

Population at Risk by Evacuation Zone					
Year	Zone A	Zone A+B	Zone A-C	Zone A-D	Zone A-E
1995	74,280	82,961	98,935	111,012	127,243
2000	99,090	115,692	128,213	142,825	159,497
2003	104,776	128,822	138,245	151,692	169,486
2005	110,463	129,953	144,277	160,599	179,436

Source: Manatee County Emergency Management Department and 1996 EAR.

Development Restrictions in Hazard Areas

The Comprehensive Plan utilizes various mapping overlays to identify areas where there may be specific hazards and appropriately restrict development. There are numerous overlays and flood zones as follows:

- Coastal Storm Vulnerability Area (CSVA)
 - Velocity Zone
 - Areas seaward of the five foot contour
 - aka Coastal High Hazard Area
- Coastal Evacuation Area (CEA)
 - 1st Evacuation Zone (A)
- Coastal Planning Area (CPA)
 - First 3 Evacuation Zones (A-C)
- 25 Year Floodplain Map
 - Map incomplete in most portions of county
 - USGS doing another map set but not covering east county
- Sea, Lake, and Overland Surges from Hurricanes (SLOSH) Map
 - Identifies coastal flood areas with the category of storm surge.

The Comprehensive Plan is clear about staying out of the 25 year floodplain except where it is appropriate to allow cut and fill balancing, allowing development to "engineer out" of the floodplain. Where the 25 Year Floodplain has been mapped, the following table shows what the residential density has been in the area:

Net Increases/Decreases in Residential Dwelling Units in 25 Year Floodplain						
1997	1998	2000	2001	2002	2003	Total
11	939	492	77	-1,302	-371	-154

Source: Manatee County Planning Department, 2004.

Local Mitigation Strategy. The Local Mitigation Strategy (LMS) is a document that identifies areas of potential and historical risks and vulnerabilities and is assessed on a standard list set forth by the Federal Emergency Management Agency (FEMA) in the Disaster Mitigation Act of 2000 (DMA2K) nationwide. The LMS Group is comprised of individuals from various County departments, municipalities, private & public-sector organizations, and other public safety agencies such as fire districts. Citizen participation is also encouraged and the LMS is available for public comment at various public workshops prior to any adoption/revisions.

The LMS Group identifies and ranks mitigation projects, or initiatives, that can become eligible for grant funding, particularly after a Presidentially-declared disaster. In order for an LMS and its ranked initiatives to remain eligible for Federal funding it must be approved as DMA2K-

compliant by FEMA. Manatee County successfully obtained grant funding in the Fall of 2003 to enlist the assistance of the Tampa Bay Regional Planning Council (TBRPC) in bringing the County's LMS document into DMA2K-compliance. In the Spring of 2004 FEMA announced that Manatee County's LMS was deemed compliant. Formal adoption by the Manatee Board of County Commission and the respective municipal elected councils will proceed over the Summer of 2004.

Successes in implementing projects are noted on the LMS Initiative List. They are also featured in an electronic newsletter, or "E-zine", that is distributed freely via the County's web site (www.co.manatee.fl.us) on the Hazard Mitigation page of the Comprehensive Planning section of the Planning Department area on the site.

The LMS group meets at least quarterly or more often as needed. Notices of the meetings are given to the major newspapers in the county and the general public is invited to attend.

Nonconforming Densities in the CPA. There are limited areas in the CPA that have incompatible densities. These exact same areas existed with the previous EAR. The County will balance public safety considerations and address their redevelopment feasibility and the property rights of affected residents if and when their property seeks redevelopment approval.

Public Safety Operational Improvements since 1996 EAR

The following is a summary of public safety improvements made since the last EAR:

Public Safety Dept. Accreditation

The County Public Safety Dept. as of summer 2004 is working to become State accredited.

Fire Districts

There are currently twelve fire districts in Manatee County. The Braden River and Myakka fire districts un-consolidated in 2002. The fire chiefs meet monthly with the County Public Safety Department to coordinate training and other activities.

