970) contained most of the population. At present, population of the County is contained primarily in its southwest quadrant. The focal point of this growth is the Spring Hill community and several other developments which have grown adjacent to and surrounding Spring Hill. The Spring Hill community was a major planned community which initiated housing development in the 1960's and continues significant growth up to the present time.

Recent estimates of available lots indicate continued development in the Spring Hill community for the next decade. Agricultural and mining activities, which are located in the northwest quadrant and eastern areas of the County are slowly transitioning to other uses and over time may cease to operate. The Existing Land Use Map of the County indicates the County's overall land use pattern being agricultural/rural in the east, urban in the southwest, and significant public holdings for conservation purposes along the Coast and in the eastern and northeastern portions of the County.

The Future Land Use Element contains seven goals and corresponding objectives and policies. Goal 1.01 contains the majority of the policies which address the manner in which land is to be used in the County. The objectives and policies in Goal 1.01 support the categories that are contained on the Future Land Use Map. These categories include residential, commercial, industrial, mining, conservation, rural, planned development, public facilities, and education. In addition, there is a special section which contains the mapping criteria for each category, which gives direction for how the Future Land Use Map is to be prepared and provides a list of land uses allowed for each map category. The Future Land Use Element is also supported by the Future Land Use Map series, which provides specialized maps that furnish additional guidance for the policies contained in the Future Land Use Element.

The additional six goals of the Future Land Use Element address the need for a balanced local economy and industrial standards, locating new development in areas of adequate public facilities, establishing level of service standards, creating a system requiring new development to pay a proportionate share of costs, the protection of private property rights, the protection of the existing environmental quality in the County, and the creation of mixed land use areas with specialized needs and controls.

2. *Assessment of Successes and Shortcomings of Objectives Relating to Major Issues*

ISSUE: Growth Rate and Planning Time Horizons

As presently written, the Plan does not address rate of growth. While it provides for concurrency in the availability of certain infrastructures necessary to support a particular development, the Plan provides no guidance in directing development to specific locations within defined time frames. Essentially, the current Plan delegates control of development timing to the availability of water, sewer and roads anywhere in the urban growth areas designated on the Future Land Use Map.

The County should develop a mechanism where the linkage between growth, its location, and the timely provision of infrastructure can be improved. The County prepares an annual update to the Capital Improvements Element five year list of capital projects. However, a intermediate step for facility planning would be useful to deal with the timing issue (i.e. ten year water supply plan).

ISSUE: Distribution of Density and Intensity of Land Uses and Future Land Use Categories With Permitted Uses

Residential Uses:

The Plan provides substantial guidance for determining the distribution and intensity of residential land uses. The Future Land Use Element (FLUE) in Objective 1.01A ties the intensity of Planned Development projects to the ability to provide public services and facilities to LOS. Objectives 1.01B and 1.01C provide substantial guidance to allow very low density residential development (2.5 to 10 acres per dwelling unit) throughout the Rural Land Use category on the FLUM. Objectives 1.01F and 1.01G provide guidance for single family and multi-family residential development intensity and location. Objective 1.01Q provides for single family residential densities greater than .4 units per acre (one unit per 2.5 acres) to occur in proximity to existing development for efficient use of infrastructure and services, and discourages single family development at densities greater than .2 dwelling units per acre in major flood areas. Objectives 1.07 A, B, and D provides for three planned development districts with guidance for residential land uses and intensities allowed.

Commercial Uses:

Objective 1.01L provides for new commercial rezoning to be initiated within commercial nodes and regional commercial overlay districts of the Future Land Use Map with exceptions for Specialty Commercial, Neighborhood Commercial and appropriate infill areas. Objective 1.01M provides for the management and direction of commercial development into categories of commercial nodes established by locational factors primarily related to intersections of roads on the

functionally classified roadway network. Objective 1.01O provides guidance to limit and manage existing strip commercial and infill areas, and prohibits expansion of existing strip commercial areas and prohibits creation of any new strip commercial areas during the planning period.

Industrial Uses:

Objective 1.02A addresses the issue of locating industrial uses along the major roadway network. Objective 1.02B establishes locational criteria for new industrial areas.

The current plan objectives relating to the location of density and intensity of uses have adequately addressed the issue. However, additional things can be done to make improvements. Some of these include:

- The County should consider additional guidance for residential densities within the Residential Land Use Category on the Future Land Use Map.
- Direct future urban growth to occur within the urban growth areas currently delineated in the Comprehensive Plan, or as located by the development of planning horizons related to capital improvements and water supply planning, until such time as the existing urban growth areas are predominantly developed and the population projections indicate a need for additional urban development areas.
- Utilize the commercial node system for highway-dependent and most other intense commercial development, while limiting commercial development in the residential land use category to internal neighborhood commercial within residential developments, and commercial included as an integral component of high intensity residential, commercial, office, and multi-use development centers.
- Develop additional policies defining and guiding commercial infill.

ISSUE: **Open Space**

The Future Land Use Element provides for open space criteria in Land Development Regulations to direct Planned Development Projects, Rural lands, and Residential development, with additional guidance for multi-family residential developments. Objective 1.01S provides for buffers between adjacent land uses and environmental and archaeological features. Objective 1.04A provides for level of service (LOS) standards for parks (which includes open space) and for impact fees to help distribute the capital costs for parks necessary to maintain LOS. Objective 1.07D includes special guidelines for the World Woods Planned Development District, including specific criteria for retention of large amounts of open space.

The Objectives cited above have provided an adequate means of addressing the issue of open space in the Future Land Use Element. Additional issues which

will enhance the system of open space include more open space in urban areas and multi-purpose system of scenic corridors.

ISSUE: Public Facility Siting

The Future Land Use Element contains guidelines for locating and regulating public facilities in Objectives 1.01T and 1.01U. These objectives have adequately addressed the issue in the Future Land Use Element.

ISSUE: School Siting Criteria

The Future Land Use Element (Objective 1.01I) provides substantial guidance for locating schools and providing adequate infrastructure and services. With the approval of the Intergovernmental Agreement between the School Board, Hernando County, and the City of Brooksville, the school siting issue will be enhanced by the process created for coordination. The new interlocal agreement should be utilized to develop magnet school, neighborhood school, and non-neighborhood school definitions and siting standards for inclusion in the Plan. Additional policy guidance should be created to encourage the co-location of schools and public recreation facilities.

ISSUE: Light Pollution

Objective 1.01L provides for including specific criteria for commercial uses in the Land Development Regulations. Policy 1.01L provides that where commercial development is proximate to residential uses, anticipated negative impacts (including light, among others) shall be mitigated to the extent practical by the commercial development. Land Development Regulations currently address lighting and light impacts.

More specific policy guidance for controlling light pollution is recommended. LDRs should strive to limit light escaping from premises in all land use categories with consideration of cost and security issues. Standards should require reductions in after hours lighting for nonresidential uses and reductions on outdoor lighting in residential areas.

ISSUE: Noise Pollution

The Future Land Use Element addresses noise regulation in several objectives. Objective 1.01J entitled “Noise Regulation and Standards by Receiving Land Use” provides policy guidelines for a Noise Control Ordinance, which has been adopted. Objective 1.01L provides for commercial development regulations to mitigate noise impacts (among others) of commercial development on proximate residential uses. Objective 1.01R provides for LDRs to include performance standards for a range of issues, including noise.

An additional policy is needed to address regulation of noise adjacent to conservation areas and for consideration of noise when making development decisions for parcels near conservation areas.

ISSUE: Urban Vegetation

Objective 1.01L requires the Landscape Ordinance to require buffering of the negative visual impacts of commercial development with techniques to include landscaping, screening, planting of trees and where possible, the preservation of native vegetation. Objective 1.01R provides that LDRs may cover landscaping, among others. Objective 1.01S (Buffers) provides for the promulgation of guidelines to be utilized in the establishment of buffers, including lists of acceptable plants, and requires that buffers shall consist of appropriate plant species for the purpose of the buffer, using native plant species whenever practical.

The Plan should be revised to require conservation of more native vegetation on development sites and more native vegetation should be required in new landscaping.

ISSUE: Level of Service in Floodplains

The County currently does not have objectives in the Future Land Use Element that deals with a level of service standard for development in floodplains. There are references in other elements to regulating floodplain development. However, a level of service standard would be beneficial in the Future Land Use Element.

Hernando County should develop LOS standards for floodplains to address roads, potable water, wastewater disposal, drainage, other public infrastructure and services, and lower development intensities, and taking into consideration the different characteristics of riverine flood plains, coastal storm surge floodplains, and closed drainage basins.

ISSUE: Coordination With Hernando County School Board Regarding School Matters

Objective 1.01I establishes standards for the location of future school sites. In addition, there is a requirement for annual coordination of the development of the respective capital improvement programs of the County and HCSD.

The Plan as currently written provides for adequate communication and cooperation between the County and the HCSD. No changes are recommended.

ISSUE: Financial Costs and Benefits of Various Types and Intensities of Land Uses

Objectives 1.03A and 1.04A, B, and C provides guidance for the subdivision of land, recognizes that facilities must be expanded to maintain level of service standards as growth occurs, provides for impact fees, requires concurrency, and establishes level of service standards, all with the intent to provide infrastructure and services for growth in an environmentally and fiscally responsible manner, and to require new development to pay its fair and proportionate share of the cost for the necessary public facilities.

The County should strive to determine the relative revenues and service costs of various land uses, intensities, and locations. A Fiscal Impact Analysis Model or similar approach should be investigated as a means of evaluating costs and revenues and for ensuring that new development pays for its own capital costs and provides an operational revenue stream consistent with the County's ability to provide services and facilities in accordance with LOS standards. Upon development of a suitable methodology for evaluating fiscal impacts, the County should evaluate the long term financial feasibility of the Plan for County government, and, if necessary, adjust growth management strategies to attain a financially sustainable mixture of land uses and revenues.

ISSUE: Airport

Objective 1.07C provides for aviation and aviation related facilities along with a mixture of commercial, industrial, public facility, and certain other limited land uses. Land uses are to be regulated to protect the primary aviation functions of the airport. The Plan provides for coordination with FDOT and the Federal Aviation Authority (FAA) for improvement planning and Master Plan updates.

The County should develop additional policies defining incompatible land uses and policies which protect the Airport from encroachment from such land uses.

B. MINING ELEMENT

1. General Description of Element

The Mining Element is an optional element and has been incorporated into the Comprehensive Plan because of the extensive limerock mining operations located within the County. Resource extraction has historically been a significant component of the County's economy for well over 50 years. Although the resource is finite and the operations will pass with time, there is still significant activity to warrant a regulatory position for the County. The Mining Element contains three goals and eight objectives and supporting policies which address standards for mining operations, including reclamation, a requirement for plans and permits to be approved by the County, and the protection of natural resources and ecological features from mining activities.

2. *Assessment of Successes and Shortcomings of Objectives Relating to Major Issues*

ISSUE: Future Uses of Mined Areas

The Mining Element provides guidance for managing mining land uses. The emphasis is directed to issues related to active mining, rather than to the future use after completion of mining. Objective 1.08D establishes guidelines for reclamation and requires final reclamation to be completed within three years of cessation of mining. Objective 1.09B requires mining plans with a 25 year planning horizon, with mining permits to be approved every five years.

To address a future use following reclamation of a mined area, the County should develop guidelines in the Comprehensive Plan for transition of mining lands to other land uses, with limitations on land uses to protect groundwater resources, and emphasis on protecting existing and potential public benefits in wildlife habitat and movement corridors, and open space.

C. TRANSPORTATION ELEMENT

1. *General Description of Element*

The Transportation Element is a major component of the Comprehensive Plan because it provides guidance for the provision of various methods of access to existing and anticipated development. Since the County has a Metropolitan Planning Organization (MPO) with responsibility for preparing a Long Range Transportation Plan, a shorter range Transportation Improvement Program, a Transit Operations Plan, and various related plans and programs, it is essential that the Transportation Element be modified in a timely manner to be consistent with the efforts of the Hernando County MPO. The Transportation Element contains eight goals and corresponding objectives and policies which are consistent with the adopted plans of the MPO. These goals address coordination with the various agencies responsible for the delivery of transportation resources and services, the provision of a multi-modal network, the provision of adequate capacity to accommodate the anticipated growth in the County, the protection of rights-of-way for future needs, the provision of a mass transit system, the continuation of Port Authority activities, and the continued expansion of the Hernando County Airport facility to meet the aviation needs of Hernando County.

2. *Assessment of Successes and Shortcomings of Objectives Relating to Major Issues*

ISSUE: Financial Costs and Benefits of Various Types and Intensities of Land Use

Objective 2.04A provides for roads level of service standards. Objective 2.04B provides for roads impact fees. Objective 2.05C requires new development to

provide its proportionate share of road rights-of-way and other road, site-related and intersection improvements necessary to maintain level of service and other Plan standards. There are no needs to modify the objectives in the Transportation Element to address this issue.

ISSUE: Adequacy of the Functionally Classified Networks

The Plan contains (in Section E, Special Features Maps of Hernando County, Florida) the Functionally Classified Roadway Map 2025 which identifies planned functionally classified roads and the Highway Network Map 2025 which delineates the number of lanes planned for roads on the functionally classified network. The Transportation Element provides for level of service (LOS) standards for roads (Objective 2.04A), transportation concurrency management, transportation impact fees (Objective 2.04B), and a frontage road network along identified highways (Objective 2.04C). The County has processes in place to implement these provisions of the Plan.

The Transportation Element has been amended in 1998 (EAR based amendments), 2002 and 2003. These amendments have:

- improved the linkage and coordination of the highway transportation network with the Future Land Use Map (FLUM) and Future Land Use Element by planning a functionally classified network to support the development contemplated by those parts of the Plan;
- established functional coordination with the MPO to update the Plan in coordination with the MPO's 3 year cycle for updating the Long Range Transportation Plan (LRTP);
- improved connectivity in the planned functionally classified network;
- clarified the County's policy to require development to provide its proportionate share of rights-of-ways, additional lanes, site-related improvements, and other road improvements necessary to maintain LOS standards; and,
- provided for rights-of-way identification to restrict encroachment of uses on existing and designated future rights-of-way.

In addition, in 2003 Hernando County and the City of Brooksville entered into an interlocal joint planning agreement to address transportation (and other) issues in certain areas around the City.

Future rights-of-way identification and designation processes should be improved to assist in providing for rights-of-ways needed to develop the planned transportation network, with particular emphasis on rights-of-way needed to accommodate major intersections of arterial, collector, and/or limited access freeways and toll roads. The Transportation

Element will need amendment to provide additional policy guidance for the timing, funding, and processes for acquiring the planned future rights-of-way indicated in the Plan, and for protecting and acquiring adequate right-of-way widths at major intersections with turn lanes, and for managing land uses through development review processes to minimize improvements on future rights-of-way.

ISSUE: Defining Characteristics of Roads Which are not Functionally Classified (Local Roads, Major Local Roads, and Frontage Roads)

The current Plan provides for a functionally classified road network of arterial, collectors, and freeways/tollroads (Section E: Special Features Maps), and additionally, provides for a system of frontage roads parallel to the County arterial network (Objective 2.04C). While the Plan provides a policy distinction between major and minor collector roads, the policies do not address local roads and, while frontage roads are addressed, they are not addressed as part of the functionally classified network.

The County should evaluate the importance of major local roads and frontage roads to the functioning of the functionally classified road network, consider the benefits and costs of adding (or not adding) such roads to the network, and determine the extent, if any, that such roads need to be addressed by the Plan and/or by implementation in the Land Development Regulations.

ISSUE: Alternate and Mass Transportation

Objectives 2.06B and C provide direction for the MPO to maintain a mass transit feasibility study. The Plan also directs the County to consider a program recommended by the study, to consider mass transit routes in evaluating development proposals, and to reserve sufficient rights of way space for safe and efficient operation of bus routes. Section E Special Features Maps of Hernando County, Florida includes a map entitled Recommended Transit Routes which delineates routes in and connecting the Spring Hill and Brooksville areas. These sections are mostly based on the MPO's LRTP. The Plan does not currently contain policies to guide linkage between land use and mass transit considerations.

The Plan should be updated to reflect the LRTP currently being updated by the MPO. Additional policies are needed to provide direction toward linking land use decisions and mass transit considerations in order to improve the practicality of mass transit over the long term. Higher population densities should be considered at appropriate points in close proximity to mass transit routes, making mass transit accessible to people who will use it.

ISSUE: Railroads

The current Plan does not mention railroads. New objectives and policies should be added to the Transportation Element to address railroads as part of the County's transportation network, to recognize the importance of railroads in carrying freight to support commercial and industrial sectors, to conserve the potential for future rail passenger service to the metropolitan areas to the south, and to coordinate with the MPO to include railroads in transportation planning.

ISSUE: Bicycle and Pedestrian Access and Facilities

The current Plan includes Objective 2.03C and its policy cluster addressing pedestrian facilities. This Objective requires the County to consider sidewalks and other pedestrian improvements in planning, design, construction or reconstruction of urban thoroughfares. The policies provide for coordination with the MPO and FDOT on the Pedestrian Element of the Transportation Plan, maintaining an annually updated priority list of pedestrian facility projects for the MPO's Transportation Improvement Program (TIP), and incorporating pedestrian design features in urban road projects, where possible.

Objective 2.03D and its policy cluster address bicycle facilities. The objective provides for bicycle facilities as an integral element of the planning process. The policies provide for representation from County planning and engineering staffs on the MPO's Bicycle/Pedestrian Advisory Committee, coordination with the MPO in updates to the multi-modal elements of the Long Range Transportation Plan (LRTP) and the Bicycle Element of the Transportation Plan, maintaining an annually updated list of bicycle facility projects for TIP, and, where possible, the incorporation of bicycle design features in all new road and reconstruction projects.

Section E, Special Features Maps of Hernando County, Florida, of the Plan includes a Year 2015 Bicycle Facilities map which delineates the location of existing and planned bicycle facilities, indicating multi-use trails, paved shoulders, wide curb lanes, and bike lanes along selected arterial, freeway, and collector roads. Section E also includes a year 2015 Pedestrian Facilities map which delineates planned and existing multi-use trails and sidewalks (one or two sides).

Require sidewalks and bike facilities in commercial nodes, along commercial road frontages, and along frontage roads.

Provide a policy basis for requiring (in the Land Development Regulations) bike and pedestrian access between commercial, single family and multifamily residential, places of public assembly, parks, and other developments where bike and pedestrian interconnectivity is desirable.

Update the 2015 Bicycle Facilities and the 2015 Pedestrian Facilities maps, with the delineated networks modified to connect more destinations and to serve as

multi-purpose alternative transportation networks for bicycles and pedestrians, and also as greenways and wildlife corridors, as practical.

D. HOUSING ELEMENT

1. General Description of Element

Hernando County is a major growth area within the Tampa Bay metropolitan area, thereby making the provision of adequate and affordable housing for the various demographic components of the County's existing and anticipated population is of significant importance. Since the provision of the vast majority of the County's housing stock is from the private sector, the County's role in housing delivery is primarily regulatory, with certain incentive based programs such as those administered by the Hernando County Housing Authority. The Housing Element contains five goals and corresponding objectives and policies. The major goals address the provision of adequate and affordable housing for all residents, the elimination of substandard housing and the preservation of the quality of existing housing, the cooperation of the public and private sector in the promotion and delivery of adequate housing, the provision of adequate and appropriate sites for housing for populations with need based on income levels and other needs, and the preservation of historically and architecturally significant housing.

2. Assessment of Successes and Shortcomings of Objectives Relating to Major Issues

The following activities are considered successes of the Element. The County's Development Department has streamlined the permitting and inspection process to improve the coordination between the public sector regulation and the private sector provision of housing products. Recently, the County had prepared an affordable housing study which detailed both existing and future needs in the area of affordable housing.² Several large complexes, which accommodate a portion of the affordable housing demand, have been constructed in the last few years. Three other similar complexes are in the design stage and could be constructed in the next few years. Additionally, about 2,000 multi-family dwelling units are included among about 16,000 dwelling units approved in various stages of the development process (see Part II, Section D.3).

There are no identified major issues in the EAR which are related to the objectives contained in the Housing Element of the Comprehensive Plan. With the exception of the review of any specific dates contained therein, the objectives currently in the Plan are adequate to serve the needs of the County.

²/ The Study can be found at <http://www.co.hernando.fl.us/housing/rentalstudy.htm>.

E. SANITARY SEWER ELEMENT

1. General Description of Element

The Sanitary Sewer Element of the Plan provides guidance on the provision of central sewer services in the primarily, urban areas of the County. With the recent acquisition of the Florida Water Services operation in Spring Hill, the County is now, the main provider of central sanitary sewer service, with the exception of historic package plants, areas lying within the City of Brooksville and certain areas adjacent to the City. During the late 1980's and the 1990's the County constructed several major sub-regional wastewater treatments plants to serve the areas designated for urban uses on the Future Land Use Map. These included the Glen, Berkeley Manor, Ridge Manor, Airport, and Brookridge plants. Several smaller plants and package plants were consolidated into the sub-regional system.

The Sanitary Sewer Element contains four goals and corresponding objectives and policies. These address the need for a Wastewater Service Plan, requirement for connection to the system, establishing level of service standards, the provision of additional capacity, consolidating less efficient smaller plants into larger system, the provision of reuse water, and establishing sanitary sewer impact fees.

2. Assessment of Successes and Shortcomings of Objectives Relating to Major Issues

The following activities are considered successes of the Element. During the late 1980's and the 1990's the County constructed several major sub-regional wastewater treatments plants to serve the areas designated for urban uses on the Future Land Use Map. These included The Glen, Berkeley Manor, Ridge Manor, Airport, and Brookridge plants. Several smaller plants and package plants were consolidated into the sub-regional system.

ISSUE: Financial Costs and Benefits of Various Types and Intensities of Land Uses

Objective 4.04A provides for sanitary sewer impact fees and requires land development to bear a proportionate share of the cost of new or expanded sewer capital facilities required by such development. There are no identified major issues that relate to the Sanitary Sewer Element that will result in new changes to the objectives.

F. SOLID WASTE ELEMENT**1. General Description of Element**

The Solid Waste Element of the Comprehensive Plan addresses the issue of how to deal with the generation of solid waste in the County by all types of users, including both domestic, industrial, and hazardous waste materials. The County acquired sufficient land in the early 1990's to accommodate the need for disposal for the long term. The County has also developed other strategies for dealing with the anticipated waste stream including recycling, multi-jurisdictional agreements for disposal, the provision of a C and D component to the landfill and the separation of yard waste to minimize placement of materials into the sanitary disposal cell.

The Solid Waste Element contains three goals and corresponding objectives and policies. These address the adoption of a level of service standard for disposal, the provision of a site for a landfill, solid waste collection service, provisions dealing with the disposal of sludge, a solid waste management strategy, and alternatives for dealing with environmentally damaging materials.

2. Assessment of Successes and Shortcomings of Objectives Relating to Major Issues

The following activities are considered successes of the Element. The County acquired sufficient land in the early 1990's to accommodate the need for disposal for the long term. The County has also developed other strategies for dealing with the anticipated waste stream including recycling, multi-jurisdictional agreements for disposal, the provision of a C and D component to the landfill and the separation of yard waste to minimize placement of materials into the sanitary disposal cell.

There are no major issues identified in the EAR which relate to the objectives contained in the Solid Waste Element of the Plan. No major changes are expected in the Element.

G. DRAINAGE AND NATURAL GROUNDWATER AQUIFER RECHARGE ELEMENT**1. General Description of Element**

Hernando County, because of its geologic and topographic features, has very little positive drainage to streams and rivers for stormwater drainage. Instead the majority of stormwater runoff occurs in closed basins to either sinkhole complexes or percolation into the ground through sand based soils. This creates a situation where large-scale solutions to drainage problems that cover vast geographic areas of the County are not feasible. In addition, the sand based soils, which allow rapid percolation of stormwater, and the flow of runoff from more impervious soils into sinkhole complexes, creates a potential groundwater pollution issue, which

needs to be addressed. The Drainage Element contains three goals and corresponding objectives and policies. These address the use of natural drainage for stormwater runoff, issues of identified drainage problems, the provision of level of service standards, protection of the natural recharge system, mapping of recharge areas, and the restriction of certain land uses in areas of mapped wellhead protection zones.

2. *Assessment of Successes and Shortcomings of Objectives Relating to Major Issues*

ISSUE: Groundwater Quality Protection

Objectives 4.10A and C provide for protection of aquifer recharge quality and quantity, designation of Special Protection Areas for vulnerable features which have potential to discharge directly to the aquifer, and policy support for a groundwater protection ordinance (adopted in 1994).

Since this issue are is addressed by multiple elements of the Plan, the issues of groundwater quality protection will be addressed in the Conservation portion of this part III of the EAR.

ISSUE: Development in Closed Drainage Basins

The objectives in this Element currently offer no guidance for development in closed drainage basins.

The County should develop guidelines for addressing the particular groundwater quality protection requirements for development in closed drainage basins. The guidelines should recognize and address different kinds of closed basins (open sinkhole drainage/recharge like Peck Sink and Blue Sink, drainage/recharge through surface soils like most of the Spring Hill area, or drainage to surface water bodies or wetlands). The guidelines and best management practices should seek to minimize impervious surfaces, utilize dispersed treatment designs or other low impact stormwater management systems, control agricultural runoff, and protect groundwater quality where development occurs in closed drainage basins.

ISSUE: Development in Karst Areas

The objectives in this Element do not specifically address the particular risks and potential public costs associated with development in karst areas (areas affected by underground limestone dissolution and/or collapse).

The County should require development review processes to include geophysical investigations before construction of infrastructure to be dedicated to the public. The geotechnical investigations must be sufficient to identify karst features which could affect the infrastructure and developers should be held financially

responsible for damage caused by karst activity within a defined time period following dedication to the public.

The County should seek to identify differences in karst probabilities for different geographic areas, and should evaluate lower residential densities and development intensities for areas with high probabilities for karst activity.

The Plan should be amended to support environmentally sensitive lands identification of important karst areas (areas with significant sinkhole aquifer recharge, open conduits, or other important features).

H. POTABLE WATER ELEMENT

1. General Description of Element

Similar to the purpose of the Sanitary Sewer Element, the Potable Water Element provides guidance on the provision of central water services in the primarily, urban areas of the County. As a result of the recent acquisition of the Florida Water Services, the County controls the majority of all central water systems in the unincorporated and primarily urban areas of the County. The City of Brooksville owns and operates their own system within the City limits and within a certain distance of their boundaries.

The County has a monitoring system to help ensure that the water supply is safe and sanitary for domestic use that is consistent with State and Federal regulations. The monitoring system is also a first alert for the saltwater intrusion issue faced by coastal counties. The County has had prepared a Water Resource Assessment Plan (WRAP), which involved the creation of a model to determine the availability of supply for a period of 50 years. The results of the WRAP will be used in well field development. The Potable Water Element contains six goals and corresponding objectives and policies. These address the provision of a water distribution system and corresponding standards, wellfield protection standards, the transfer of water outside of the County, wellfield siting criteria, establishing a level of service standard, water conservation, and the establishment of potable water impact fees.

The County has a monitoring system to help ensure that the water supply is safe and sanitary for domestic use that is consistent with State and Federal regulations. The monitoring system is also a first alert for the saltwater intrusion issue faced by coastal counties. The County has had prepared a Water Resource Assessment Plan (WRAP), which involved the creation of a model to determine the availability of supply for a period of 50 years. The results of the WRAP will be used in well field development.

2. *Assessment of Successes and Shortcomings of Objectives Relating to Major Issues*

ISSUE: Groundwater Quality Protection

Objective 4.12A provides additional support for the groundwater protection ordinance, provides policy support for technical analysis, computer modeling, staff and equipment necessary to effectively implement and monitor compliance with the groundwater protection ordinance. In addition, policies provide for County groundwater quantity and quality monitoring to develop a database for understanding, managing and protecting groundwater resources, including monitoring wells near county boundaries and to monitor the saltwater interface both along the coast and at depth inland. The intent is to develop a County monitoring network and database to: supplement the monitoring efforts of other entities; to fill data gaps; to supplement and assist SWFWMD's establishment of Minimum Flows and Levels for surface and groundwater; and, to provide data to assist in the protection of Hernando County's groundwater resources, both in terms of quality and to inhibit the diversion of groundwater outside the County to the detriment of the long term needs of present citizens and future growth.

The County should develop a scientific basis for determining the western limits of future water supply wells.

ISSUE: Water Use Patterns

Potable water conservation policy is adequately expressed in the Objective 4.15A. Policies provide for a variety of strategies to reduce potable water consumption, reduce demand, and discourage the use of potable water for irrigation.

Hernando County should continue to utilize a variety of strategies (utility rate structures, watering restrictions, landscaping regulations, wastewater reuse, and others, as appropriate) to manage water use patterns, especially irrigation demands on potable water supply systems.

Hernando County should continue to discourage the use of potable water for irrigation and should encourage utilization of reuse water to the greatest practical extent.

ISSUE: Level of Service for Potable Water

Objective 4.14A provides a level of service (LOS) standard of 250 gallons per equivalent residential unit per day. This standard includes both residential and nonresidential use combined, but does not distinguish between potable needs and use of potable water for irrigation.

The LOS standard for potable water supply systems in the Plan needs to be revised to reflect actual demands placed on County systems.

A LOS standard for residential use should be developed separate from nonresidential uses and should include a realistic component for irrigation.

Hernando County should place greater emphasis on planning for reuse water for irrigation in new developments with potable water supply systems.

ISSUE: Financial Costs and Benefits of Various Types and Intensities of Land Uses

Objective 4.16A provides for impact fees and requires land development to bear its proportionate share of new or expanded potable water capital facilities required by such development. There are no identified changes which need to be made to the Potable Water Element with regard to impact fee issues.

I. COASTAL MANAGEMENT ELEMENT

1. General Description of Element

Since Hernando County is considered a coastal county, it is required by Chapter 163 F.S., to prepare a Coastal Management Element to be included in the Comprehensive Plan. The Hernando County Coastal Zone includes almost all lands west of US 19. The area is characterized by various land uses and includes residential developments such as Hernando Beach, Glen Lakes, Regency Oaks, Lake in the Woods, the Heather, Forest Glen, and other older communities along the Weeki Wachee River and various canals off of the river. There are also significant commercial developments along the west side of US 19 and along Shoal Line Boulevard, the main north-south road running through the Coastal Zone.

The vast majority of the acreage within the Coastal Zone is public land purchased for conservation purposes, including the Weeki Wachee Preserve, the Chassahowitzka National Wildlife Refuge, and various other holdings by local, regional, state and federal agencies. The Coastal Management Element contains seven goals, with corresponding objectives and policies. These address the preservation of environmental features, limiting development potential while preserving access to coastal resources, maintaining adequate evacuation routes, the provision of adequate infrastructure for areas with development potential, post-disaster redevelopment and hazard mitigation, the protection of the defined coastal high hazard area, and the protection of historically, architecturally or archaeologically significant areas.

Since most of the coastal zone is in conservation, coastal resources and environmental features will be protected with limited development potential within the high hazard zone. Since the 1993 "No Name Storm", a significant number of homes have been raised above the base flood elevation and hurricane evacuation zones with respect to the coastal high hazard zone have been evaluated, primarily looking at storm surge as most life threatening. Education has been

successful, however, aspects of enforcement could be improved. Failure to properly secure propane tanks is one example.

2. ***Assessment of Successes and Shortcomings of Objectives Relating to Major Issues***

ISSUE: Distribution of Density and Intensity of Land Uses and Future Land Use Categories with Permitted Uses

Objective 5.02A limits new residential development densities in the V-Zone within the Coastal High Hazard Area to no greater than 1.0 dwelling unit per acre of upland. There are no identified changes necessary to this objective in the EAR.

ISSUE: Open Space

Objectives 5.01A through F includes substantial direction for wetland protection, conservation area usage with forestry, recreation and open space given priority over urban development in conservation areas, and support for acquisition of environmentally important coastal lands. Objective 5.06B provides for maintenance of salt marshes and open waters for the viewing enjoyment of residents and visitors, with continuing efforts to identify and maintain scenic vistas. The current plan objectives are adequate to address the open space issue in the Coastal Area and no changes are proposed.

ISSUE: Levels of Service in Floodplains

Objective 5.01B requires development approvals in flood prone areas to be conditioned upon the ability of evacuation routes to provide safe exodus for all potential residents of existing development within the flood prone area and the proposed new development. Objective 5.02A prohibits construction of new county funded public facilities in the V-Zone on the adopted Flood Insurance Rate Map unless the facility is for recreation, public access or resource restoration.

Objective 5.02B limits construction of county funded public facilities within the coastal high hazard area unless necessary for public health, safety, resource restoration or for the restoration of existing development following a storm event. It also requires the County to maintain capacity on all identified evacuation routes so that evacuation clearance times can be maintained. Objective 5.03A requires analyzing the coastal transportation network, developing the capability to evacuate all residents before roads become impassable or within eight (8) hours or less, and evaluating hurricane evacuation capacity before allowing new development.

Objective 5.04A requires each new development in the designated V-Zone to provide and maintain its own infrastructure concurrent with development, and prohibits the County from accepting for public ownership or maintenance any roads, drainage, sewer or water infrastructure of new development in the designated V-Zone. It also forbids County construction of new transportation corridors in the V-Zone except to provide necessary hurricane evacuation.

While the current Plan includes substantial guidance for limited development and public facilities in flood plains, especially in the Coastal Zone, Hernando County should develop LOS standards for floodplains to address roads, potable water, wastewater disposal, drainage, other public infrastructure and services, and lower development intensities, and taking into consideration the different characteristics of riverine flood plains, coastal storm surge floodplains, and closed drainage basins.

ISSUE: Financial Costs and Benefits of Various Types of and Intensities of Land Uses

Objectives 5.04A and 5.04B requires adequate infrastructure designed to resist flood damage, seeks to eliminate all direct and indirect county subsidies to new development in V-Zone areas of the Coastal High Hazard Area, and aims to limit public expenditures in the Coastal High Hazard Areas. The existing objectives in the Coastal Management Element Adequately address this issue. Therefore, no major changes are proposed.

J. CONSERVATION ELEMENT

1. General Description of Element

Hernando County contains a rich cross section of ecosystem communities. From west to east in the County there is a progression from sea grass meadows of the Gulf of Mexico to its associated salt marshes and lush upland islands to the large, groundwater seepage fed wetland forests to interior sandhills and the mixed hardwood forest on the Brooksville Ridge to a pine-oak-lakes region east to the pine flatwoods, cypress, and river swamps of the Withlacoochee State Forest. Each of these unique communities have characteristics and needs that have to be addressed through actions of local, regional, state, and federal government.

The Conservation Element contains nine goals and associated objectives and policies. These address the protection of wildlife habitats, the protection of the quality and quantity of both groundwater and surface water resources, the protection of air quality, the protection of wetland resources, the conservation and protection of soils, mineral resources, and trees, appropriate growth in harmony with natural conditions, and the regulation of hazardous materials and waste pollution sources.

2. *Assessment of Successes and Shortcomings of Objectives Relating to Major Issues*

ISSUE: Distribution of Density and Intensity of Land Uses and Future Land Use Categories With Permitted Uses

Objective 6.05A limits residential densities to a maximum of 7 dwelling units per acre adjacent to Class I wetlands, and limits residential density to one residential unit per forty acres on wetland soils.

Direct future urban growth to occur within the urban growth areas currently delineated in the Comprehensive Plan, or as located by the development of planning horizons related to capital improvements and water supply planning, until such time as the existing urban growth areas are predominantly developed and the population projections indicate a need for additional urban development areas.

ISSUE: Open Space

The Conservation Element provides for significant efforts that will result in the continued existence of open space, including protection of significant wildlife habitat areas (Goal 6.01), identification and preservation of environmentally sensitive lands and unique natural vegetation communities (Objective 6.01C), the establishment of conservation areas (Objective 6.01D), and the creation of natural greenways (Objective 6.01G).

The Plan should be modified to provide support for a multi-purpose system of corridors to serve as bicycle and pedestrian travel ways, wildlife movement corridors, greenways, and open space.

The Plan should be modified to provide guidance for designating scenic highways, and to provide guidance for setbacks, buffers, vegetation and definition and screening of non-scenic land uses.

ISSUE: Groundwater Quality Protection

The Plan places substantial emphasis on groundwater protection issues. Objective 6.02A provides for identification of aquifer quality, prime recharge areas, sinkholes and pollution sources, and provides for regulations to address land uses, stormwater management, solid waste disposal, sewage treatment, and well abandonment with the goal of protecting water supplies and preventing contamination of groundwater resources.

It is recommended that the County recognize the increasing nutrient levels in coastal spring discharges and aggressively seek strategies to minimize the use of polluting fertilizers.

The County should continue to support the Florida Yards and Neighborhoods programs and initiate additional programs to educate the public about groundwater contamination and individual prevention strategies.

The County should continue to encourage developers, businesses, and residents to reduce the amount of turf and non-native landscaping in new and existing development, minimize the use of highly soluble fertilizers, increase requirements for use of native plants in turf and landscaping, and promote water conservation to minimize the opportunity for excess water to carry contaminants downward into the aquifer.

County government should lead by example in utilizing techniques and strategies at all county facilities to minimize nutrient and other contaminant contributions to groundwater contamination while facilitating high aquifer recharge as feasible.

The County should continue to cooperate with SWFWMD in monitoring efforts to track surface and groundwater quality.

ISSUE: Groundwater Quantity

Most of the emphasis in the current Plan is on protecting groundwater quality rather than quantity. Objective 6.02A provides for coordination with SWFWMD in the identification of aquifer quality and prime recharge areas and for the use of land development regulations to protect aquifer recharge areas and water supply withdrawal points by limiting incompatible land uses. Objective 6.03A, B, and C provides for County cooperation with SWFWMD to establish minimum aquifer levels, utilization of the Water Resources Assessment Project findings to establish minimum flows for springs in the coastal zone, and coordination with the Withlacoochee Regional Water Supply Authority to ensure that human and natural resource needs can be met.

The County should continue efforts to identify and protect important aquifer recharge areas, both in terms of recharge quantity and quality.

The County should strive to utilize reuse water for irrigation wherever economically practical.