Emergency Medical Services

Manatee County provides Emergency Medical Services (EMS) county-wide, with the exception of Longboat Key, which provides Advanced Life Support (ALS) thru their fire rescue. A successful partnership with the Myakka City Fire Department and the EMS division of the County's Public Safety Department has been formed where a Paramedic is on each of the three (3) shifts along with the corresponding shift firefighter to allow ALS response via the fire engine.

Alternate Emergency Operations Center

In 2001, Manatee County completed its new building on 26th Street to house the Project Management and Transportation Departments. This building is hardened and serves as the Alternate Emergency Operations Center (AEOC) in the event the downtown Bradenton EOC is compromised. Downtown must be evacuated in the event of a Category 3 or greater hurricane.

Manatee County First-In Teams

First-In Teams are teams that have been established consisting of EMS, Fire, Public Works, Florida Power & Light (FPL) and other public safety personnel, equipped to go in to a post-

disaster area and clear major roadways. Priority will be given to arterial roads that lead to hospitals and other critical facilities.

Board of County Commission Contingency Meetings

The BOCC has alternate meeting locations identified if the County Administration Building in downtown Bradenton is compromised. The various locations are potentially utilized based on the type of disaster, whether localized or countywide, that impacts the regular meeting chambers.

In July 2003, a Continuity of Government (COG) meeting was held with area EMS, Emergency Communications Center (ECC a/k/a "911") staff, fire districts, law enforcement agencies, and debris management contractors. A consultant was hired via grant funds to write a COG plan by summer of 2004.

Damage Assessment Teams

The Manatee County Building Department along with trained volunteers will conduct damage surveys from vehicles, called "windshield surveys", as they drive by damaged areas. They can also perform more detailed house-by-house assessments. The Building Department can also setup paper-based operations near a Disaster Field Office (DFO) to issue emergency building permits.

Debris Removal

Manatee County as of 2000 has mass debris removal contracts in place. The beach communities also have their own debris removal contracts in case of emergency.

Disaster Notification

In 2000, Manatee County's "Reverse 911" Dialogic phone system became operational. This allows residents in a specific area to be notified of an emergency. This system was used in the summer of 2003 due to flooding along the Manatee River. The system notified thousands of residents in a short time of the situation and gave them evacuation information.

Radio Communication

The County's 800 MHz radio system also will be expanded in 2004 with two new towers, bringing the total to four (4) towers. The existing, aging towers, including the one at the County Administration Building in downtown Bradenton, were also replaced with newer towers and antennas. Regularly budgeted funds were used by the Information Services Department (ISD) to finance the communication enhancement project.

Community Emergency Response Teams

In 2003, with a federal grant, Manatee County began implementing the Community Emergency Response Team (CERT) program. CERT Teams are neighborhood post-disaster teams made up of trained citizen volunteers that can provide aid within their community. The Bayshore Gardens community is the first CERT team in Manatee County.

Volunteers

In 2003, the Emergency Management Division coordinated a drill for the Volunteer Reception Center at Braden River Library on SR 70. The drill was to train volunteers at this facility to manage out-of-state volunteers that typically come into a post-disaster area. The center then provides credentials to them if they are needed and then directs their efforts to a specific area.

This center is managed by volunteer services and the Manateens, a large teen-volunteer organization.

Firewise

The Firewise community training has taken place at the annual Manatee County Hurricane Preparedness & Safety Expo. The goal is to educate those that live in, and those that plan for the development of, the urban interface and rural areas where wildfire is a regular threat.

LIDAR.

The County obtained Light Detection and Ranging (LIDAR) data from aerial flyovers of the more populated areas of Manatee County. The resulting map products are being utilized by Transportation, Wastewater, and Emergency Management. The Hurricane Evacuation Zones will be reassessed using the LIDAR results in the future.

Comprehensive Emergency Management Plan

The Comprehensive Emergency Management Plan (CEMP) is due for evaluation in September, 2004. Revisions are being made by Emergency Management staff for this five (5) year review and update. The purpose of the CEMP is to describe the various types of emergencies that can occur in our county and establish a framework for the effective system of comprehensive emergency management, utilizing an all hazards approach.