As part of the EAR based comprehensive plan amendments, it will be necessary to incorporate into the Plan a work plan, covering at least a ten (10) year planning period, for building water supply facilities that are identified in the element as necessary to serve existing and new development and for which the County is responsible (Chapter 163.3177(6)(c) F.S.).

Utilize the WRAP computer model to evaluate supply and perform periodic audits to maintain calibration of the model.

ISSUE: SWFWMD's Minimum Flows and Levels

Objectives 6.03A and 6.03B provides for cooperation with SWFWMD to establish minimum levels for surface water features, aquifer levels, and minimum flows for coastal springs.

Hernando County should continue to encourage SWFWMD to set MFLs for surface water bodies, the aquifer, and Hernando County's coastal springs as soon as possible.

Hernando County should set an example by establishing its own criteria that are more protective of water resources than MFLs and by initiating efforts to reduce water use at County facilities and throughout the community when those criteria indicate.

ISSUE: Integrity of Wildlife Habitats and Natural Communities

Objective 6.01A provides for identification and mapping of prime habitat areas of wildlife species of special concern, threatened species, and endangered species. Objective 6.01C provides for measures to identify and facilitate public acquisition of environmentally sensitive lands and unique natural vegetation communities. Objective 6.01G provides policies for: continuing encouragement of appropriate agencies and private organizations in their development or preservation of natural area greenways which may function as wildlife corridors and/or recreation areas; meeting the passive recreational needs of the County while preserving the County's natural vegetation; preventing fragmentation of wildlife corridors, where possible; and, continued preservation of wildlife corridors and natural areas within development projects. Objectives 6.05A and B provide for classifications and protections for wetlands. Finally, Objective 6.08A makes it County policy to coordinate with appropriate agencies to protect habitat important to threatened or endangered species through the development review process.

The County should make it policy to strive to connect all critical habitats with wildlife travel corridors. Critical habitats should be identified, mapped, and potential corridors evaluated, with strategies for corridor creation/conservation identified.

The County should establish policy guidelines for buffers and separations to minimize land use conflicts between conservation lands and surrounding land uses. Residential densities should be kept low (one unit per ten acres) and uses sensitive to smoke (schools, hospitals, medical facilities, places of public assembly, elderly care facilities, and similar facilities which congregate people) should be adequately separated from conservation lands. Where low density residential or other development does occur in close proximity to conservation areas, property purchase notifications should be considered to advise purchasers

of periodic smoke episodes due to maintenance burning on nearby conservation lands.

In order to buffer conservation lands from urbanization, several strategies are recommended. New conservation acquisitions should be large enough to include their own buffers, where possible. New development adjacent to existing conservation lands should be low intensity and required to include buffers to protect conservation lands from land use conflicts, with cluster development an option to improve buffering and land use compatibility. Agricultural land uses should be considered as potential buffer uses around conservation lands.

The County should strive to identify critical habitats on properties proposed for development as early as possible in the development review process, and should require conservation of any critical habitats which occur on site.

The County should increase its environmental education efforts to inform citizens of the existence and significance to wildlife habitats and natural communities.

The County should pursue the Little Withlacoochee Corridor Connection Project to link the Withlacoochee State Forest units.

The County should develop guidelines for protecting those isolated and ephemeral wetlands that serve as critical habitats.

ISSUE: **Air Quality**

Objective 6.04A provides for county procedures for reviewing and mitigating potential air pollution sources.

The Plan as currently written is adequate and no changes are recommended.

ISSUE: **Urban Vegetation**

Objective 6.01F provides guidance for protection of native plant species and prohibits the planting of certain noxious exotic plants to prevent their spread. It also provides for conservation of trees and native vegetation and the use of xeriscape principles for landscaping of new, restored or retrofitted development projects and public lands and right-of-way.

The Plan should be revised to require conservation of more native vegetation on development sites and more native vegetation should be required in new landscaping.

ISSUE: Levels of Service in Floodplains

Objective 6.02C says that the County should limit the use of septic systems in areas subject to periodic flooding. Objective 6.08A requires less intensive development in flood-prone areas. Objective 6.08C requires the flood plain ordinance to minimize development impact on flood plains, including storage capacity and increase or decrease in the natural flow of floodwater.

While the current Plan includes substantial guidance for limited development and public facilities in flood plains, especially in the Coastal Zone, Hernando County should develop LOS standards for floodplains to address roads, potable water, wastewater disposal, drainage, other public infrastructure and services, and lower development intensities, and taking into consideration the different characteristics of riverine flood plains, coastal storm surge floodplains, and closed drainage basins.

ISSUE: Southwest Florida Water Management District (SWFWMD)

Objective 6.02A provides for coordination with SWFWMD and the Florida Department of Environmental Protection (DEP) in the identification of aquifer quality, prime recharge areas, sinkholes, and pollution sources. Objective 6.03A requires the County to work with SWFWMD to establish Minimum Flows and Levels. Objective 6.05A requires County coordination with SWFWMD (and other agencies) to identify and regulate wetland areas under their jurisdiction.

The current Plan provides for substantial and broad cooperation between the County and SWFWMD. A wide range of cooperative and communicative efforts are ongoing and the current Plan is considered adequate to support future cooperation. No changes are recommended at this time.

K. RECREATION AND OPEN SPACE ELEMENT

1. General Description of Element

Hernando County has substantial parkland, both developed and undeveloped. The County has a total of 378.5 acres of user-oriented park facilities and a total of 945 acres of open space. This does not include the holdings of both the State of Florida and the federal government, which are extensive. In addition, there are 28 park sites in Spring Hill, which were deeded to the County by the Deltona Corporation. Of those 28, five have been developed. The County has consistently committed resources to developing its park sites since the early 1990's.

The Open Space and Recreation Element contains five goals and related objectives and policies. These address the provision of a variety of facilities to enhance recreational experiences, the development of a park system to meet the needs of existing and future population, the provision of an impact fee system of financing, the coordination of open space

with environmental quality and aesthetic enhancement, the provision of adequate public access to facilities, including beaches and shores.

2. ***Assessment of Successes and Shortcomings of Objectives Relating to Major Issues***

ISSUE: Open Space

Objective 7.03A provides for an open space level of service standard of 2.00 acres per thousand peak (seasonal) population, which is half of the total LOS standard for parks and open space. Objective 7.04A provides policy guidance for maintaining the land holdings of state and federal agencies in the Withlacoochee State Forest, the Chinsegut Nature Center, the Chinsegut National Wildlife Refuge (NWR), and the Chassahowitzka NWR with limited development and as natural open areas for the continuing enjoyment of residents and visitors. Objective 7.04B also encourages purchase of additional open space lands, requires public agencies and private enterprises alike to provide appropriate amounts of open space on developed sites for scenic enjoyment and the separation of uses, and requires the enactment of regulations to designate scenic road routes and mark them with signage.

The Plan should be modified to provide policy support for mechanisms to provide more open space in urban areas.

The Plan should be modified to provide support for a multi-purpose system of corridors to serve as bicycle and pedestrian travel ways, wildlife movement corridors, greenways, and open space. The Future Land Use, Transportation and Recreation Elements will be affected.

The Plan should be modified to provide guidance for designating scenic highways, and to provide guidance for setbacks, buffers, vegetation and definition and screening of non-scenic land uses.

ISSUE: School Siting Criteria

Objective 7.01D provides support for coordination of Hernando County with other entities, including the Hernando County School District (HCSD), toward the joint use of recreation facilities.

The Plan (Recreation & Open Space Element) should be modified to provide policy guidance for allocating a minimum percentage of funds for parks to be utilized for co-locating parks with schools for joint use.

If and when neighborhood schools are used, they should be planned and constructed as neighborhood centers, including education, recreation, and community service functions, with meeting space for community organizations, recreation facilities that serve both school and neighborhood park functions, and

other shared facilities, such as parking, roads, libraries, and offices for community service organizations.

The Plan should be amended to encourage planning for schools and parks to be located in close proximity to each other (Future Land Use and Recreation & Open Space Elements).

ISSUE: Coordination With Hernando County School Board Regarding School Matters

Objective 7.01D provides for the coordination of County public recreation facilities with those provided by other governmental entities (and the private sector), stating the County should enter into an intergovernmental agreement with HCSD and PHCC for the joint use of school recreation facilities. Objective 7.02C requires cooperation with HCSD and PHCC to encourage the placement of user-oriented recreation facilities on existing and new school sites.

The Plan as currently written provides for adequate communication and cooperation between the County and the HCSD. No changes are recommended.

ISSUE: Financial Costs and Benefits of Various Types and Intensities of Land Use

Objective 7.03B requires land development to bear its proportionate share of the cost of providing new or expanded park facilities required by such development, and provides for parks impact fees. The current objective meets the needs for the issue so no changes are anticipated.

ISSUE: Boat Ramps

Objective 7.02E provides locational guidance and standards for boat ramp development. No changes in the Plan are needed to address this issue.

L. INTERGOVERNMENTAL COORDINATION ELEMENT

1. General Description of Element

As Hernando County develops and the issues facing the County become more complex, there is a growing need for responsible and efficient interaction with various other governmental entities and agencies, who have an effect on decisions the County must make in its daily operations. These include other local governments, regional agencies, state agencies, and federal agencies. This level of coordination requires diligence and attention to make sure that the public resources are used efficiently, without duplication of effort. The Intergovernmental Coordination Element contains one goal and related objectives and policies. These address how the County

will coordinate with the various governmental agencies on a daily basis to address the needs of the complex issues the County faces.

The County has entered into several agreements with the Southwest Florida Water Management District on issues of water supply and preservation. The County also has an intergovernmental agreement with Pasco County dealing with land use petitions within a certain distance of the common boundary. During the past year, the County has entered into a Joint Planning Agreement with the City of Brooksville for a 28 square mile area around the City and also entered into an agreement with the City of Brooksville and the Hernando County School District for coordination on school planning issues.

2. *Assessment of Successes and Shortcomings of Objectives Relating to Major Issues*

ISSUE: School Siting Criteria

Objective 8.01E provides for maintaining formal coordination mechanisms with HCSD and Pasco-Hernando Community College to allow planning and utilization of shared facilities, and planning coordination on school siting, school planning, population projections, and comprehensive planning.

The new interlocal agreement between the Hernando County School District, the City of Brooksville and the County should be utilized to develop neighborhood school definitions and siting standards for inclusion in the Plan. Neighborhood schools should be planned and constructed as neighborhood centers, including education, recreation, and community service functions, with meeting space for community organizations, recreation facilities that serve both school and neighborhood park functions, and other shared facilities, such as parking, roads, libraries, and offices for community service organizations.

ISSUE: Joint Planning with the City of Brooksville

Objective 8.01C provides for County coordination mechanisms with the Cities of Brooksville and Weeki Wachee and for amending existing interlocal agreements and/or creating new ones as needed to facilitate improved coordination. The policies listed under this objective provide for a range of communication and coordination mechanisms between the County and the Cities, including interlocal agreements, review and comment opportunities, joint planning efforts, and staff level coordinating mechanisms.

The referenced interlocal agreements with the City were executed in November 2003 and, therefore, are too new to effectively evaluate as to whether additional changes are needed. Accordingly, no changes to these Agreements or the Plan are recommended at this time.

ISSUE: Coordination With Hernando County School Board Regarding School Matters

Objective 8.01E provides for maintaining formal coordination mechanisms with the Hernando County School Board (HCSD) and Pasco-Hernando Community College (PHCC). The underlying policies provide for staff level contacts, establishment of a coordination process to plan a utilize shared facilities, identification (by HCSD) and protection of potential school sites during the development review process, coordination to obtain school sites during DRI reviews, sharing of population projections and any other requested data within the County's ability to provide, and creation of a Joint Planning Committee to provide for increased participation in the County Comprehensive Plan review process, school planning process, school siting, and cooperative planning efforts.

The Plan as currently written provides for adequate communication and cooperation between the County and the HCSD. No changes are recommended.

ISSUE: Southwest Florida Water Management District (SWFWMD)

Objective 8.01F provides for formal coordination mechanisms with SWFWMD. Underlying policies with this objective provide for cooperation in research studies on localized drainage problems, groundwater protection, water conservation, and acquisition of environmentally sensitive lands, including lands adjacent to the Weeki Wachee and Withlacoochee Rivers.

The Intergovernmental Coordination Element in Objective 8.01F provides for formal coordination mechanisms with SWFWMD. Underlying policies with this objective provide for cooperation in research studies on localized drainage problems, groundwater protection, water conservation, and acquisition of environmentally sensitive lands, including lands adjacent to the Weeki Wachee and Withlacoochee Rivers.

ISSUE: Withlacoochee Regional Planning Council (WRPC)

Objective 8.01A provides for establishment of formal liaison processes for ongoing coordination with the WRPC. It also requires the County to utilize the formal Dispute Resolution Process provided by the WRPC for resolving conflicts with other local governments that cannot be solved throughout direct intergovernmental coordination. The Plan as currently written is adequate and no changes are recommended.

ISSUE: Adjacent Counties

Objective 8.01D and its policies provide for staff level coordination mechanisms and establishment of reciprocal agreements to allow a process of review and comment for issues of mutual concern. The Plan as currently written is adequate and no changes are recommended.

M. CAPITAL IMPROVEMENTS ELEMENT

1. General Description of Element

One of the major governmental responsibilities during circumstances of rapid growth is the provision of adequate infrastructure to meet the demands of both residents and business. Hernando County has absorbed substantial growth for several decades and the projections indicate continued substantial growth for the foreseeable future. Hernando County has adopted and maintains on an annual basis, a 5 year schedule of capital improvements for roads, other transportation improvements, water, sewer, solid waste, parks, and the airport. This five year list is adopted as part of the County's Comprehensive Plan and is folded into the County's annual preparation of its budget. The Capital Improvements Element contains one goal and corresponding objectives and policies. These address the development of the 5 year schedule of capital improvements, the level of service standards for various public facilities, adequate capital facilities to maintain level of service standards, and the management of fiscal resources.

Hernando County has adopted and maintains on an annual basis, a 5 year schedule of capital improvements for roads, other transportation improvements, water, sewer, solid waste, parks, and the airport. This five year list is adopted as part of the County's Comprehensive Plan and is folded into the County's annual preparation of its budget.

2. Assessment of Successes and Shortcomings of Objectives Relating to Major Issues

The following activities are considered successes of the Element. Hernando County has adopted and maintains on an annual basis, a 5 year schedule of capital improvements for roads, other transportation improvements, water, sewer, solid waste, parks, and the airport. This five year list is adopted as part of the County's Comprehensive Plan and is folded into the County's annual preparation of its budget. There are no major issues identified in the EAR which relate to the objectives contained in the Capital Improvements Element of the Plan. No major changes are expected in the Element.

N. ECONOMIC DEVELOPMENT ELEMENT

1. General Description of Element

Since Hernando County continues to be a high growth county, it is necessary for the County to address the need for a balanced economy to provide both jobs for its citizens and a balanced property tax base to help finance the operation of government to meet the needs of its residents. The Economic Development Element of the County's Comprehensive Plan is considered an optional element. The Element contains one goal and corresponding objectives and policies. These address support of existing business and the recruitment of new businesses,

the natural environment as an economic asset, the workforce quality and supply, and the regulatory climate affecting economic development efforts.

2. *Assessment of Successes and Shortcomings of Objectives Relating to Major Issues*

ISSUE: Economic And Tourism Development Indicators and Objectives

A new Economic Development Element was added to the Plan in early 2003. Objectives A - F provide for supporting existing businesses and recruiting targeted new businesses, utilizing Hernando County’s natural environment as an economic development marketing tool, cooperating with educational institutions to produce a capable workforce, assisting with regulatory obstacles to economic development, and monitoring and evaluation procedures.

The County must develop the economic development indicators required by the Plan. These indicators should be part of an economic development plan separate from and supporting the Comprehensive Plan. No plan amendments are needed, although additional implementation is required by the Plan.

ISSUE: Arts and Cultural Issues

The current Plan does not address Culture and the Arts. The County should add policies to the Plan to establish County policy related to culture and the arts.

PART IV IDENTIFICATION AND ANALYSIS OF ISSUES

The issues addressed by this EAR were identified through public participation activities (see Appendices), approved by the Hernando County Board of County Commissioners, and submitted to DCA with a request for a letter of understanding that these would be the issues addressed by Hernando County's EAR (no DCA response was received).

A. GROWTH AND DEVELOPMENT ISSUES

1. GROWTH RATE AND PLANNING TIME HORIZONS

Issue Sources: Planning survey; BCC community planning workshops; EAR Policy Advisory Committee.

Status of Current Plan:

As presently written, the Plan does not address rate of growth. While it provides for concurrency in the availability of certain infrastructures necessary to support a particular development, the Plan provides no guidance in directing development to specific locations within defined time frames. Essentially, the current Plan delegates control of development timing to the availability of water, sewer and roads anywhere in the urban growth areas designated on the Future Land Use Map.

Discussion:

Respondents to the 2002 planning survey selected "Growth Rate Too High" as Most Important more often than any other growth and development issue, and placed it fourth among cumulative response totals. Numerous public comments at the BCC's community planning workshops addressed the amount and rate of growth occurring in the County. Although citizens clearly are concerned about growth rates, in general, Florida's land use laws encourage local governments to provide the infrastructure necessary to support projected population growth to the adopted level of service standards, as long as it is within the local government's financial means to do so.

In any business plan, construction project, or financial plan the issue of timing is very important. Goals and objectives related to time and timing provide a mechanism for keeping plans on track and for measuring their success and accomplishments over time. Without functional timing components, a plan is somewhat like a set of construction drawings providing a detailed picture of the finished product. While the drawings alone can only show us an image,

additional components are needed to actually construct the finished product, including a location, funding, organization of tasks in terms of time, and management to move things along on schedule.

In comprehensive plans, the Future Land Use Map is the drawing, the Future Land Use Element defines the mission and the organization of tasks in terms of time, the Capital Improvements Element and Capital Improvements Plan manage the funding, and the Land Development Regulations provide the management tools. Hernando County's Plan does not currently contain policy guidance to direct the timing and location of development. Additional timing guidance would allow more accurate infrastructure planning for water, sewer and roads and improve the County's ability to meet level of service obligations, and improve the financial feasibility of the Plan.

Recommendations: The state's comprehensive planning statutes, Section 163.3177(5)(a), F.S., require the comprehensive plan to include at least two planning periods, one covering at least a 5-year period, and another covering at least a 10 year period. Technically, the Plan meets the requirement as Capital Improvements planning takes place on a five year period, with annual updates, while the long term planning horizon for the Plan is 20 years. However, the linkage between growth, its location, and the timely provision of infrastructure can be improved.

Another recent addition (Section 163.3191(2)(1), F.S.) to statutory requirements for comprehensive plans mandates the additional of a ten year water supply work plan to the Plan for building any water supply facilities that are identified as necessary to serve existing and new development. The addition of a ten year water supply work plan to the Potable Water Element will provide an excellent opportunity to strengthen the Plan links between growth, its location and infrastructure planning to support it. **When the EAR based amendments are adopted, the Future Land Use Element (and possibly other Elements) should be amended to provide additional guidance for the location and timing of growth within the five year Capital Improvements planning cycle and the newly-mandated ten year water supply work planning period.**

2. ***DISTRIBUTION OF DENSITY AND INTENSITY OF LAND USES AND FUTURE LAND USE CATEGORIES WITH PERMITTED USES***

Issue Sources: Planning survey; BCC community workshops; EAR Policy Advisory Committee.

**Status of Current
Plan:**

a. Residential Land Uses

The Plan provides substantial guidance for determining the distribution and intensity of residential land uses. The Future Land Use Element (FLUE) in Policy 1.01A(7) ties the intensity of Planned Development projects to the ability to provide public services and facilities to LOS. Objectives 1.01B and 1.01C provide substantial guidance to allow very low density residential development (2.5 to 10 acres per dwelling unit) throughout the Rural Land Use category on the FLUM. Policy 1.01B(10) allows residential land uses consistent with uses allowed in the Residential land Use Category to be developed up to 1320 feet (one-quarter mile) into the Rural Land Use Category without a comprehensive plan amendment where certain performance standards can be met.

Objectives 1.01F and 1.01G provide guidance for single family and multi-family residential development intensity and location. Objective 1.01Q provides for single family residential densities greater than .4 units per acre (one unit per 2.5 acres) to occur in proximity to existing development for efficient use of infrastructure and services, and discourages single family development at densities greater than .2 dwelling units per acre in major flood areas. Goal 1.07 provides for four planned development districts with guidance for land uses and intensities allowed, although the four districts have generally not developed as envisioned, with the notable exception of the Airport Planned Development District, which has developed industrial and commercial land uses consistent with the Airport Master Plan.

The Coastal Management Element (Policy 5.02A(5)) limits new residential development densities in the V-Zone within the Coastal High Hazard Area to no greater than 1.0 dwelling unit per acre of upland.

The Conservation Element in Policy 6.05A(9) limits residential densities to a maximum of 7 dwelling units per acre adjacent to Class I wetlands, and Policy 6.05A(12) limits residential density to one residential unit per forty acres on wetland soils.

Section D Mapping Criteria & Land Uses Allowed provides for single family residential up to 5.4 units/acre and multi-family residential up to 16 units per acre, along with other land uses, within the areas designated as Residential on the FLUM.

b. Commercial Land Uses

Policy 1.01L(3) provides for new commercial rezoning to be initiated within commercial nodes and regional commercial overlay districts of the Future Land Use Map with exceptions for Specialty Commercial, Neighborhood Commercial and appropriate infill areas. Objective 1.01M provides for the management and direction of commercial development into categories of commercial nodes established by locational factors primarily related to intersections of roads on the functionally classified roadway network. Objective 1.01O provides guidance to limit and manage existing strip commercial and infill areas, and prohibits expansion of existing strip commercial areas and prohibits creation of any new strip commercial areas during the planning period.

Section D Mapping Criteria & Land Uses Allowed permits commercial development in the Residential Land Use category provided that it is neighborhood commercial, office and professional commercial, and commercial extending from commercial nodes with functioning frontage road (unless it is determined that wetlands or existing development make frontage road extension unfeasible). The commercial mapping criteria in Section D provide for commercial nodes which are mapped on the FLUM. In addition, the mapping criteria indicate unmapped commercial areas driven by policies and performance standards to include: neighborhood commercial, commercial approved as part of or proximate to major mixed-use developments, planned development districts, specialty commercial, infill areas and commercial extending from nodes with functioning frontage roads. The statement of purpose appears to conflict with the stated objective in the FLUE (to direct commercial uses into nodes) by indicating that the purpose is to provide locations for the provision of commercial services along major roads in residential growth corridors.

The Future Land Use Map (FLUM) designates locations for a range of land uses. The Residential Land Use Category on the FLUM is essentially an urban growth area, as the areas within this category are where the County (and/or the City of Brooksville) plans to provide the services and infrastructure required to support urban growth.

Discussion a. Residential Land Uses

The mapping boundaries between land use categories on the FLUM are not parcel-specific, meaning they do not follow property lines. In many situations, the FLUM mapping boundaries bisect parcels, making it

difficult to determine which future land use category applies, and requiring interpretation of the textual policies included in the Plan. While this situation allows flexibility in decision-making, it leads to uncertainty in determining consistency with the FLUM, and to differences in opinion regarding application of the policies. This uncertainty often leaves it unclear whether a given parcel should be included or excluded from a particular category, or is inside or outside a commercial node, or what type of commercial is considered appropriate for the location. Often the only way to answer the questions is to submit a development application in order to ascertain the future land use category. While this uncertainty may not allow the degree of predictability sought by supporters of Smart Growth principles, it does allow for a public hearing process that includes opportunities for public comment valued by Hernando County's citizens.

The interface between Residential and adjoining land use categories is the urban development boundary. Where Residential adjoins Rural on the FLUM, the policies in the text allow development to extend up to one quarter mile beyond the mapped boundary provided that certain conditions are met. Extension of medium to high residential densities into these Residential/Rural interface areas potentially allows urban development of an additional 5% of the County in addition to the urbanization planned in the Residential areas. At current average densities of around 3 units per gross acre, these interface areas could support about 50,000 dwelling units, or about 2.5 times as many as needed to support projected population growth to 2020. While the actual number of dwelling units at build-out might be somewhat higher or lower, clearly the flexible urban development boundary allows for significant additional residential development in addition to that planned in the Residential areas.

The Residential land use category allows residential densities up to 16 units per acre, but provides limited guidance as to how densities are to be distributed throughout the Residential areas. Smart Growth principles indicate a preference for actually planning and designating expected residential densities in order to allow calibrating the size and capacity of the necessary infrastructure based upon the population indicated by the planned density, rather than indicating a maximum allowable density that will seldom be achieved (and with built-in uncertainty for population projections and infrastructure planning).

With about 32,000 vacant lots in existing developments (these lots could provide about 35,000 DUs) and about 15,923 dwelling units approved pending development, and enough vacant Residential acreage to support about 44,000 additional dwelling units, plus a potential of about 50,000 additional dwelling units in the Residential/Rural interface where urban development may be extended one quarter mile into the Rural areas, plus about 6400 potential additional residential parcels in the Rural areas, the

Plan provides for about 222,000 dwelling units at build-out. While growth rates will vary over time based on changes in economic and other factors, these estimates based on the BEBR medium projections may be conservative, especially in consideration of Hernando County's completion of 2399 new residential dwelling units in the twelve month period from April 1, 2003 to March 31, 2004. The Plan provides adequate land for development to provide an estimated 30,000 new dwelling units to meet the needs of BEBR Medium projected population growth of about 60,000 people over the next twenty years. (See related discussion in Part II, Section D).

b. Commercial Land Uses

As presently constructed, the Plan provides for most commercial to be situated in commercial clusters or "nodes" located at designated major intersections, except in designated commercial infill areas along SR 50 and US 19 where existing strips of commercial lots line the highways. However, in addition to residential land uses (and schools, hospitals and minor public facilities), the Residential Land Use Category allows neighborhood commercial, office and professional commercial, and highway commercial (extending from commercial nodes with a functioning frontage road, unless it is determined that wetlands or existing development makes frontage road extension unfeasible, when presumably, it is permissible to extend commercial development from a node without a frontage road). There are other Plan policies regarding infill that have been interpreted to allow significant new commercial development within the Residential Land Use Category on the FLUM, especially on County Line Road.

The Plan's concept of directing commercial development into nodes and designated infill areas has been somewhat effective in directing about half of new commercial development into nodes (while protecting the utility of the highway transportation network). However, additional policy direction is needed for defining infill, for guiding infill commercial development, and for improved guidance of commercial land uses permitted in Residential areas on the FLUM. Application of the Plan's current policies has effectively allowed commercial development of parts of major highway corridors which are not clearly within commercial nodes (while substantial numbers of parcels and acres lie vacant within the nodes), especially within the Residential FLUM Category, and especially along the eastern half of County Line Road.

The analysis of development patterns for consistency with the Plan in Part II, Section F indicates that recent commercial rezonings on County Line Road have resulted in the BCC interpretation that the area is a commercial infill area, based in part on development activities on the Pasco County side. A series of development approvals in this area have

created a new strip commercial area not previously identified in the Plan. The creation of this new strip commercial area will substantially complicate and dramatically increase the cost of improving County Line Road to handle the traffic generated by residential developments approved in the area.

Continuing approval of commercial rezonings outside the generally defined nodes undermines the intent of the Plan to direct new commercial development into nodes. In addition, it discourages efficient utilization of already zoned, vacant, commercial property. It also seems unfair to create new commercially zoned property outside the nodes to compete in the marketplace with vacant parcels previously zoned and taxed as commercial by the County. Commercial property owners who have paid property taxes at commercial rates for years are often “rewarded” with lower priced competition created by rezoning of additional property, with no County emphasis on efficiently using property already approved for development, and little or no analysis of the need for additional commercial property.

Recommendations: The County should consider additional guidance for residential densities within the Residential Land Use Category on the Future Land Use Map.

Direct future urban growth to occur within the urban growth areas currently delineated in the Comprehensive Plan, or as located by the development of planning horizons related to capital improvements and water supply planning, until such time as the existing urban growth areas are predominantly developed and the population projections indicate a need for additional urban development areas.

Utilize the commercial node system for highway-dependent and most other intense commercial development, while limiting commercial development in the residential land use category to internal neighborhood commercial within residential developments, and commercial included as an integral component of high intensity residential, commercial, office, and multi-use development centers.

Develop additional policies defining and guiding commercial infill.

3. FUTURE USES OF MINED AREAS

Issue Sources: Planning staff, EAR Policy Advisory Committee.

Status of Current Plan:

The Mining Element provides guidance for managing mining land uses. The emphasis is directed to issues related to active mining, rather than to what happens after completion of mining. Objective 1.08D establishes guidelines for reclamation and requires final reclamation to be

completed within three years of cessation of mining. Goal 1.09 requires mining plans with a 25 year planning horizon, with mining permits to be approved every five years.

Discussion:

Limestone mining in Hernando County is past its production peak and will decline in both activity and economic importance within the next decade or two. The acreage included in the area designated for Mining on the Future Land Use is a substantial portion of the County and generally includes significant areas not actually disturbed by mining activities. As mining ends on these lands, alternative land uses will need to be considered. Where the limestone has been exposed by mining, storm water can easily enter the aquifer, presenting significant concerns about groundwater pollution as these lands transition to other land uses. Mining lands currently provide substantial public benefits in wildlife habitat and open space.

Recommendations:

Develop guidelines in the Comprehensive Plan for transition of mining lands to other land uses, with limitations on land uses to protect groundwater resources, and emphasis on protecting existing and potential public benefits in wildlife habitat and movement corridors, and open space.

4. OPEN SPACE

Issue Sources:

Planning survey; BCC community planning workshops; EAR Policy Advisory Committee.

Status of Current Plan:

The Plan places significant emphasis on open space as a recurring theme of conserving the natural environment as we grow and develop. The Future Land Use Element provides for open space criteria in Land Development Regulations to direct Planned Development Projects, Rural lands, and Residential development, with additional guidance for multi-family residential developments. Objective 1.01S provides for buffers between adjacent land uses and environmental and archaeological features. Goal 1.04 provides for level of service (LOS) standards for parks (which includes open space) and for impact fees to help distribute the capital costs for parks necessary to maintain LOS. Objective 1.07 includes special guidelines for the World Woods Planned Development District, including specific criteria for retention of large amounts of open space.

The Coastal Management Element (Goal 5.01) includes substantial direction for wetland protection, conservation area usage with forestry, recreation and open space given priority over urban development in conservation areas, and support for acquisition of environmentally important coastal lands. Objective 5.06B provides for maintenance of

salt marshes and open waters for the viewing enjoyment of residents and visitors, with continuing efforts to identify and maintain scenic vistas.

The Conservation Element provides for significant efforts that will result in the continued existence of open space, including protection of significant wildlife habitat areas (Goal 6.01), identification and preservation of environmentally sensitive lands and unique natural vegetation communities (Objective 6.01C), the establishment of conservation areas (Objective 6.01D), and the creation of natural greenways (Objective 6.01G).

The Recreation and Open Space Element (Goal 7.03) provides for an open space level of service standard of 2.00 acres per thousand peak (seasonal) population, which is half of the total LOS standard for parks and open space. Goal 7.04 provides policy guidance for maintaining the land holdings of state and federal agencies in the Withlacoochee State Forest, the Chinsegut Nature Center, the Chinsegut National Wildlife Refuge (NWR), and the Chassahowitzka NWR with limited development and as natural open areas for the continuing enjoyment of residents and visitors. This goal also encourages purchase of additional open space lands, requires public agencies and private enterprises alike to provide appropriate amounts of open space on developed sites for scenic enjoyment and the separation of uses, and requires the enactment of regulations to designate scenic road routes and mark them with signage.

The Capital Improvements Element (Policy 9.01E(1)) establishes the parks LOS standard for impact fees consistent with the LOS standard set in the Recreation and Open Space Element at 4.00 acres per thousand population, with 2.00 acres for user oriented parks and 2.00 acres for open space.

Discussion:

Public comments at the BCC's community planning workshops repeatedly urged protection of the natural environment that makes Hernando County special. This theme was strongly advocated by the EAR Policy Advisory Committee in its analysis of issues facing the County. While the definition of "open space" can vary greatly in the eye of the beholder, it seems that most citizens equate open space and the Nature Coast image primarily with:

1. scenic vistas, visible from the highways, which is the way most residents see their county;
2. natural vegetation, especially the impressive large trees of the Brooksville Ridge and the Big Hammock region of central Hernando County; and,

3. effective buffers, preferably vegetated with trees, and of adequate height and opacity to screen most development from view.

The Plan contains much policy guidance to provide for open space in development, protect natural vegetation, establish a list of canopy roads with guidance for their protection, and provide for identifying and maintaining scenic vistas of salt marshes, islands and open waters in the Coastal Zone. Consistent with direction in the Plan, the County has adopted a broad reaching landscaping ordinance with significant protection for large trees.

In contrast, the public perception seems to be that far too many trees are removed in most developments. While development clearly removes substantial amounts of vegetation, the landscaping regulations require tree replacement in addition to conservation of large trees. Although the initial impact of development contemplated and supported by the Plan will inevitably and significantly alter landscapes and habitats, the impacts will be mitigated over the long term by the County's regulatory efforts to create an urban forest of primarily native trees in coexistence with that development, and by the requirements to include open space within developments.

Hernando County enjoys the benefits of large areas of open space in the conservation areas in public and private ownership, with more than 27% of the County occupied by the Withlacoochee State Forest, the Chassahowitzka and Chinsegut National Wildlife Refuges, and environmentally sensitive lands owned by SWFWMD and the County. While these open space areas are large, they are located at the ends of the County where many citizens are unable to see and appreciate them in their daily lives.

Public opinion seems to favor additional open space in closer proximity to where people live and work in urban areas. Public concern over loss of open space to urbanization will probably intensify as vacant lots in existing developments are converted to their approved urban uses. It will be important for County government to manage growth to incorporate treescaping, buffers, and open space into new and existing developed areas to create the visual image of open space and green areas into urban areas. (See discussion of multi-purpose bike, pedestrian, greenway, and wildlife movement corridors in Bike and Pedestrian Facilities and Access in the Transportation Issue Section.)

The apparent public desire to continue to enjoy rural scenic vistas is particularly problematic for County government. The only certain way to preserve a scenic vista is to buy it. The large acreage and high costs involved make it unlikely that the public is willing to pay to keep the scenic vistas currently enjoyed. However, short of acquisition, the land

development regulatory authority provides the County with a powerful management tool. Where such scenic vistas are in Rural areas as designated on the FLUM, the Plan can certainly be written to keep them rural, yet allow limited development using permitted densities and clustering with buffers to screen development from highway views.

In substance, this scenario is provided in the Plan as currently written and can be continued by managing development consistent with the Plan, although additional policy guidance to place high priority on scenic vistas outside the Coastal Zone would provide stronger support for consideration of scenic vistas in making development decisions.

The Suncoast Parkway is currently being promoted for designation as a scenic corridor. Although the corridor includes the multi-use, recreational Suncoast Trail, it was not originally designed as a scenic corridor with additional right of way for buffering against non-scenic land uses, nor did the land acquisition include lands or easements necessary to preserve scenic vistas seen from the Parkway. The Suncoast Scenic Parkway Corridor Advocacy Group has requested comprehensive planning support from Hernando County in its efforts to have the Suncoast Parkway designated as a Florida Scenic Highway.

The Plan does not presently provide substantive guidance for designating and managing scenic corridors. Guidelines could be added for inclusion of definitions of scenic corridors, management objectives, guidelines for buffers, setbacks, and landscaping, protection of bordering native vegetation, and screening of urban land uses adjacent to scenic corridors.

Recommendations: The Plan should be modified to provide policy support for mechanisms to provide more open space in urban areas.

The Plan should be modified to provide support for a multi-purpose system of corridors to serve as bicycle and pedestrian travel ways, wildlife movement corridors, greenways, and open space. The Future Land Use, Transportation and Recreation Elements will be affected.

The Plan should be modified to provide guidance for designating scenic highways, and to provide guidance for setbacks, buffers, vegetation and definition and screening of non-scenic land uses.

5. ***PUBLIC FACILITY SITING***

Issue Sources: EAR Policy Advisory Committee.

Status of Current Plan:

The Future Land Use Element contains guidelines for locating and regulating public facilities in Objectives 1.01T and 1.01U. The Capital

Improvements Element provides guidelines for the funding and programming of capital facilities.

Discussion: The guidance for locating, regulating, planning, and funding public facilities currently included in the Plan is adequate.

Recommendations: No changes are needed or recommended.

6. SCHOOL SITING CRITERIA

Issue Sources: Planning survey; BCC community workshop; EAR Policy Advisory Committee.

Status of Current Plan:

The Future Land Use Element (Objective 1.01I) provides substantial guidance for locating schools and providing adequate infrastructure and services. The Recreation and Open Space Element (Objective 7.01D) provides support for coordination of Hernando County with other entities, including the Hernando County School District (HCSD), toward the joint use of recreation facilities. The Intergovernmental Coordination Element (Objective 8.01E) provides for maintaining formal coordination mechanisms with HCSD and Pasco-Hernando Community College to allow planning and utilization of shared facilities, and planning coordination on school siting, school planning, population projections, and comprehensive planning.

Discussion: The Comprehensive Plan includes certain criteria for locating schools, primarily based upon vehicular access, services and infrastructure, land use compatibility and site suitability. Within the last few months, Hernando County, the City of Brooksville, and HCSD the have entered into an interlocal agreement to improve communication and coordination on a range of issues, including school siting, population projections, and comprehensive planning. In addition, a representative of the HCSD has been appointed to the Planning & Zoning (P&Z) Commission as a nonvoting member and is afforded the opportunity (but not required) to comment on matters of interest to HCSD.

The current economic circumstances and rapid growth in student population necessitate HCSD seek the most economical way to provide student stations. The economically efficient approach tends to produce large facilities which generate significant impacts and limit the suitable locations for new schools, with the additional side effect of making schools too large to be good neighbors to residential communities, and too large to be contained within neighborhoods where they could be combined with county recreation facilities, libraries, and meeting facilities to serve as the centerpiece of the neighborhood. At present, when the P&Z Commission considers new residential developments, the

HCSD representative often indicates that new students to be generated can be accommodated in portable classrooms. Thus, the HCSD consistently indicates the ability to accommodate additional students generated by growth.