Public Education

Annual Hurricane Preparedness & Safety Expo

Manatee County, in conjunction with all its municipalities, conducts an annual Hurricane Preparedness & Safety Expo. In its first two years the Expo was held at the Manatee Convention Center in Palmetto; attendance was approximately 1,100 people at the inaugural event. For the last two years the Expo was held at the DeSoto Square Mall in Bradenton. This event covers the various hazards (including hurricanes, floods, wildland fires, terrorism, etc.) to which Manatee County residents and organizations are exposed. The Expo assists the County in meeting the public education and outreach requirements dictated by the National Flood Insurance Program as well as our Local Hazard Mitigation Strategy.

Small Business Survival Kit CD

Small businesses, those with 50 or less employees, are the backbone of Manatee County's commerce and that of the nation. Business Continuity addresses the need of businesses to safeguard their employees, physical assets, and computer data from natural and technological disasters. For the past several years a committee formed at the Tampa Bay Regional Planning Council (TBRPC) has produced a compact disc (CD) that helps small business form a business continuity (BC) plan. Manatee County is an active member in this committee. In 2004 a second edition of the CD was produced and using funds from the Florida Department of Emergency Management (FDEM) the CD was distributed statewide.

Objectives Overview

Objective 4.3.2 Public Infrastructure in the Coastal Planning Area: *Minimize public expenditures on infrastructure for new development within the Coastal Planning Area to limit replacement costs in case of damage from natural hazards.*

No new public-funded infrastructure has been constructed in the CPA except to improve hurricane evacuation times, provide public recreation, or maintain LOS. Nor has any County maintained infrastructure to support new development been dedicated seaward of the 5' topographic contour.

Objective 4.4.1 Hurricane Evacuation: *Maintain or reduce hurricane evacuation clearance times through mitigation and response techniques to protect the health and safety of residents and visitors in areas subject to coastal storms.*

Manatee County, as identified in Chapter 2 Major Issue – Hazard Mitigation, addresses hurricane evacuation times, which are consistently less at all hurricane levels than other coastal counties in the Tampa Bay Regional Planning Council district, but have increased over previous years.

Objective 4.4.2 Hazard Mitigation: *Create pre-disaster mitigation plans to reduce the risk to life and property from natural disasters.*

The Land Development Code requires submittal of hurricane evacuation plans for all new development in the Coastal Planning Area and approval by the Public Safety Dept. prior to construction. Manatee County, thru new school construction has increased its shelter capacity. In Chapter 2 Major Issue – Hazard Mitigation, hazard mitigation is addressed in more detail.

Objective 4.4.3 Post Disaster Recovery: *Identify and prioritize cleanup and recovery in the event of a major storm event to provide for quick recovery in case of a natural disaster.*

Manatee County has not developed a Post Disaster Redevelopment Plan (PDRP) as outlined in existing Comprehensive Plan policy. The County anticipates using the Best Practices Guide for PDRP being developed by the DCA.

Major Issue - Affordable Housing

I. Data and Trend Highlights

In the 1990 census, there were over 31,000 persons claiming some sort of disability in the county. In 2000 census, over 62,000 people claimed some sort of disability.

Manatee County as of 2003, there are 24 camps licensed by the FL Department of Health with a capacity of 2,073 (data varies widely).

In 2003, there were 2,224 single-family homes sold between \$30,000 and \$115,000 (Planning Dept. data).

The majority of new housing being constructed in the county is well above \$100,000 (2000 US Census).

The average new home value/cost in unincorporated county in 2003 was \$192,633.

The median household income in the county according to the 2000 US Census is \$38,673.

II. Accomplishments

[Information to be provided]

III. Concerns and Opportunities

Providing enough attainable, quality housing for all, including special needs housing and the homeless.

Elderly housing opportunities near services - need to remain part of the community.

Integration of transit for elderly population which continues to grow.

Use of Land Development Code incentives.