Recommendations: The Plan (Recreation & Open Space Element) should be modified to provide policy guidance for allocating a minimum percentage of funds for parks to be utilized for co-locating parks with schools for joint use.

The new interlocal agreement between the Hernando County School District, the City of Brooksville and the County should be utilized to develop neighborhood school definitions and siting standards for inclusion in the Plan. Neighborhood schools should be planned and constructed as neighborhood centers, including education, recreation, and community service functions, with meeting space for community organizations, recreation facilities that serve both school and neighborhood park functions, and other shared facilities, such as parking, roads, libraries, and offices for community service organizations.

The Plan should be amended to encourage planning for schools and parks to be located in close proximity to each other (Future Land Use and Recreation & Open Space Elements).

B. ENVIRONMENTAL ISSUES

1. GROUNDWATER QUALITY PROTECTION

Source of Issue: Planning survey; BCC community planning workshops; scoping meeting; EAR Policy Advisory Committee.

Status of Current Plan:

The Plan places substantial emphasis on groundwater protection issues. The Conservation Element (Objective 6.02A) provides for identification of aquifer quality, prime recharge areas, sinkholes and pollution sources, and provides for regulations to address land uses, stormwater management, solid waste disposal, sewage treatment, and well abandonment with the goal of protecting water supplies and preventing contamination of groundwater resources.

The Intergovernmental Coordination Element (Objective 8.01F) provides for coordination with SWFWMD in research studies, including groundwater protection efforts. The County has cooperated and continues to cooperate with SWFWMD on a number of projects including education efforts, floodplain coordination, and a series of

Water Resources Assessment Projects to model and evaluate groundwater quantity and the potential for saltwater intrusion.

The Drainage and Natural Groundwater Recharge Element (Goal 4.10) provides for protection of aquifer recharge quality and quantity, designation of Special Protection Areas for vulnerable features which have potential to discharge directly to the aquifer, and policy support for a groundwater protection ordinance (adopted in 1994).

The Potable Water Element (Goal 4.12) provides additional support for the groundwater protection ordinance, provides policy support for technical analysis, computer modeling, staff and equipment necessary to effectively implement and monitor compliance with the groundwater protection ordinance. In addition, policies provide for County groundwater quantity and quality monitoring to develop a database for understanding, managing and protecting groundwater resources, including monitoring wells near county boundaries and to monitor the saltwater interface both along the coast and at depth inland. The intent is to develop a County monitoring network and database to: supplement the monitoring efforts of other entities; to fill data gaps; to supplement and assist SWFWMD's establishment of Minimum Flows and Levels for surface and groundwaters; and, to provide data to assist in the protection of Hernando County's groundwater resources, both in terms of quality and to inhibit the diversion of groundwater outside the County to the detriment of the long term needs of present citizens and future growth.

Discussion:

While the County is charged under Florida Law, including Chapter 163, with a duty to protect water resources, and while the County has undertaken considerable efforts to fulfill that duty through land use regulations and research, the reality is that state agencies regulate many of the key components of groundwater protection. SWFWMD regulates groundwater pumpage and the design and construction of drainage and stormwater management facilities which greatly affect the location and quality of aquifer recharge.

The Florida Department of Environmental Regulation (DEP) regulates hazardous waste, wastewater disposal, including sewage treatment systems, disposal methods and locations. The Department of Health regulates septic systems and other public water systems. The areas under the regulatory jurisdiction of the state have a great deal of impact on groundwater quality, while the County regulates the land uses that cause the impacts.

The development patterns related to this issue in western Hernando County date from the 1960s, long before Hernando County's first Comprehensive Plan. However, in spite of considerable regulation by the state, the management of land uses by the County, and substantial public education efforts by the County and SWFWMD, nutrient levels

from inorganic fertilizer have continued to increase in groundwater in the western part of the County. Dissolved nitrates from inorganic fertilizers (determined by nitrogen isotope analysis) applied to lawns and golf courses have caused increased nutrient levels in groundwater discharging from many springs along Florida's west coast, including Weeki Wachee Spring in Hernando County.

Research has determined that the nutrients doing the damage to water quality and vegetation are inorganic and come from commercial fertilizers (SWFWMD, 1997). The increased nutrients in spring water have altered the vegetation (and dependent animals) in Weeki Wachee Spring and the river downstream. Other springs whose recharge areas have urbanized are experiencing the same fate. Phosphates are also increasing, and it may be likely that other contaminants are as well. While any increase in contaminants is cause for concern, the contamination observed to date does not approach levels indicative of human health issues. These are very sensitive systems being affected by very small changes which add up to significant cumulative impacts which are causing environmental degradation.

The application of fertilizers to landscaping in and of itself is not necessarily detrimental to groundwater resources. The combination of several factors has caused the increase in nutrient levels in groundwater in the aquifer beneath western Hernando County:

1. urban development in the springs recharge basins;
2. geology consisting of very well-drained sands directly above the aquifer with little or no confining layer allowing easy passage of nutrient-laden water and other contaminants into the aquifer;
3. substantial use of non-native vegetation and turf grasses in landscaping (requiring ample use of fertilizers, chemicals, and irrigation water for maintenance);
4. utilization of highly soluble inorganic fertilizers; and,
5. excessive landscape irrigation provides an overabundance of water to carry nutrients and other contaminants down into the aquifer.

This set of circumstances and factors does allow several approaches to minimize or eliminate future contamination of groundwater resources. Contamination can be reduced by:

1. minimizing inorganic fertilizer applications and promoting careful use of slow release, organic fertilizers;

2. avoiding excessive irrigation as a source of transport water for contaminants;
3. minimizing turf grasses and utilizing native vegetation which need little or no fertilizer, chemicals, or irrigation; and,
4. public education.

As long as current practices continue, groundwater contamination will continue and worsen. The contamination is long lasting, but not permanent. If the stream of nutrients and contaminants is stopped it will take ten to twenty years to flush from the aquifer.

Recommendations: It is recommended that the County recognize the increasing nutrient levels in coastal spring discharges and aggressively seek strategies to minimize the use of polluting fertilizers.

The County should continue to support the Florida Yards and Neighborhoods programs and initiate additional programs to educate the public about groundwater contamination and individual prevention strategies.

The County should continue to encourage developers, businesses, and residents to reduce the amount of turf and non-native landscaping in new and existing development, minimize the use of highly soluble fertilizers, increase requirements for use of native plants in turf and landscaping, and promote water conservation to minimize the opportunity for excess water to carry contaminants downward into the aquifer.

County government should lead by example in utilizing techniques and strategies at all county facilities to minimize nutrient and other contaminant contributions to groundwater contamination while facilitating high aquifer recharge as feasible.

The County should continue to cooperate with SWFWMD in monitoring efforts to track surface and groundwater quality.

Wastewater facilities should be designed with advanced wastewater treatment systems and existing plants should be retrofit to accommodate reuse.

The County should a develop scientific basis for determining the western limits of future water supply wells.

2. **GROUNDWATER QUANTITY**

Issue Sources: Planning survey; BCC community planning workshops; scoping meeting; EAR Policy Advisory Committee.

Status of Current Plan:

Most of the emphasis in the current Plan is on protecting groundwater quality rather than quantity. The Conservation Element (Objective 6.02A) provides for coordination with SWFWMD in the identification of aquifer quality and prime recharge areas and for the use of land development regulations to protect aquifer recharge areas and water supply withdrawal points by limiting incompatible land uses. Conservation Element Goal 6.03 provides for County cooperation with SWFWMD to establish minimum aquifer levels, utilization of the Water Resources Assessment Project findings to establish minimum flows for springs in the coastal zone, and coordination with the Withlacoochee Regional Water Supply Authority to ensure that human and natural resource needs can be met.

Discussion:

On a peninsula surrounded and underlain by water bearing rock, the quantity of water is not in question. The important consideration is the availability of potable water for use without costly treatment. Salt water can be desalinated, but energy costs to run the process are high, yielding more costly water. Other undesirable ingredients can be removed with treatments, which drive up the cost of providing water to the public. The issue is essentially the availability of adequate supplies of inexpensive, clean water to support present and future Hernando County needs of people and natural systems.

In a state where some areas have less clean, fresh water than people there want to consume, while other areas have abundances of water, the regional disparities have generated and will continue to generate discussions of moving water from areas that seemingly have plenty to areas of demand. Residents located in areas of adequate water supply are generally not in favor of water transfers that might degrade the environment and/or limit the supply available for their own future economic and population growth.

With concern about the adequacy of groundwater to meet its long term needs and with a wariness that other communities are likely to covet the apparent abundance of high quality groundwater, Hernando County conducted (with cooperation from the Withlacoochee Regional Water Supply Authority and SWFWMD) two Water Resources Assessment Projects (WRAP). The WRAP produced a computer model to greatly improve our understanding of the Floridian Aquifer beneath the County and assess groundwater pumpage, to assess the capability of groundwater to serve growth needs for the long term while protecting the

environment and natural systems, and to provide guidance for planning and infrastructure including wellfield development.

The WRAP modeling has indicated that groundwater is adequate to provide for Hernando County's projected needs for the next 50 years, assuming continuation of historic rainfall patterns. However, the highly permeable soils and general absence of continuous confining layers in much of the County make the risk of groundwater contamination an ever-present threat. While EAR public participation has expressed ample concern about the availability of adequate water supplies to meet present and future needs, the long term challenge for Hernando County will almost certainly be ensuring that surface land uses do not contaminate the groundwater beneath.

Recommendations:

The County should continue efforts to identify and protect important aquifer recharge areas, both in terms of recharge quantity and quality.

The County should continue to aggressively seek to protect groundwater from contamination.

The County should strive to utilize reuse water for irrigation wherever economically practical.

The County should review its regulations regarding disposal of wastewater treatment plant residual sludge, industrial residual sludge, and other similar waste products.

As part of the EAR based comprehensive plan amendments, it will be necessary to incorporate into the Plan a work plan, covering at least a ten (10) year planning period, for building water supply facilities that are identified in the element as necessary to serve existing and new development and for which the County is responsible (Chapter 163.3177(6)(c) F.S.).

Utilize the WRAP computer model to evaluate supply and perform periodic audits to maintain calibration of the model.

3. WATER USE PATTERNS

Issue Sources:

Planning survey; planning staff; BCC community workshops; and EAR Policy Advisory Committee.

Status of Current Plan:

Potable water conservation policy is adequately expressed in the Potable Water Element's Goal 4.15 Maximize Potable Water Conservation. Policies provide for a variety of strategies to reduce potable water

consumption, reduce demand, and discourage the use of potable water for irrigation.

Discussion:

Seasonal peaks in demand due to irrigation present serious challenges to public water supply in Hernando County. State regulations prevent the construction of public supply systems with adequate capacity to meet irrigation demand in addition to demand for potable water. However, many residents and businesses utilize the potable supply system as a source of water for irrigating turf and shrubbery. In the spring dry season, irrigation demand (ignored by design, but real enough) causes service pressures to drop on lawn watering days, resulting in customer inconvenience and complaints to the County who owns the systems.

Hernando County currently employs a variety of strategies to encourage conservation and discourage excessive use of potable water for irrigation. Building codes require water efficient design features, like low-flow toilets and rain sensors on irrigation systems. Utility planning incorporates the eventual feasibility of producing reuse water for irrigation, thereby reducing irrigation demand on potable systems. Potable water rates are structured so that increasing use results in increasing rates, providing a financial disincentive for over consumption. The Landscaping Ordinance requires the use of some drought resistant vegetation and an irrigation plan with areas of minimized irrigation to reduce irrigation demand on potable systems. (See next issue related to Level of Service for Potable Water).

Recommendations:

Hernando County should continue to utilize a variety of strategies (utility rate structures, watering restrictions, landscaping regulations, wastewater reuse, and others, as appropriate) to manage water use patterns, especially irrigation demands on potable water supply systems.

Hernando County should continue to discourage the use of potable water for irrigation and should encourage utilization of reuse water to the greatest practical extent.

4. LEVEL OF SERVICE FOR POTABLE WATER

Issue Sources:

Planning staff.

Status of Current Plan:

The Potable Water Element (Objective 4.14A) provides a level of service (LOS) standard of 250 gallons per equivalent residential unit per day. This standard includes both residential and nonresidential use combined, but does not distinguish between potable needs and use of potable water for irrigation.

Discussion: The LOS standard in the Plan is not adequate for demands placed on the County's potable water supply systems by consumers. The Hernando County Utilities Department has recently raised its LOS standard to 350 gallons per day per equivalent residential unit to more realistically reflect actual demand on its systems.

Recommendations: The LOS standard for potable water supply systems in the Plan needs to be revised to reflect actual demands placed on County systems.

An LOS standard for residential use should be developed separate from nonresidential uses and should include a realistic component for irrigation.

Hernando County should place greater emphasis on planning for reuse water for irrigation in new developments with potable water supply systems.

5. ***SWFWMD's MINIMUM FLOWS AND LEVELS***

Issue Sources: Planning staff; EAR Policy Advisory Committee.

Status of Current Plan:

The Conservation Element in Goal 6.03, Policies 6.03A(1) and (2), and 6.03B(2) provides for cooperation with SWFWMD to establish minimum levels for surface water features, aquifer levels, and minimum flows for coastal springs.

Discussion: SWFWMD has several planned work programs to set Minimum Flows and Levels (MFLs) for selected lakes (Lake Hancock, Spring Lake, Mountain Lake, Neff Lake, Hunters Lake, Lake Lindsey, and Weeki Wachee Prairie/Lake Theresa) the Withlacoochee River, Weeki Wachee Spring, and the Floridian aquifer. Setting these levels is an important step in establishing management goals for water bodies and groundwater in Hernando County. MFLs identify minimum water levels needed to support natural systems, allow certain recreational activities, and minimize flooding of existing development. Below these levels, man's impacts must be modified to protect natural systems from damage.

The County has some concern over the anticipated length of time before all scheduled MFLs are set by SWFWMD. In the case of the Withlacoochee River (currently scheduled for 2011), many land use decisions could be made long before MFLs are established to indicate the capability of the aquifer around the river to support groundwater withdrawals without draining flow from the river.

Recommendations: Hernando County should continue to encourage SWFWMD to set MFLs for surface water bodies, the aquifer, and Hernando County's coastal springs as soon as possible.

Hernando County should set an example by establishing its own criteria that are more protective of water resources than MFLs and by initiating efforts to reduce water use at County facilities and throughout the community when those criteria indicate.

6. ***DEVELOPMENT IN CLOSED DRAINAGE BASINS***

Issue Sources: Planning survey; BCC community workshops; planning staff; and EAR Policy Advisory Committee.

Status of Current Plan:

The Drainage and Natural Groundwater Aquifer Recharge Element and the Conservation Element provide policies for protection of groundwater and aquifer recharge, for management of stormwater to protect groundwater, and for the designation of Special Protection Areas around sinkholes and direct recharge points. However, there is currently no guidance for development in closed drainage basins.

Discussion:

Closed drainage basins are land areas where all surface water drains to a low place within the area, rather than draining to a surface drainage system like a creek or river. In a closed basin the low area becomes a lake or pond unless the water can drain into the ground by seeping through sediments or into a sinkhole. Closed basins often contribute substantial amounts of water to recharging the aquifer which provides our potable water. Development in closed basins can generate pollutants which can be carried by storm water into the lake, causing surface water pollution, or into the groundwater recharge point in the bottom of the basin, or carried by irrigation water through sediments and into the aquifer. Much of Hernando County is comprised of closed drainage basins, unlike other areas of Florida which are drained by creeks and rivers. An example of the kind of problem that can occur is the pollution of Weeki Wachee Spring water by nutrients from fertilizer used on the developed properties in the recharge basin that feeds the spring.

Recommendations: The County should develop guidelines for addressing the particular groundwater quality protection requirements for development in closed drainage basins. The guidelines should recognize and address different kinds of closed basins (open sinkhole drainage/recharge like Peck Sink and Blue Sink, drainage/recharge through surface soils like most of the Spring Hill area, or drainage to surface water bodies or wetlands). The guidelines and best management practices should seek to minimize impervious surfaces, utilize dispersed treatment designs or other low impact stormwater management systems, control agricultural runoff, and

protect groundwater quality where development occurs in closed drainage basins.

The County should require an environmentally sound design and management program for golf courses, such as the Audubon Signature or equivalent program.

7. DEVELOPMENT IN KARST AREAS

Issue Sources: Planning staff; EAR Policy Advisory Committee.

Status of Current Plan:

The current Plan provides policy guidance for protecting aquifer recharge and groundwater quality, but does not specifically address the particular risks and potential public costs associated with development in karst areas (areas affected by underground limestone dissolution and/or collapse).

Discussion:

Development presents special concerns when it occurs in areas where active geological processes are causing the ground surface to settle or collapse into voids in underground limestone. These areas often allow rapid transport of stormwater and contaminants into groundwater, making placement of stormwater retention facilities an important consideration if groundwater quality is to be protected. In addition, the extra weight and increased water movement associated with stormwater retention ponds can facilitate sinkhole collapse or opening of conduits which allow rapid infiltration of stormwater and pollutants into the aquifer.

In addition to the potential for groundwater contamination, there can be substantial public expense to repair stormwater management facilities damaged by karst activity, since such facilities are usually transferred to public ownership in the development process. Roads built over karst features can be similarly affected, with resulting large public repair costs for sinkhole or settling damage.

Recommendations:

The County should require development review processes to include geophysical investigations before construction of infrastructure to be dedicated to the public. The geotechnical investigations must be sufficient to identify karst features which could affect the infrastructure and developers should be held financially responsible for damage caused by karst activity within a defined time period following dedication to the public.

The County should seek to identify differences in karst probabilities for different geographic areas, and should evaluate lower residential

densities and development intensities for areas with high probabilities for karst activity.

The Plan should be amended to support environmentally sensitive lands identification of important karst areas (areas with significant sinkhole aquifer recharge, open conduits, or other important features).

8. INTEGRITY OF WILDLIFE HABITATS AND NATURAL COMMUNITIES

Issue Sources: Planning survey; BCC community planning workshops; EAR Policy Advisory Committee.

Status of Current Plan:

The Conservation Element in Goal 6.01 entitled “Protect Wildlife and Conserve, Appropriately Use, and Protect Wildlife Habitats” provides for identification and mapping of prime habitat areas of wildlife species of special concern, threatened species, and endangered species (Objective 6.01A). Objective 6.01C provides for measures to identify and facilitate public acquisition of environmentally sensitive lands and unique natural vegetation communities.

Objective 6.01G provides policies for: continuing encouragement of appropriate agencies and private organizations in their development or preservation of natural area greenways which may function as wildlife corridors and/or recreation areas; meeting the passive recreational needs of the County while preserving the County’s natural vegetation; preventing fragmentation of wildlife corridors, where possible; and, continued preservation of wildlife corridors and natural areas within development projects. Goal 6.05 provides for classifications and protections for wetlands. Finally, Goal 6.08 (entitled “Growth In Harmony With Natural Conditions”) makes it County policy to coordinate with appropriate agencies to protect habitat important to threatened or endangered species through the development review process.

Discussion: Healthy natural communities are those large enough to meet the needs of the animals and plants that live there. In addition, healthy natural communities are connected to other communities which allows interactions and mobility between communities. However, as development of the County takes place, healthy natural communities tend to be reduced in size and increasingly separated from other natural communities, usually with adverse implications for animals and plants.

Over time, the County may lose substantial portions of its remaining healthy natural habitat, leaving pockets which are too small to support some animals and isolated from other communities so that essential

interactions and mobility are minimized or effectively prevented. Hernando County is currently cooperating with SWFWMD to establish a wildlife corridor connecting the Chassahowitzka conservation areas to the Withlacoochee State Forest. Hernando County continues a program for acquisition of environmentally sensitive lands funded by a voter-approved referendum to levy an ad valorem tax of one-tenth mil.

In the transportation issues section of this report there is a discussion of planning a better developed (than the current Plan) network of multi-purpose corridors for bicycle, pedestrian, and greenway purposes. Such corridors can also serve as travel paths for many (but by no means all) animals and plants that otherwise could not negotiate a sea of urbanization between isolated conservation areas.

As the County continues to urbanize, development will increase the number of people living in the vicinity of most conservation areas. Some of the management practices necessary to maintain and protect conservation areas can be very disruptive to some land uses. Maintenance burning of timberlands is absolutely necessary in most Florida upland ecosystems, but the smoke can be dangerous for elderly citizens and others with respiratory difficulties, and can cause considerable annoyance and discontent in residential areas. Timber harvesting and related activities can be annoying and disturbing to nearby residents. It will be important to consider in development proposals any potential land use conflicts in the development review process and to be vigilant to protect the ability of conservation land manages to utilize best management practices in caring for our natural assets.

In the sandhills currently undergoing the majority of development in Hernando County, wetlands and surface water are scarce. The scarcity of these habitats makes even the smallest isolated seasonal and ephemeral wetlands critical habitats for some species, particularly amphibians. These wetlands are typically not protected by DEP and are often destroyed without mitigation in development.

Recommendations: The County should make it policy to strive to connect all critical habitats with wildlife travel corridors. Critical habitats should be identified, mapped, and potential corridors evaluated, with strategies for corridor creation/conservation identified.

The County should establish policy guidelines for buffers and separations to minimize land use conflicts between conservation lands and surrounding land uses. Residential densities should be kept low (one unit per ten acres) and uses sensitive to smoke (schools, hospitals, medical facilities, places of public assembly, elderly care facilities, and similar facilities which congregate people) should be adequately separated from conservation lands. Where low density residential or

other development does occur in close proximity to conservation areas, property purchase notifications should be considered to advise purchasers of periodic smoke episodes due to maintenance burning on nearby conservation lands.

In order to buffer conservation lands from urbanization, several strategies are recommended. New conservation acquisitions should be large enough to include their own buffers, where possible. New development adjacent to existing conservation lands should be low intensity and required to include buffers to protect conservation lands from land use conflicts, with cluster development an option to improve buffering and land use compatibility. Agricultural land uses should be considered as potential buffer uses around conservation lands.

The County should strive to identify critical habitats on properties proposed for development as early as possible in the development review process, and should require conservation of any critical habitats which occur on site.

The County should increase its environmental education efforts to inform citizens of the existence and significance to wildlife habitats and natural communities.

The County should pursue the Little Withlacoochee Corridor connection Project to link the Withlacoochee State Forest units.

The County should develop guidelines for protecting those isolated and ephemeral wetlands that serve as critical habitats.

9. *AIR QUALITY*

Issue Sources: EAR Policy Advisory Committee

Status of Current Plan: The Conservation Element (Goal 6.04) provides for county procedures for reviewing and mitigating potential air pollution sources.

Discussion: At present, there are no identified problems with air quality in Hernando County. Three particulate monitoring stations are currently operated by private industry to monitor PM10 and PM2.5 with quarterly reports to the County. To date the reports have indicated no significant problems with particulates. In 1997, Hernando County completed a sampling of sediments in water bodies with analysis for a broad range of chemical contaminants that could settle from the air into water bodies, with no problems found. A sulphur dioxide monitoring station near Brooksville was discontinued by the Florida Department of Environmental

Protection (DEP) due to consistently clean samples which did not justify the continued expense of monitoring and station maintenance.

The County continues to evaluate air quality monitoring conducted in the region by other agencies for indications of problems. Continuing efforts focus on the contaminants that appear most likely to become problematic. As the number of automobiles on the roads and congestion increases and more intersections are constructed, it seems plausible that vehicle emissions may become an air quality issue in some locations during atmospheric inversion episodes. Other land uses (certain industrial, agricultural, and waste handling activities) may also present air quality issues.

Recommendations: The Plan as currently written is adequate and no changes are recommended.

10. LIGHT POLLUTION

Issue Sources: EAR Policy Advisory Committee

Status of Current Plan:

The Future Land Use Element in Policy 1.01L(2) provides for including specific criteria for commercial uses in the Land Development Regulations. Policy 1.01L(5) provides that where commercial development is proximate to residential uses, anticipated negative impacts (including light, among others) shall be mitigated to the extent practical by the commercial development. Land Development Regulations currently address lighting and light impacts.

Discussion: As additional development takes place, outdoor lighting will likely increase. Neighbors can be affected and the darkness of the night and the night sky will be affected. Current commercial design standards regulate lighting to minimize adverse effects off site.

Recommendations: More specific policy guidance for controlling light pollution is recommended. LDRs should strive to limit light escaping from premises in all land use categories with consideration of cost and security issues. Standards should require reductions in after hours lighting for nonresidential uses and reductions on outdoor lighting in residential areas.

11. NOISE POLLUTION

Issue Sources: EAR Policy Advisory Committee

Status of Current**Plan:**

The Future Land Use Element addresses noise regulation in several objectives and policies. Objective 1.01J entitled “Noise Regulation and Standards by Receiving Land Use” provides policy guidelines for a Noise Control Ordinance, which has been adopted. Policy 1.01L(6) provides for commercial development regulations to mitigate noise impacts (among others) of commercial development on proximate residential uses. Policy 1.01R(2) provides for LDRs to include performance standards for a range of issues, including noise.

Discussion:

Noise can be a troublesome issue where highways adjoin residential neighborhoods and when commercial or industrial uses adjoin residential neighborhoods. Noise can have adverse impacts on wildlife populations where human activities are proximate to conservation areas. Hernando County currently has a noise ordinance. The Zoning Ordinance requires buffers to address noise impacts between land uses. The volume of sound is often less problematic than sounds which are unusual, unexpected, and/or intermittent and perceived as annoying or disturbing rather than excessively loud.

Recommendations:

Additional policy is needed to address regulation of noise adjacent to conservation areas and for consideration of noise when making development decisions for parcels near conservation areas.

12. URBAN VEGETATION

Issue Sources:

BCC community planning workshops; EAR Policy Advisory Committee.

Status of Current**Plan:**

The Current Plan addresses urban vegetation in several places. The Future Land Use Element (Policy 1.01L(4)) requires the Landscape Ordinance to require buffering of the negative visual impacts of commercial development with techniques to include landscaping, screening, planting of trees and where possible, the preservation of native vegetation. Policy 1.01R(2) provides that LDRs may cover landscaping, among others. Objective 1.01S (Buffers) provides for the promulgation of guidelines to be utilized in the establishment of buffers, including lists of acceptable plants, and requires that buffers shall consist of appropriate plant species for the purpose of the buffer, using native plant species whenever practical.

The Conservation Element (Objective 6.01F) provides guidance for protection of native plant species. Policy 6.01F(7) prohibits the planting of certain noxious exotic plants to prevent their spread. Policies 6.01F(8 and 9) provide for conservation of trees and native vegetation and the use of xeriscape principles for landscaping of new, restored or retrofitted development projects and public lands and right-of-way.

The western part of the county consists of well-drained sands where xeriscaping principles can reduce irrigation water demand, reduce chemical and fertilizer use, and minimize the potential for groundwater contamination. Objective 6.06D provides for the Landscape Ordinance to protect trees of certain diameter and require minimum tree retention or reestablishment criteria. In addition, the objective provides for flexibility in land use standards where developers are attempting to preserve natural tree areas, and for the County to develop a program to plant and manage trees along public streets where practical.

Discussion: While the current Plan clearly establishes policy to protect and conserve native vegetation in urban areas and Hernando County has a Landscaping Ordinance, the reality is that most trees and native vegetation may be removed in clearing for development, with basic requirements for replacement with small trees. The public perception (based on comments received from EAR public participation) is that current efforts are not effective in preserving the vegetation that substantially symbolizes the Nature Coast image used to promote and identify the County.

Recommendations: The Plan should be revised to require conservation of more native vegetation on development sites and more native vegetation should be required in new landscaping.

13. LEVELS OF SERVICE IN FLOODPLAINS

Issue Sources: Planning Staff

Status of Current Plan:

The Plan currently includes several references to LOS standards and consideration of the special consequences of development in floodplains. Goal 1.04 in the Future Land Use Element provides for Land Use and Public Facilities Levels of Service Standards to be maintained in accommodating new development.

The Coastal Management Element in Policy 5.01B(4) requires development approvals in flood prone areas to be conditioned upon the ability of evacuation routes to provide safe exodus for all potential residents of existing development within the flood prone area and the proposed new development. Policy 5.02A(2) prohibits construction of new county funded public facilities in the V-Zone on the adopted Flood Insurance Rate Map unless the facility is for recreation, public access or resource restoration.

Policy 5.02B(5) limits construction of county funded public facilities within the coastal high hazard area unless necessary for public health, safety, resource restoration or for the restoration of existing development

following a storm event. Policy 5.02B(6) requires the County to maintain capacity on all identified evacuation routes so that evacuation clearance times can be maintained. Goal 5.03 is to “Maintain the efficient functioning of transportation corridors within the coastal zone,” with policies for analyzing transportation planning, developing the capability to evacuate all residents before roads become impassable or within eight (8) hours or less, and evaluating hurricane evacuation capacity before allowing new development. Objective 5.04A states: “Hernando County shall discourage the development of lands in the V-Zone within the designated Coastal High-Hazard Area by eliminating all direct and indirect county subsidies to new development.”

Policy 5.04A(1) requires each new development in the designated V-Zone to provide and maintain its own infrastructure concurrent with development, and Policy 5.04A(2) prohibits the County from accepting for public ownership or maintenance any roads, drainage, sewer or water infrastructure of new development in the designated V-Zone. Policy 5.04A(3) forbids County construction of new transportation corridors in the V-Zone except to provide necessary hurricane evacuation.

In the Conservation Element, Objective 6.02C is to “Protect the quality and quantity of waters which flow into estuaries.” Policy 6.02C(3) states: “Limit the use of septic systems in areas subject to periodic flooding.” Policy 6.08A(2) requires less intensive development in flood-prone areas. Policy 6.08C(3) requires the flood plain ordinance to minimize development impact on flood plains, including storage capacity and increase or decrease in the natural flow of floodwater.

Discussion:

Where flood prone areas are developed, there are significant financial implications for County government and taxpayers. Floodplain management regulations require new buildings to be constructed with their floor levels high enough to avoid flooding by all but the highest floods. However, development requires infrastructure, such as roads, drainage facilities, and utilities which are often built at or below ground level where they are vulnerable to flood waters. Flooding often damages such infrastructure which is usually repaired at public expense.

In addition, disaster relief efforts can generate substantial public expenses. Current comprehensive plan policies discourage additional development in floodplains, but infill in existing developments will continue to take place. Level of Service Standards are utilized to measure adequacy of available services and maintenance efforts. Hernando County will develop Level of Service Standards as part of a Memorandum of Understanding on Flood Protection Coordination between Hernando County and SWFWMD.

Recommendations:

While the current Plan includes substantial guidance for limited development and public facilities in flood plains, especially in the

Coastal Zone, Hernando County should develop LOS standards for floodplains to address roads, potable water, wastewater disposal, drainage, other public infrastructure and services, and lower development intensities, and taking into consideration the different characteristics of riverine flood plains, coastal storm surge floodplains, and closed drainage basins.

C. INTERGOVERNMENTAL COORDINATION ISSUES

1. JOINT PLANNING WITH CITY OF BROOKSVILLE

Issue Sources: Scoping meeting; BCC community planning workshops; EAR Policy Advisory Committee; Planning Staff.

Status of Current Plan:

Objective 8.01C provides for County coordination mechanisms with the Cities of Brooksville and Weeki Wachee and for amending existing interlocal agreements and/or creating new ones as needed to facilitate improved coordination. The policies listed under this objective provide for a range of communication and coordination mechanisms between the County and the Cities, including interlocal agreements, review and comment opportunities, joint planning efforts, and staff level coordinating mechanisms.

Discussion: Recent relations between the County and the City of Brooksville have been difficult, primarily with respect to coordinating development matters related to infrastructure. The County and City have recently entered into joint planning interlocal agreements as part of a settlement process related to the City's annexation of lands for development. It is hoped that improved relations, joint infrastructure planning, and cooperative growth management will result from this agreement in the future. The policies in the current Plan provide adequate support for joint planning efforts with the City of Brooksville.

Recommendations: The referenced interlocal agreements with the City were executed in November 2003 and, therefore, are too new to effectively evaluate as to whether additional changes are needed. Accordingly, no changes to these Agreements or the Plan are recommended at this time.

2. COORDINATION WITH HERNANDO COUNTY SCHOOL BOARD REGARDING SCHOOL MATTERS

Issue Sources: Scoping meeting, BCC community planning workshops, EAR Policy Advisory Committee, Planning Staff, Chapter 163 F.S.

Status of Current**Plan:**

Objective 1.01I and its policy cluster in the Future Land Use Element establish standards for the location of future school sites. In addition, Policy 1.01I(14) requires annual coordination of the development of the respective capital improvement programs of the County and HCSD.

Objective 8.01E of the Intergovernmental Coordination Element provides for maintaining formal coordination mechanisms with the Hernando County School Board (HCSD) and Pasco-Hernando Community College (PHCC). The underlying policies provide for staff level contacts, establishment of a coordination process to plan a utilize shared facilities, identification (by HCSD) and protection of potential school sites during the development review process, coordination to obtain school sites during DRI reviews, sharing of population projections and any other requested data within the County's ability to provide, and creation of a Joint Planning Committee to provide for increased participation in the County Comprehensive Plan review process, school planning process, school siting, and cooperative planning efforts.

In the Recreation & Open Space Element, Objective 7.01D provides for the coordination of County public recreation facilities with those provided by other governmental entities (and the private sector), with Policy 7.01D(5) stating the County should enter into an intergovernmental agreement with HCSD and PHCC for the joint use of school recreation facilities. Policy 7.02C(1) requires cooperation with HCSD and PHCC. to encourage the placement of user-oriented recreation facilities on existing and new school sites.

Discussion:

The County, the City of Brooksville, and the Hernando County School Board completed an interlocal agreement in 2003 to improve coordination with respect to school siting and other issues of mutual interest. A School District representative sits as a nonvoting member of the Planning and Zoning Commission to provide comment and input on matters of interest to schools. Although school overcrowding is an ever present issue in Hernando County, HCSD routinely comments during residential development review processes that the school system has the capacity to provide student stations for the students added by new development.

Recommendations:

The Plan as currently written provides for adequate communication and cooperation between the County and the HCSD. No changes are recommended.

3. ***SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD)***

Source of Issue: EAR Policy Advisory Committee.

Status of Current Plan:

The Conservation Element provides several policies directing coordination and cooperation with SWFWMD. Policy 6.02A(1) provides for coordination with SWFWMD and the Florida Department of Environmental Protection (DEP) in the identification of aquifer quality, prime recharge areas, sinkholes, and pollution sources. Objective 6.03A requires the County to work with SWFWMD to establish Minimum Flows and Levels. Policy 6.05A(7) requires County coordination with SWFWMD (and other agencies) to identify and regulate wetland areas under their jurisdiction. (See related discussion on Minimum Flows and Levels in the Environmental Issues section.)

The Intergovernmental Coordination Element in Objective 8.01F provides for formal coordination mechanisms with SWFWMD. Underlying policies with this objective provide for cooperation in research studies on localized drainage problems, groundwater protection, water conservation, and acquisition of environmentally sensitive lands, including lands adjacent to the Weeki Wachee and Withlacoochee Rivers.

Discussion:

The County and SWFWMD have cooperated on many issues and projects with several cooperative efforts ongoing. A Joint Issue Paper on Hernando County Flooding (cooperatively authored by SWFWMD and County staffs) in response to the El Nino flooding events of 1997-1998 has evolved into formal flood protection coordination between SWFWMD and the County, with identification of responsibilities, projects, technical aspects, and funding for projects.

The County and SWFWMD are cooperating on a continuing series of Hernando County Water Resource Assessment Projects. The two entities have worked together to acquire environmentally sensitive lands of mutual interest. Additional cooperative efforts are underway and it is expected there will be numerous others in the future.

Recommendations:

The current Plan provides for substantial and broad cooperation between the County and SWFWMD. A wide range of cooperative and communicative efforts are ongoing and the current Plan is considered adequate to support future cooperation. No changes are recommended at this time.

4. WITHLACOOCHEE REGIONAL PLANNING COUNCIL (WRPC)

Source of Issue: EAR Policy Advisory Committee.

Status of Current Plan:

In the Intergovernmental Coordination Element, Policy 8.01A(3) provides for establishment of formal liaison processes for ongoing coordination with the WRPC. Policy 8.01A(4) requires the County to utilize the formal Dispute Resolution Process provided by the WRPC for resolving conflicts with other local governments that cannot be solved throughout direct intergovernmental coordination.

Discussion: Hernando County is currently a member of the WRPC and maintains effective communication with the WRPC staff.

Recommendations: The Plan as currently written is adequate and no changes are recommended.

5. ADJACENT COUNTIES

Issue Sources: EAR Policy Advisory Committee

Status of Current Plan:

The Intergovernmental Coordination Element in Objective 8.01D and its policies provide for staff level coordination mechanisms and establishment of reciprocal agreements to allow a process of review and comment for issues of mutual concern.

Discussion: Hernando County has established effective communication mechanisms with adjoining counties to address issues of mutual concern.

Recommendations: The Plan as currently written is adequate and no changes are recommended.

6. CHANGES IN STATE STATUTES, RULES, AND PLANS, AND CHANGES IN REGIONAL PLANS

Issue Sources: Section 163.3191(1)(a), F.S.

Status of Current Plan:

Numerous changes have been made to state growth management statutes and rules (Chapter 163 F.S., Rule 9J-5, and Rule 9J-11, F.A.C.), and the State Comprehensive Plan (Chapter 187, F.S.). A list of the various changes and discussion of their relationship to the Plan are included in Part V of this Report.

Discussion: Hernando County has regarded the comprehensive planning process as ongoing and has regularly updated its Plan. Most of the changes identified in Part V have been addressed in previous amendments to the Plan. The changes which will need to be addressed in the EAR based amendments are listed below.

Recommendations: A water supply work plan covering at least a ten (10) year planning period must be incorporated into the Potable Water Element. It must plan for building County water supply facilities that are identified in the element as necessary to serve existing and new development. Section 163.3177(6)(c). Plan amendments to incorporate a 10-year water supply work plan in the Potable Water Element will be included in the EAR based amendments.