Location of multi-family housing in relation to services and employment.

Maintaining quality of life and independence without personal vehicle.

IV. Imagine Manatee Key Elements and Actions

Diverse populations living in harmony in well maintained, diverse neighborhoods.

An aggressive affordable housing program.

Establishment of an Affordable Housing Task Force to seek new ways to stimulate the development of affordable housing.

Establish and expand programs to improve the physical appearance of existing and new development.

V. Possible Plan Amendments

Amendments to reflect affordable living instead of just affordable housing.

VI. Other Possible Actions

In 2004, the Legislature adopted a revision to the FL Statutes allowing single-family units to have accessory dwelling units. The County will review this legislation for applicability to Manatee County.

Imagine Manatee Goals & Strategies

Affordable Housing Goal: *A community with safe, diverse new and existing neighborhoods that provide adequate amounts of quality affordable housing for very low and moderate income families, agricultural workers, migrant workers, seniors, and residents with special needs throughout the County.*

Strategies identified for implementing *Affordable Housing Goal* include:

- Revise local development codes (LDC's) to encourage traditional neighborhood development (TND) boosting affordable housing by design.
- Offer tax incentives or impact fee credits to builders and investors.
- Offer families that are currently on subsidized housing assistance home ownership options, including faith-based initiatives.
- Develop inclusionary zoning.
- Local elected officials encourage developments consistent with the goal.

Imagine Manatee

- Diverse populations living in harmony in well maintained, diverse neighborhoods.
- An aggressive affordable housing program.
- Establishment of an Affordable Housing Task Force to seek new ways to stimulate the development of affordable housing.
- Establish and expand programs to improve the physical appearance of existing and new development.

Crime and Public Safety Goal: *A community that aggressively enforces all laws and building codes with proper punishment that fits the crime, and that has adequate street lighting, proper emergency response by the appropriate authority (law, fire, EMS), and supports prevention.*

Strategies identified for implementing *Crime and Public Safety Goal* include:

- Increase police patrols (both car and foot) to reduce crime and enhance public safety.

- Consolidate all law enforcement, fire, and medical response to improve services through the County and city governments.
- Ensure aggressive enforcement through additional sheriff's and building code department's personnel, increased accountability, and proper utilization of all assets.
- Coordinate County and city governments' efforts with Florida Power & Light (FP&L) to provide streetlights in all communities of the County.
- Policy makers should come together to focus on countywide needs.

Affordable Living

There are many factors that make housing affordable, the most key factor is proper financing. But no matter how affordable the house is, there are other life factors that play a part in getting ahead financially in life, such as:

- Can people afford to live near their work?
- Are there other transportation options available besides automobile ownership?
- Are services, retail, and shopping close enough to walk to?
- Energy efficiency / water efficiency

As the county continues to grow new service employment opportunities outside of existing transit routes, those service workers must absorb the cost of traveling to the new locations. As of 2004, the average cost of owning an automobile in the United States was over \$8,000 per year (USDOT, Bureau of Transportation Statistics). Theoretically, if the average family could reduce their automobile ownership by one or be totally car-less, that family could afford much more home or better afford their existing home with a more flexible budget.

Special Needs Populations

The 2020 Comprehensive Plan also identifies special needs populations as follows:

- Elderly
- Homeless
- Physically disabled
- Mentally disabled
- Farm workers

Elderly. The elderly population in the county is approximately 71,062. As of 2004, this is approximately 25% of the population and is expected to rise to 31%.

Homeless. In 2003, the homeless count numbered 2,047 countywide, 0.77% of the population. There is a community coalition on homelessness and the 2025 population estimate for the homeless is 3,027, at 0.77% of the future population. The following are homeless demographics in the county:

- 41% Single Males
- 41% Families with Children
- 13% Single Women
- 5% Unaccompanied Youth
- 23% Mental Illness
- 32% Substance Abusers
- 50% African American
- 35% White
- 12% Hispanic

- 2% Native American
- 1% Asian

Disability Population. In 1990 census, there were over 31,000 persons claiming some sort of disability in the county. In 2000 census, over 62,000 claim some sort of disability.