The Conservation Element must address the County's current and projected water needs and sources for at least a ten year period. In the absence of a SWFWMD Regional Water Supply Plan (not yet adopted for Hernando County), the assessment of current and projected water needs and sources for at least a 10-year period must consider the district water management plan approved pursuant to Section 373.036(2) F.S. Section 163.3177(6)(d). Plan amendments to the Conservation Element will be included in the EAR based amendments to address the 10-year water supply work plan's needs and sources considering SWFWMD's regional water management plan approved pursuant to Section 373.036(2) F.S.

The Intergovernmental Coordination Element must show the relationships and state the principles and guidelines to be used in accomplishing coordination with SWFWMD's Regional Water Supply Plan (not yet adopted for Hernando County). Section 163.3177(6)(h), F.S. Plan amendments to the Intergovernmental Coordination element will be included in the EAR based amendments to show the relationships and stating principles and guidelines to be used in coordinating with SWFWMD's regional water management plan and for a potential future regional water supply plan covering Hernando County.

The Transportation Element must contain one or more policies which address implementation activities for coordinated intermodal management of surface and water transportation within ports, airports, and related facilities. Rule 9J-5.019(4)(c)20, F.A.C. Plan amendments to the Transportation Element to add one or more policies to coordinate multimodal management of surface and water transportation within ports, airports, and related facilities will be included in the EAR based amendments.

The Transportation Element must contain one or more policies which address implementation activities for protection of ports, airports, or related facilities from the encroachment of incompatible land uses. Rule

9J-5.019(4)(c)21, F.A.C. Plan amendments to the Transportation Element to add one or more policies to protect port and airport and related facilities from encroachment of incompatible land uses will be included in the EAR based amendments.

D. ECONOMIC ISSUES

1. FINANCIAL COSTS AND BENEFITS OF VARIOUS TYPES AND INTENSITIES OF LAND USES

Issue Sources: Planning staff; BCC community planning workshops; EAR Policy Advisory Committee.

Status of Current Plan:

The Future Land Use Element in Goals 1.03 and 1.04 provides guidance for the subdivision of land, recognizes that facilities must be expanded to maintain level of service standards as growth occurs, provides for impact fees, requires concurrency, and establishes level of service standards, all with the intent to provide infrastructure and services for growth in an environmentally and fiscally responsible manner, and to require new development to pay its fair and proportionate share of the cost for the necessary public facilities.

The Transportation Element provides for roads level of service standards (Goal 2.04) and for roads impact fees (Goal 2.05). Policy 2.05 requires new development to provide its proportionate share of road rights-of-way and other road, site-related and intersection improvements necessary to maintain level of service and other Plan standards.

The Sanitary Sewer Element (Goal 4.04) provides for sanitary sewer impact fees and requires land development to bear a proportionate share of the cost of new or expanded sewer capital facilities required by such development.

The Potable Water Element (Goal 4.16) provides for impact fees and requires land development to bear its proportionate share of new or expanded potable water capital facilities required by such development.

The Coastal Management Element (Goal 5.04, Objectives 5.04A and 5.04B) requires adequate infrastructure designed to resist flood damage, seeks to eliminate all direct and indirect county subsidies to new development in V-Zone areas of the Coastal High Hazard Area, and aims to limit public expenditures in the Coastal High Hazard Areas.

The Recreation and Open Space Element (Objective 7.03B) requires land development to bear its proportionate share of the cost of providing

new or expanded park facilities required by such development, and provides for parks impact fees.

Discussion:

The long term financial health of Hernando County government will be affected by the types and intensities of land uses which develop in the County. Both revenues and costs to the County vary from one land use to another, and within the same land use due largely to differences in taxable value and demand for services. Ideally, Hernando County would be blessed with a mixture of land uses which would result in a balance between revenues and the costs of providing services desired by the citizens, and yield a stable and dependable revenue source which would allow sound, long term fiscal planning. However, a balanced mixture of land uses with favorable, dependable revenue for county government is not likely to occur without planning and influence by County government.

While County government has almost no authority to direct a marketplace dictated primarily by supply and demand in response to consumer preferences, there is clearly opportunity to plan, encourage, influence, and support land uses that provide favorable revenue/cost scenarios for the County. One of the challenges is determining the true picture of total service costs versus total combined revenues for each type and intensity of land use. Yet without such information, it is not possible to accurately calculate the financial impacts of different land uses, and it is unclear what mixture of land uses will provide long term financial stability for County government.

It is urgent that Hernando County develop a better understanding of the long term financial impacts of various types, intensities, and locations of development. With an accurate evaluation of fiscal impacts, both capital and operational, it becomes possible to calculate whether the Plan is financially feasible over the long term, and to effectively ensure that new development approvals adequately address the fiscal impacts of such development.

Recommendations:

The County should strive to determine the relative revenues and service costs of various land uses, intensities, and locations. A Fiscal Impact Analysis Model or similar approach should be investigated as a means of evaluating costs and revenues and for ensuring that new development pays for its own capital costs and provides an operational revenue stream consistent with the County's ability to provide services and facilities in accordance with LOS standards. Upon development of a suitable methodology for evaluating fiscal impacts, the County should evaluate the long term financial feasibility of the Plan for County government, and, if necessary, adjust growth management strategies to attain a financially sustainable mixture of land uses and revenues. The relatively low inventory of industrial land may be cause for concern and should be evaluated as part of any fiscal impact analysis.

The County should develop economic development strategies to create a mixture of development which is financially sustainable for the long term. The economic indicators required by the Economic Development Element (Objective 10.01F) should be selected to measure the effectiveness of economic development efforts in facilitating the mixture of land uses and revenue sources necessary for the Plan to provide long term financial stability to County government.

The findings of the fiscal impact analysis recommended above should be broadly distributed to educate the citizens about the cost and revenues of different types, intensities and locations of development, and about the long term financial issues for County government.

Impact fees and other revenues directly derived from growth are currently an important part of the County's revenues. As Hernando County grows and approaches build out (except for infill), it will be essential for the County to seek long term revenue sources to supplement and eventually replace declining growth revenues.

Plan amendments are needed to support development of fiscal impact data and planning, and to guide growth management based upon long term fiscal impacts and requirements. Amendments may be needed to the Future Land Use, Capital Improvements, and Economic Development Elements, although the fiscal impact analysis and data will probably not be available within the time frame required for EAR based amendments. It is expected that such amendments will not be included in the EAR based amendments, but will follow pending development of adequate fiscal impact analysis.

2. *ECONOMIC AND TOURISM DEVELOPMENT INDICATORS AND OBJECTIVES*

Issue Sources: Planning survey, BCC community workshops, EAR Policy Advisory Committee

Status of Current Plan:

A new Economic Development Element was added to the Plan in early 2003. The Element provides for supporting existing businesses and recruiting targeted new businesses, utilizing Hernando County's natural environment as an economic development marketing tool, cooperating with educational institutions to produce a capable workforce, assisting with regulatory obstacles to economic development, and monitoring and evaluation procedures.

Discussion: Economic development efforts are long term processes producing long term results and it is too early to assess performance of the new Economic Development Element. However, economic development

indicators required by the Element (Objective 10.01F, Policies 10.01F(1 and 2)) to measure performance and effectiveness of economic development efforts have not been adopted. These indicators will be needed to assess performance of economic development efforts in implementing the Plan.

Recommendations: The County must develop the economic development indicators required by the Plan. These indicators should be part of an economic development plan separate from and supporting the Comprehensive Plan. No plan amendments are needed, although additional implementation is required by the Plan.

E. ARTS AND CULTURAL ISSUES

SUPPORTING THE ARTS AND CULTURAL ACTIVITIES

Issues Sources: BCC community planning workshops

Status of Current Plan: The current Plan does not address Culture and the Arts.

Discussion: Prior to this EAR, culture and arts issues have been considered social matters not directly linked to comprehensive planning. At the community planning workshops held by the BCC, representatives of the Fine Arts Council requested the addition of policies to address culture and the arts in the Plan. The EAR Policy Advisory Committee discussed the role of County government in the development of culture and arts programs and facilities. Generally, the Committee indicated that the County should support, encourage, and provide incentives for well-rounded programs that embrace all ages, utilizing multi-purpose and co-located facilities, and cooperate with educational institutions, with primary funding for culture and the arts from the private sector and minimal public funding.

Recommendations: The County should add policies to the Plan to establish County policy related to culture and the arts.

F. TRANSPORTATION ISSUES

1. ADEQUACY OF THE FUNCTIONALLY CLASSIFIED NETWORKS

Issue Sources: Board of County Commissioner's community planning workshops; Planning staff; MPO staff; planning survey; and EAR Policy Advisory Committee.

Status of Current Plan:

The Plan contains (in Section E, Special Features Maps of Hernando County, Florida) the Functionally Classified Roadway Map 2025 which identifies planned functionally classified roads and the Highway Network Map 2025 which delineates the number of lanes planned for roads on the functionally classified network. In addition, the Plan provides for level of service (LOS) standards for roads, transportation concurrency management, transportation impact fees, and a frontage road network along identified highways. The County has processes in place to implement these provisions of the Plan.

Since the last EAR in 1996, the Transportation Element has been amended in 1998 (EAR based amendments), 2002 and 2003. These amendments have:

- improved the linkage and coordination of the highway transportation network with the Future Land Use Map (FLUM) and Future Land Use Element by planning a functionally classified network to support the development contemplated by those parts of the Plan;
- established functional coordination with the MPO to update the Plan in coordination with the MPO's 3 year cycle for updating the Long Range Transportation Plan (LRTP);
- improved connectivity in the planned functionally classified network;
- clarified the County's policy to require development to provide its proportionate share of rights-of-ways, additional lanes, site-related improvements, and other road improvements necessary to maintain LOS standards; and,
- provided for rights-of-way identification to restrict encroachment of uses on existing and designated future rights-of-way.

In addition, in 2003 Hernando County and the City of Brooksville entered into an interlocal joint planning agreement to address transportation (and other) issues in certain areas around the City.

Discussion:

As Hernando County grows and develops within the urban growth areas depicted as Residential, Commercial, Industrial, and Planned Development on the Future Land Use Map, it is expected that the capacity of the highway transportation network of collector and arterial roads will need to be expanded with intersection improvements and additional lanes on some existing roads, and the addition of new roads.

Smart Growth principles call for a network of roads that is well-connected and offers multiple routes to a given destination. Such a well-connected network allows traffic to distribute itself on multiple routes in response to congestion, offers flexibility in emergency response and disaster evacuation routes, and can offer route choices with varying speed limits, lanes and traffic volumes. Options with different traffic characteristics provide travel choices for citizens, and can allow an aging population to choose comfortable traffic conditions. Conventional transportation planning indicates arterial highways should be spaced about every one- to-two miles and collector roads about every one-fourth to one-half mile, with a basis in planned land uses and population densities. The Comprehensive Plan's road network maps were amended in 2002 and 2003 to add roads, add planned road lanes, and improve alignments.

The County has continued to update the Transportation Element of the Plan as an ongoing process of coordination with the MPO and its LRTP. The currently ongoing update to the LRTP has generated data that has contributed to better links between future land use and future transportation needs. It is anticipated that the joint planning interlocal agreement with the City of Brooksville (resulting from conflicts over comprehensive planning issues) will yield improved cooperation and coordination between County, City, and MPO for transportation planning and management issues in the joint planning area. The framework of objectives and policies in the Plan has yielded improved coordination between land use and transportation planning, coordination between comprehensive planning and the MPO's LRTP and its update processes, and an ongoing, continuous process of integrating transportation planning and comprehensive planning.

Recommendations:

The ongoing planning process could be improved by providing in the Plan better density guidance for development to allow more accurate projections of transportation needs at build out within the urban growth areas designated on the FLUM. (See related issue discussion in Growth and Development Issues No. 2.)

Future rights-of-way identification and designation processes should be improved to assist in providing for rights-of-ways needed to develop the planned transportation network, with particular emphasis on rights-of-way needed to accommodate major intersections of arterial, collector, and/or limited access freeways and toll roads. The Transportation Element will need amendment to provide additional policy guidance for the timing, funding, and processes for acquiring the planned future rights-of-way indicated in the Plan, and for protecting and acquiring adequate right-of-way widths at major intersections with turn lanes, and for managing land uses through development review processes to minimize improvements on future rights-of-way.

2. **DEFINING CHARACTERISTICS OF ROADS WHICH ARE NOT FUNCTIONALLY CLASSIFIED (LOCAL ROADS, MAJOR LOCAL ROADS, AND FRONTAGE ROADS)**

Issue Sources: Planning staff; MPO staff; EAR Policy Advisory Committee.

Status of Current Plan:

The current Plan provides for a functionally classified road network of arterials, collectors, and freeways/tollroads, and additionally, provides for a system of frontage roads parallel to the County arterial network. While the Plan provides a policy distinction between major and minor collector roads, the policies do not address local roads and, while frontage roads are addressed, they are not addressed as part of the functionally classified network.

Discussion:

Since only functionally classified roads are eligible for impact fee funding, frontage roads and those major local roads (local roads that serve collector and/or connectivity functions, but with traffic volumes insufficient to justify collector status) that serve as important components of the network are not eligible for impact fee expenditures and are not currently programmed into the 5 year Capital Improvements Program (CIP).

The significance of such roads is made clear by the dependence of the Tampa Bay Regional Transportation Model's reliance on completion of the frontage road network as essential to meet LOS standards on some arterial sections over the interim and long term. In the absence of functional classification, these important roads may be overlooked unless an issue arises. An additional classification to include frontage roads and major local roads could improve planning, funding and programming options for these roads.

Recommendations:

The County should evaluate the importance of major local roads and frontage roads to the functioning of the functionally classified road network, consider the benefits and costs of adding (or not adding) such roads to the network, and determine the extent, if any, that such roads need to be addressed by the Plan and/or by implementation in the Land Development Regulations.

3. **AIRPORT**

Issue Sources: EAR Policy Advisory Committee; staff.

Status of Current Plan:

The current Plan provides for aviation and aviation related facilities along with a mixture of commercial, industrial, public facility, and

certain other limited land uses. Land uses are to be regulated to protect the primary aviation functions of the airport. The Plan provides for coordination with FDOT and the Federal Aviation Authority (FAA) for improvement planning and Master Plan updates. A comprehensive plan amendment is currently in process to adopt an Airport Master Plan into *Hernando County's Comprehensive Plan* in accordance with Section 163.3177(6)(k), F.S.

Discussion: This issue was originated by the EAR Policy Advisory Committee. However, the Committee offered no recommendations for changes.

Recommendations: The County should develop additional policies defining incompatible land uses and policies which protect the Airport from encroachment from such land uses. (Required by changes to Rule 9J-5.019(4)(c) 21, F.A.C.)

4. **BOAT RAMPS**

Issue Sources: This issue was added to the List of EAR Issues by the EAR Policy Advisory Committee.

Status of Current Plan:

The Recreation and Open Space Element contains Objective 7.02E and its policy cluster that provides locational guidance and standards for boat ramp development.

Discussion: The EAR Policy Advisory Committee which originated this issue offered no comments with respect to boat ramps. The current plan is considered adequate to address this issue.

Recommendations: No changes in the Plan are needed to address this issue.

5. **ALTERNATE AND MASS TRANSPORTATION**

Issue Sources: Planning survey, BCC community planning workshops, EAR Policy Advisory Committee.

Status of Current Plan:

The Plan contains guidance in the Transportation Element (Objectives 2.06B and C) for the MPO to maintain a mass transit feasibility study. The Plan also directs the County to consider a program recommended by the study, to consider mass transit routes in evaluating development proposals, and to reserve sufficient rights of way space for safe and efficient operation of bus routes. Section E Special Features Maps of Hernando County, Florida includes a map entitled Recommended Transit Routes which delineates routes in and connecting the Spring Hill and Brooksville areas. These sections are mostly based on the MPO's

LRTP (which is currently under revision). The Plan does not currently contain policies to guide linkage between land use and mass transit considerations.

Discussion:

The Plan needs to be updated to reflect accomplishments since the current Plan policies were adopted. The MPO is currently updating its LRTP and that update will provide direction to any EAR based amendments relative to mass transit.

Hernando County currently has a fixed route transit system using buses to serve the Spring Hill and Brooksville areas and connecting the two communities, substantially using the starting route configuration plus route enhancements. Grant monies are currently funding the major part of the cost of the system. As is typical for public transit systems, the system is not expected to be financially self-sufficient, and will require continuing public financial support to provide services to provide a transportation option to the transportation disadvantaged.

Although County financial support for the system is greatly reduced by grant money, some citizens have been sharply critical of the system's lack of financial self-sufficiency. Others have been frustrated that the limited service area and routes do not serve their particular neighborhood. The community is divided in opinion as to whether or not Hernando County should continue to spend taxpayer funds to provide mass transit service to its citizens.

Recommendations:

The Plan should be updated to reflect the LRTP currently being updated by the MPO. Additional policies are needed to provide direction toward linking land use decisions and mass transit considerations in order to improve the practicality of mass transit over the long term. Higher population densities should be considered at appropriate points in close proximity to mass transit routes, making mass transit accessible to people who will use it.

6. RAILROADS

Issue Sources:

This issue was added to the List of EAR Issues by the EAR Policy Advisory Committee.

Status of Current Plan:

The current Plan does not mention railroads.

Discussion:

Hernando County is traversed by two CSX railroad lines, a main line located east of I-75 which serves as part of the national rail network, and a Brooksville spur line which connects the limerock mines and airport rail park to Tampa and the national rail network. The Brooksville spur line to Tampa currently provides bulk freight service to the mining

industry and associated power generation plants, and will soon include a siding into the industrial rail park as part of development at the County's airport. In addition, the Suncoast Parkway contains in its median a right of way for a future fixed guideway, which could provide for a future rail connection to the Tampa Bay area.

The Brooksville spur has future potential as a passenger commuter link between Brooksville and Tampa and points in between. The Plan should contain policies that recognize this potential and protect the future opportunity to include a rail connection to the south as part of a multi-modal transportation plan in addition to its continued function as a freight line to serve industrial and commercial development in the County. In addition, the Plan should provide for coordination with the MPO to include railroads in transportation planning.

Recommendations: New objectives and policies should be added to the Transportation Element to address railroads as part of the County's transportation network, to recognize the importance of railroads in carrying freight to support commercial and industrial sectors, to conserve the potential for future rail passenger service to the metropolitan areas to the south, and to coordinate with the MPO to include railroads in transportation planning.

7. ***BICYCLE AND PEDESTRIAN ACCESS AND FACILITIES***

Issue Sources: EAR Policy Advisory Committee; MPO Bicycle and Pedestrian Advisory Committee; Planning Staff analysis of Smart Growth principles; Chapter 163 F.S.; planning survey; and, BCC community planning workshops.

Status of Current Plan:

The last major revision of the Plan was in 1998 following the last EAR which was adopted in 1996.

The current Plan includes Objective 2.03C and its policy cluster addressing pedestrian facilities. This Objective requires the County to consider sidewalks and other pedestrian improvements in planning, design, construction or reconstruction of urban thoroughfares. The policies provide for coordination with the MPO and FDOT on the Pedestrian Element of the Transportation Plan, maintaining an annually updated priority list of pedestrian facility projects for the MPO's Transportation Improvement Program (TIP), and incorporating pedestrian design features in urban road projects, where possible.