Farm Worker Population. In Manatee County as of 2003, there are 24 camps licensed by the FL Department of Health with a capacity of 2,073. Estimates of actual population vary widely.

Farm Worker Housing

According to the 2003 *Migrant/Seasonal Farm Worker Housing Options Report*, Manatee County has the following:

- 13,000 migrant workers
- 5,000 family members
- 2,200 housing units for migrant workers countywide
- \$7,000-9,000 average farm worker income

Manatee County continues to work with the Farm Worker Housing Work Group to expand housing choices in the county. For reference, please see the 2004 Farmworker Housing Map in the appendix.

Affordable Housing Needs

The 1991 Housing Partnership Report outlined a method to quantify affordable housing needs. An updated calculation through 2010 found per year need:

- Home Ownership 1,358 units
- Rental Opportunities 482 units

Median Income. The need for affordable housing is defined by median income. The following shows the median income for the area and the percentage of occupations with salaries below median:

- Sarasota/Bradenton - \$50,500 – 90.1%
- Ocala - \$40,000 – 80.2%
- Naples - \$65,000 – 96.7%

Home Sales. In 2003, there were 2,224 single-family homes sold between \$30,000 and \$115,000 (Planning Dept. data). The majority of new housing being constructed in the county is well above \$100,000 (2000 US Census). According to the 2000 US Census, the average new home cost was \$105,689 countywide. Housing is considered affordable by Manatee County if the cost is at or below \$115,000.

Since 2000, prices have risen dramatically. The following are average new home value/cost in unincorporated county by year:

- 2000 \$152,709
- 2001 \$168,015
- 2002 \$189,219
- 2003 \$192,633

Housing Burden. A family is considered to be paying excessive amount for housing if paying more than 30% of annual income towards housing. The median household income in the county according to the 2000 US Census is \$38,673. According to Census data, 7.8% pay 30-34% for housing and 21.4% pay $\geq 35\%$ for housing.

Legislative Action

- In 2004, the Legislature adopted a revision to the FL Statutes allowing single-family units to have accessory dwelling units. The County will review this legislation for applicability to Manatee County.

Issues

- Need greater elderly housing opportunities near services - need to remain part of the community.
- Integration of transit for elderly population which continues to grow.
- Use of LDC incentives.
- Tendency to provide MF near services, but not near employment.
- Maintaining quality of life and independence without personal vehicle.

Element Overview

Objective 6.1.1 Private Sector Delivery: *Maintain a Flexible Regulatory Process Which Assist the Private Sector in the Delivery of a Variety of Housing Products.*

The Land Development Code contains provision and zoning for of a mix of housing types (unit size, lot size, and price of home). As identified in Chapter 2 Major Issue – Development in the Urban Core, there is a substantial amount of vacant and underdeveloped property in the Urban Core.

Objective 6.1.2 Special Needs Populations: *Increase Housing Opportunities for Group Homes and Foster Care Facilities to address the Special Needs Populations which include; Elderly, Rural Farmworkers, Homeless, and the Physically, and Mentally Disabled.*

The Land Development Code contains provision and zoning for of variety of housing opportunities. However, according to the Community Services Dept., there is a growing need for housing for special needs.

Objective 6.1.3 Affordable Housing: *Implement Programs to Meet Affordable Housing Needs.*

There are a limited number of affordable housing programs. In recent years there is also improved data on the affordable housing market. Manatee County has yet to adopt any type of performance measures for affordable housing. Manatee County has made strides in the replacement of affordable housing eliminated by development with equivalent units. However, due to most of the development being located on undeveloped/vacant property, this is usually not an issue.

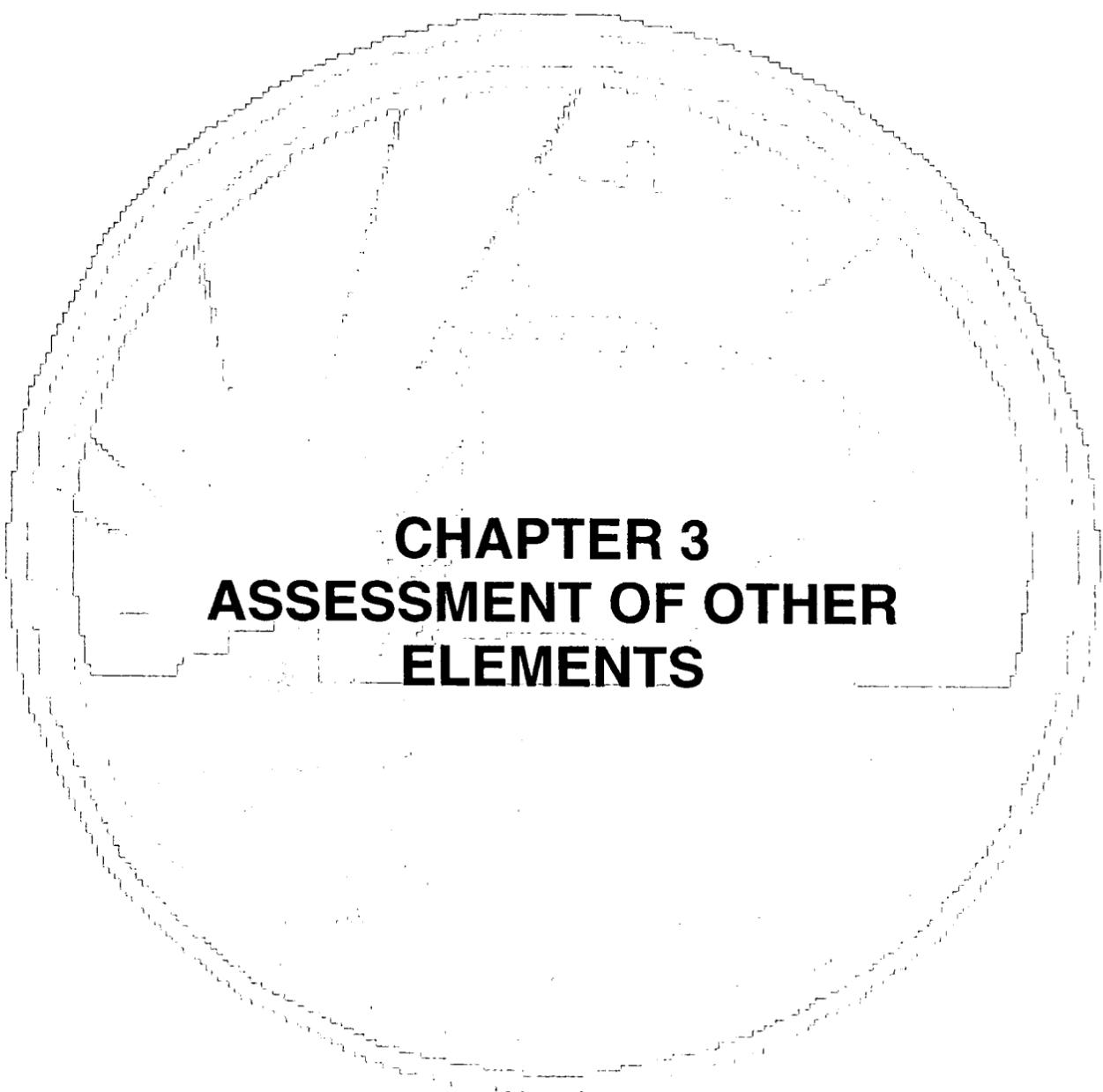
A key state action is to maintain the integrity of the housing trust fund. This would continue to provide the necessary funding for the SHIP program.

Objective 6.1.4 Substandard Housing: Continue to reduce the Number of Sub-Standard Housing Units.

Manatee County continues to reduce the total number of substandard dwelling units. Development of specific improvement goals including measurable targets within specific neighborhoods.

Objective 6.1.5 Relocation Housing: Provide Alternative Housing for Households displaced by Development Activity.