Objective 2.03D and its policy cluster address bicycle facilities. The objective provides for bicycle facilities as an integral element of the planning process. The policies provide for representation from County

planning and engineering staffs on the MPO's Bicycle/Pedestrian Advisory Committee, coordination with the MPO in updates to the multi-modal elements of the Long Range Transportation Plan (LRTP) and the Bicycle Element of the Transportation Plan, maintaining an annually updated list of bicycle facility projects for TIP, and, where possible, the incorporation of bicycle design features in all new road and reconstruction projects.

Section E, Special Features Maps of Hernando County, Florida, of the Plan includes a Year 2015 Bicycle Facilities map which delineates the location of existing and planned bicycle facilities, indicating multi-use trails, paved shoulders, wide curb lanes, and bike lanes along selected arterial, freeway, and collector roads. Section E also includes a year 2015 Pedestrian Facilities map which delineates planned and existing multi-use trails and sidewalks (one or two sides).

In 2003, the County and the MPO (cooperatively using FDOT enhancement funds) completed a sidewalk construction project in the Ridge Manor community, a restroom project in the Withlacoochee State Forest, and improvements in downtown Brooksville. A Hernando Beach community sidewalk project is scheduled for completion in 2004. Hernando County has cooperated with Turnpike Enterprises (operator of the Suncoast Parkway) and the MPO in creating the Suncoast Trail, a 42 mile long, paved, multi-use facility which parallels the Suncoast Parkway toll road. Since the last EAR, sidewalks have been added along county collector roads which have been widened.

Discussion:

At the time of the last EAR in 1996, there was little public interest in bicycle and pedestrian facility and access matters. With increasing residential development and increasing population, coupled with the Smart Growth concepts now in vogue, Hernando County citizens have been requesting additional emphasis on bicycle and pedestrian facilities both within and peripheral to new developments and between adjacent developments. A significant body of public opinion has been expressed that the County should require more bicycle and pedestrian facilities from new development. Bicycle, pedestrian and rail facilities also improve the viability and function of public transportation systems.

Recommendations:

Require sidewalks and bike facilities in commercial nodes, along commercial road frontages, and along frontage roads.

Provide a policy basis for requiring (in the Land Development Regulations) bike and pedestrian access between commercial, single family and multifamily residential, places of public assembly, parks, and other developments where bike and pedestrian interconnectivity is desirable.

Update the 2015 Bicycle Facilities and the 2015 Pedestrian Facilities maps, with the delineated networks modified to connect more destinations and to serve as multi-purpose alternative transportation networks for bicycles and pedestrians, and also as greenways and wildlife corridors, as practical.

Additional funding sources will be needed to create expanded bicycle and pedestrian facilities, including the creation of public/private partnerships in order to better leverage state and local funding sources.

**PART V CHANGES IN LEGISLATION,
RULES, STATE PLANS,
AND REGIONAL PLANS**

This section will identify pertinent changes to the Statutes, Rules, and Plans that have occurred since adoption of the last EAR based comprehensive plan amendments adopted in 1997. Changes occurring before 1997 were addressed in those amendments.

A. *The State Comprehensive Plan*

The State Comprehensive Plan is based in Chapter 187, Florida Statutes (F.S.). The State Comprehensive Plan does not place specific requirements on local governments and no amendments are required to address changes to the State Plan. However, the Plan must be consistent with the State Comprehensive Plan.

Since 1998, the State Plan has been modified by deleting goals and policies addressing education, and by adding policies related to urban and downtown revitalization. The additional policies emphasize better linkage between planning for water use, transportation, and land use planning, support concurrency, promote improved coordination and communication between local governments and school districts, encourage infill and innovative urban development and redevelopment, encourage public participation, and the locating of public facilities to encourage private sector development into planned locations. Generally, these changes have been incorporated into Statutes and Rules, and are addressed there. The Plan is considered consistent with the State Comprehensive Plan and no changes are needed.

B. *Growth Management Legislation, Chapter 163, Part II, Florida Statutes*

Since 1998, growth management legislation has been affected by a variety of changes. A list of changes was taken from DCA's Internet website and evaluated to determine the changes applicable to the Plan. The pertinent changes are summarized below with an explanation of the status of the Plan with respect to the changes.

Year 1998

1. Required the Capital Improvements Element (CIE) to set forth "standards for the management of debt." Section 163.3177(3)(a)4, F.S. **The Plan includes the required standards in CIE Policy 9.01D(5).**
2. Required that the Plan include at least two planning periods - one covering at least 5 years and another at least ten years. Section 163.3177(5)(a), F.S. **The CIE uses a 5 year planning horizon for the Capital Improvements Program which is updated annually, and the Plan uses a 20 year horizon for long term planning.**

3. Required that EARs address the coordination of the Plan with existing public schools and those in a school district's 5-year work program. Section 163.3191(2)(I), F.S. **The County, the City of Brooksville, and the Hernando County School Board have recently entered into an interlocal agreement to address cooperation and coordination on school siting, population projections, facilities planning, infrastructure planning, and other matters related to education planning. School siting is addressed in this EAR under Growth and Development Issues, No. 6, School Siting Criteria and Intergovernmental Coordination Issues, No. 2, Coordination with the Hernando County School Board Regarding School Matters.**
 4. Substantially reworded Section 163.3191, F.S., addressing the evaluation and appraisal of comprehensive plans. **These changes have been incorporated into this EAR and will be reflected in the comprehensive plan amendments to follow.**
 5. Changed the population requirements for municipalities (>50,000) and counties (>75,000) which are required to submit otherwise optional elements, Section 163.3177(6)(I), F.S. **Mass Transit and Aviation Element requirements are included in the Transportation Element, with support in the Future Land Use Element. Hernando County has no commercial ports.**
- Year 1999**
6. Created Sections 163.2511, 163.2514, 163.2517, 163.2520, 163.2523, and 163.2526, F.S., as the "Growth Policy Act" to promote urban infill and redevelopment. **The Plan does not designate any urban infill areas, although there are areas designated for commercial infill, and policies encourage urban infill, with infrastructure provided in areas designated for urban development.**
 7. Required that all comprehensive plans comply with the school siting requirements of the Future Land Use Element by October 01, 1999, Section 163.3177(6)(a), F.S. **The Future Land Use Element currently includes policies addressing these requirements.**
 8. Added "transportation facilities" to the list of public facilities that are subject to the concurrency requirement, Section 163.3180(1)(a), F.S. **These facilities are currently addressed by the Concurrency Management System.**
 9. Required local governments to use professionally accepted techniques for measuring level of service for cars, trucks, transit, bikes and pedestrians, Section 163.3180(1)(b), F.S. **The County uses FDOT Q40S software for measuring LOS for bikes, pedestrians, and transit and uses ARCPLAN with input data from FDOT on state**

road motor vehicle counts. The MPO analyzes and provides data on the condition of roadways and all modes of transport and priorities.

Year 2002

10. Required that all local planning agencies or equivalent agencies that review comprehensive plan amendments and rezonings include a nonvoting representative of the district school board, Section 163.3174, F.S. **A representative of the Hernando County School District was appointed to the Planning & Zoning Commission as a nonvoting member in 2003.**
11. Added a requirement that the coordination of local comprehensive plans with the appropriate water management district's Regional Water Supply Plan is a major objective of the comprehensive planning process, Section 163.3177(4)(a), F.S. **The Southwest Florida Water Management District (SWFWMD) has not adopted a Regional Water Supply Plan for part of their district which includes Hernando County. The EAR based amendments will address this requirement.**
12. Required that by January 1, 2005, or the deadline for adoption of the EAR whichever occurs first the sanitary sewer, solid waste, drainage, potable water and natural groundwater aquifer recharge element consider the appropriate water management district's Regional Water Supply Plan and include a work plan covering a 10-year planning period for building the identified water supply facilities, Section 163.3177(6)(c), F.S. **The Southwest Florida Water Management District (SWFWMD) has not adopted a Regional Water Supply Plan for part of the district which includes Hernando County. DCA has determined that amendments to address this requirement should be included in the EAR based amendments rather than submitted at the same time as the EAR, which includes no comprehensive plan amendments. The EAR based amendments will address these requirements.**
13. Required that local governments consider the appropriate Regional Water Supply Plan or District Water Management Plan in the preparation of the conservation element, Section 163.3177(6)(d), F.S. **The Southwest Florida Water Management District (SWFWMD) has not adopted a Regional Water Supply Plan for part of the district which includes Hernando County. The EAR based amendments will address these requirements.**
14. Required that the Intergovernmental Coordination Element (ICE) show relationships, and state principles and guidelines to be used in the coordination of the Plan with applicable regional water supply plans, Section 163.3177(6)(h), F.S. **The Southwest Florida Water Management District (SWFWMD) has not adopted a Regional Water Supply Plan for part of the district which includes Hernando**

County. The EAR based amendments will address these requirements.

15. Required that counties with population greater than 100,000 and the municipalities within those counties submit a report to Florida Department of Community Affairs by January 01, 2004, which identifies (a) all existing and proposed interlocal service delivery agreements; and (b) any deficits or duplication in the provision of services. Each local government is required to update its Intergovernmental Coordination Element based on the findings of the report, Section 163.3177(6)(h)6, 7, and 8, F.S. **The required report was submitted by the specified deadline, with no deficits or duplications noted. The ICE is adequate as written.**
16. Added a new Section 163.31777, F.S. that requires local governments and school boards to enter into an interlocal agreement that addresses school siting, enrollment forecasting, school capacity, infrastructure and safety needs of schools, schools as emergency shelters, and sharing of facilities, Section 163.31777, F.S. **The required interlocal agreement has been completed.**
17. Required local governments to include in their EAR: (1) consideration of the appropriate water management district's Regional Water Supply Plan, and (2) for local governments with Coastal High Hazard Areas, evaluation of whether past reductions in land use densities have impaired property rights of current residents where redevelopment occurs, Sections 163.3191(2)(l)and (m), F.S. **The Southwest Florida Water Management District (SWFWMD) has not adopted a Regional Water Supply Plan for part of the district which includes Hernando County. There have been no reductions in land use densities in the Coastal High Hazard Areas in Hernando County since the last EAR and therefore no impairment of property rights of current residents should redevelopment occur following a disaster. This section is considered to meet the requirement that this matter be addressed in this EAR.**

C. Rule 9J-5, Florida Administrative Code (FAC), Minimum Criteria

Since the EAR based amendments were adopted in 1997, there have been substantial changes to Rule 9J-5, FAC. Relevant changes are addressed below. Minor changes, procedural changes, and deletions not pertinent to the Plan are not addressed.

Year 1998

1. Established requirements for the Public School Facilities Element for Public School Concurrency for local governments that adopt school concurrency, Rule 9J-5.025, F.A.C. **Hernando County has not adopted a Public School Facilities Element nor school concurrency.**

Year 1999

2. Required the Generalized Future Land Use Map to show the transportation concurrency exception area boundaries if such areas have been designated and areas for possible future municipal incorporation, Rule 9J-5.006(4), F.A.C. **Transportation concurrency exception areas have not been designated for Hernando County. The Cities of Brooksville and Weeki Wachee have not established future annexation areas to be mapped. The County and the City of Brooksville have recently entered into two interlocal agreements to coordinate annexation, infrastructure, service and related issues in an area adjacent to the City. The legislature is currently considering removing the City of Weeki Wachee's ability to annex additional areas into the City.**
3. Required objectives of the Sanitary Sewer, Solid Waste, Stormwater Management, Potable Water and Natural Groundwater Aquifer Recharge Element to address protection of high recharge and prime recharge areas, Rule 9J-5.011(2), F.A.C. **Objective 4.10 (and its policies) supported by the Conservation Element Objective 6.02A (and its policies) contained in the current Plan meet this requirement.**
4. Required objectives of the Transportation Element to coordinate the siting of new, or expansion of existing ports, airports, or related facilities with the Future Land Use, Coastal Management, and Conservation Elements; to coordinate and integrate access to ports, airports, and related facilities plans with plans of other transportation providers; and ensure that access routes to ports, airports and related facilities are properly integrated with other modes of transportation, Rule 9J-5.019(4)(b), F.A.C. **The County has one general aviation airport (which is publicly owned) and no commercial ports. These requirements are addressed in the existing Plan by policies in the Transportation Element (Policies 2.07A(2) and 2.08B(1)) relating to the airport.**
5. Required (Rule 9J-5.019(4)(c), F.A.C.) policies of the Transportation Element to:
 - Provide for safe and convenient on-site traffic flow (**Addressed by Policy 2.03B(4) in the Transportation Element**);
 - Establish measures for the acquisition and preservation of public transit rights-of-way and corridors (**Addressed by Goal 2.05 of the Transportation Element. Hernando County currently operates a fixed route bus system.**);
 - Promote ports, airports and related facilities development and expansion (**Hernando County has no commercial ports. Ports, airport and related facilities are addressed by Goals**

2.07 and 2.08 of the Transportation Element and Objective 1.07C of the Future Land Use Element);

- Mitigate adverse structural and non-structural impacts from ports, airports, and related facilities (**Addressed by Goals 2.07 and 2.08 in the Transportation Element**);
- Protect and conserve natural resources within ports, airports and related facilities (**Addressed by Goals 2.07 and 2.08 in the Transportation Element and extensively by the policies of the Conservation and Coastal Management Elements**);
- Coordinate intermodal management of surface and water transportation within ports, airports, and related facilities (**Addressed by Goals 2.07, 2.08, and 2.09 of the Transportation Element. Further the Plan is coordinated with the multi-modal Long Range Transportation Plan updated every three years by the MPO. A comprehensive plan amendment adopted in 2003 updated the planned road network through and around the airport. Hernando County has no commercial ports.**); and,
- Protect ports, airports and related facilities from encroachment of incompatible land uses (**The EAR based amendments will include policies to protect airports and related facilities from encroachment of incompatible land uses**).

Year 2001

6. Revised procedures for monitoring, evaluating and appraising implementation of local comprehensive plans, Rule 9J-5.005(7), F.A.C. **The Plan includes an entire Section C devoted to Monitoring and Evaluation. This section relies heavily on the EAR process for periodic Plan evaluation, in addition to providing for an annual Plan evaluation report by the LPA to the BCC, with amendments to address recommended changes, and a baseline data updating schedule. Although the annual evaluation reports have not been accomplished, and the exactitude of the schedule has become more flexible, the actual result has been a continuous and ongoing process of collecting data, analyzing trends, evaluating Plan performance, and processing amendments as needed.**

The annual updates to the CIE and the CIP provide regular evaluations of infrastructure systems and their funding mechanisms. Environmental quality monitoring provides an ongoing measure of the efforts of both County and State environmental programs. The development of modern computer systems, especially the Geographic Information System (GIS) has enabled an amazing accumulation and manipulation of data. Hernando County's GIS

was utilized to perform the analysis of the Plan which produced the buildout estimates and evaluation of the effectiveness of the Plan in locating residential, commercial and industrial land uses contained in Section 2 of this EAR. The Hernando County Planning Department annually produces and updates a Statistical Abstract, which allows continual monitoring and evaluation of valuable planning data.

7. Repealed requirements for evaluation and appraisal reports and evaluation and appraisal amendments, Rule 9J-5.0053, F.A.C. **Revised EAR guidelines resulted and have been utilized in preparation of this EAR.**
8. Revised concurrency management system requirements to include provisions for establishment of public school concurrency, Rule 9J-5.0055(1) and (2), F.A.C. **Hernando County has not adopted school concurrency requirements.**
9. Authorized local governments to establish multi-modal transportation level of service standards and established requirements for multi-modal transportation districts, Rules 9J-5.0055(2)(b) and (3)(c), F.A.C. **Hernando County has not adopted multi-modal transportation standards or districts.**
10. Authorized local governments to establish level of service standards for general lanes of the Florida Intrastate Highway System within urbanized areas, with the concurrence of the Department of Transportation, Rule 9J-5.0055(2)(c), F.A.C. **Hernando County has not adopted separate level of service standards for general lanes.**
11. Required that data for the Housing Element include a description of substandard dwelling units and repealed the requirement that the housing inventory include a locally determined definition of standard and substandard housing conditions, Rule 9J-5.010(1)(c), F.A.C. **The required description of substandard dwelling units is included in the Housing Element Policy 3.02A(1).**
12. Required the ICE to include objectives that ensure adoption of interlocal agreements within one year of adoption of the ICE and ensure intergovernmental coordination between all affected local governments and the school board for the purpose of establishing requirements for public school concurrency, Rule 9J-5.015(3)(b), F.A.C. **The required objectives are included in Objective 8.01E of the ICE. A level of service standard for education has been established, but Hernando County has not adopted school concurrency.**
13. Required (Rule 9J-5.015(3)(c), F.A.C.) the ICE to include:

- Policies that provide procedures to identify and implement joint planning areas for purposes of annexation, municipal incorporation and joint infrastructure service areas (**The requirements are addressed in Objective 8.01C of the ICE**);
 - Establish joint processes for collaborative planning and decision-making with other units of local government (**The requirements are addressed by Objectives 8.01A, C, D and E of the ICE**);
 - Establish joint processes for collaborative planning and decision-making with the school board on population projections and siting of public schools (**The requirements are addressed by Objective 8.01E of the ICE and Objective 1.01I of the Future Land Use Element. The County, the City of Brooksville, and the Hernando County School Board have recently entered into an interlocal agreement to address these issues, among others.**)
 - Establish joint processes for siting facilities with county-wide significance; and adoption of an interlocal agreement for school concurrency (**The requirements are addressed in Objectives 8.01A, C, and E of the ICE**).
14. Required the CIE to include implementation measures that provide a five-year financially feasible public school facilities program that demonstrates the adopted level of service standards will be achieved and maintained and a schedule of capital improvements for multi-modal transportation districts, if imposed by local option for school concurrency, Rule 9J-5.016(4)(a), F.A.C. **Hernando County has not adopted school concurrency or multi-modal transportation districts.**
15. Authorized local governments to establish level of service standards for general lanes of the Florida Intrastate Highway System (FIHS) within urbanized areas, with the concurrence of the Florida Department of Transportation, Rule 9J-5.019(4)(c), F.A.C. **Hernando County has not adopted separate level of service standards for general lanes of the FIHS.**

D. Withlacoochee Strategic Regional Policy Plan (SRPP)

The Withlacoochee SRPP has not been modified since the last EAR and no new action is needed to maintain consistency.

LIST OF REFERENCES

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3. HydroGeoLogic, Inc., *Development of a Computer Model of the Regional Groundwater Flow System in Hernando County for the Hernando County Water Resources Assessment Project* (1997).
4. HydroGeoLogic, Inc., *Hernando County Water Resources Assessment Project 2* (2002).
5. Strategic Planning Group, Inc., *Rental Housing Market Study, Hernando County, Florida* (2004).
6. SWFWMD, *Water-Quality and Hydrology of the Homosassa, Chassahowitzka, Weeki Wachee, & Aripeka Spring Complexes, Citrus & Hernando Counties, FL* (1997).
7. Tihansky, Ann B., *US Geological Survey, Tampa, Florida., Sinkholes, West-Central Florida*, p. 121-140, in Galloway, Devin, Jones, D.R., and Ingelbritson, S.E., *Land Subsidence in the United States: USGS Circular 1182* (1999).