Housing availability for all persons relocated through public action.



CHAPTER 3
ASSESSMENT OF OTHER
ELEMENTS

CHAPTER 3 – ASSESSMENT OF ELEMENTS

Future Land Use Element

The purpose of the Future Land Use Element (FLUE) is to delineate Manatee County's vision of how the county is supposed to grow. It constitutes the framework for growth management and land planning in unincorporated Manatee County as authorized by Chapter 163, Florida Statutes, the "Local Government Comprehensive Planning and Land Development Act." This act requires the FLUE to be consistent with State and regional plans. The element was prepared to satisfy all the requirements of Chapter 163, F.S. and Rule 9J-5, F.A.C.

I. Data and Trend Highlights

Total land area in Manatee County 747,240 acres (740 sq. miles)

As of 2000, urbanized areas of the county totaled 59,700 acres, an increase of 13 percent from 1990.

Residential land use is the largest consumer of land occupying approximately 44,000 acres in 2000.

Two or fewer home-sites per acre represented the greatest increase in land consumption, growing by 97 percent between 1990 and 2000.

If the current trend in land consumption to urban uses continues, approximately 128,000 acres will be urbanized by 2050.

The year 2003 was a record year for number of single-family building permits approved with 3,233 single-family and 18,472 other permits for all types of construction.

II. Accomplishments

The Agriculture/Rural Future Land Use Designation on the Future Land Use Map has not been amended to residential.

From 1997-2003, the Future Land Use Map has seen the following changes:

- 4,494 acres of SWFWMD land with the "Agriculture/Rural" Land Use Category changed to "Conservation" land use category
- 153 acres of Manatee County land with the "Agriculture/Rural" Land Use Category changed to "Conservation" land use category

To further protect potable water supplies, a Peace River Watershed overlay district was added that encompassed approximately 12,870 acres in eastern Manatee County.

III. Concerns and Opportunities

Retaining agricultural land for production.

Encouraging more development/redevelopment within the existing urban core.

Accommodation of rapid urban growth north of Manatee River and east of I-75 with adequate transportation facilities.

Proliferation of five-acre and larger residential lots within the eastern portion of the county.

Correct inconsistency regarding Future Development Area Boundary and the Future Land Use Map.

At the November 2002 Imagine Manatee Stakeholders Workshop, "Where Do We Grow?" residents addressed issues of growth. The results of the project included the total average recommendation for land protection as 11% or 52,140 acres. Currently, over 25,000 acres are in "preservation" countywide.

IV. Imagine Manatee Key Elements and Actions

Favor redevelopment and infill development in the existing urbanized area.

Attractive, vibrant, economically sustainable downtowns throughout the County.

Focus on the downtown waterfronts of Bradenton and Palmetto and coordinate redevelopment efforts to create mixed use development and round the clock activities.

Create downtown waterfront task force to maximize the economic and recreational potential of the waterfront.

Cluster new development into well-designed, distinct neighborhoods and communities with walkable mixed use centers.

Establish specific plan to manage growth east of I-75.

Establish and expand programs aimed at improving the physical appearance of the existing community and new development.

Develop citizen based neighborhood plans, which identify the desires of the community.

Aggressive improvement and beautification of weak areas of the community.

V. Possible Plan Amendments

Change FLUC for repetitive-loss flood properties acquired by the County via the Flood Mitigation Assistance (FMA) grant program to Conservation or Recreation Open Space.

More Information
to follow
at later date

*pages 93 to 109 .
to follow
in future
draft*

Bike and Pedestrian – Transportation Element

I. Data and Trend Highlights

- Since 1997, cyclist activities have increased by more than twenty-five percent according to the Florida Bicycle Association.
- The 'Bikes on Bus' program that was initiated by the Manatee County Area Transit has been extremely successful and the numbers for riders traveling with bikes has increased from (22,260 in 2001) to (28,025 in 2003). This represents a 5% increase in two years.

II. Accomplishments

- Manatee County is ranked #65 in pedestrian injuries and #51 in pedestrian fatalities in the State.
- Currently, \$400,000 is allocated within the Capital Improvement Program per year to construct sidewalk and bicycle lanes.
- Manatee County, in cooperation with the Project Management Division, School Board, and local schools, has identified sidewalk deficiencies within two (2) miles of each school. These links have been prioritized and are currently being constructed in order of recognized importance.
- Since 1997, the County has adopted increased standards to require sidewalks and bicycle lanes along newly constructed roadways.
- Manatee County and the State have restriped multiple roads to include bicycle facilities as a part of their regular maintenance program.
- Manatee County has an active Bicycle and Pedestrian Advisory Board and Citizen Trails Committee.
- The Manatee County Greenways Master Plan was adopted on July 23, 2002 and is now being implemented.
- Community Development Block Grant (CDBG) funding is available for sidewalk improvements.
- Growing recognition of the health benefits of walking and bicycling.

III. Concerns and Opportunities

- Bicycle Facilities (see Bicycle/Pedestrian Facilities Map in the Appendix)
 - Continue to fill bicycle lane gaps that will create coherent networks.
 - Develop a system to keep bicycle lane construction networks updated in a Geographic Information System (GIS) database.
 - Improve coordination in Policy 5.4.1.4 for bicycle facilities with transit route locations and transit stops to encourage bicycle and transit as an alternate mode of travel.
 - Develop a Bicycle Level of Service (BLOS) map identifying levels of ride-ability and concern.
- Pedestrian Facilities (see Bicycle/Pedestrian Facilities Map in the Appendix)
 - Continue to fill sidewalk gaps that will create coherent networks.
 - Develop a system to keep sidewalk construction networks updated in the Geographic Information System (GIS) database.

IV. Imagine Manatee Key Elements and Actions

- Offer greater choices in modes and methods of transportation.
- Establish sidewalks and bike paths along all major roads and around schools.
- Establish multi-use trails system.

V. Possible Plan Amendments

- Plan Amendment recognizing the development and implementation strategies of the Greenways Master Plan.

VI. Other Possible Actions

- Create a bicycle route map indicating areas of bike-ability, including levels of experience, and identifying parks, transit stops, points of interest, etc.
- Update Bike and Pedestrian Plans.
- Establish methods to maintain / update GIS information layers associated with bike / pedestrian issues.

Traffic Subelement

As indicated in the Transportation Element Data and Trends, Manatee County residents will most likely spend more time in traffic in future years. Recent growth trends are catching up with the available capacity left in our roadway system. In this section, a more detailed analysis of the issues with automobile transportation is offered.

I. Data and Trend Highlights

According to the U.S. Census (1990 and 2000 data), an increased percentage (by 1 percent) of residents are working outside of the county, and are commuting to Pinellas, Hillsborough, and Sarasota Counties.

According to the U.S. Census, county residents are taking longer to get to work as a result of the physically expanded urban area of the County.

II. Accomplishments

Six major thoroughfares have been improved:

75th Street West,
SR 70,
U.S. 301,
34th Street West,
63rd Avenue West,
Tallevast Road.

Currently under construction for expansion:

S.R. 64

Four new roads have been constructed and are now a part of the thoroughfare network:

Lockwood Ridge Extension,
Lakewood Ranch Boulevard,
30th Avenue West extension,
Lorraine Road.

All major roadway improvements have included sidewalks, bike lanes, landscaping, and streetlights.

US 41/Tamiami Trail Scenic/Historic Highway Plan completed and corridor management entity being formed

Several studies and plans have been undertaken and/or prepared:

Blue Ribbon Transportation Study (Citizen Based) completed,
Freight Mobility Study completed,
Intelligent Transportation System (ITS) Master Plan, underway,

MPO 2030 Long Range Transportation Plan in development.

County impact fees raised and future revenue to be bonded to accelerate road construction schedule.

III. Concerns and Opportunities

A sufficient roadway network in the developing county to offer variety of movement options.

Will the thoroughfare roads meet the community expectations for design.

Timing of private development improvements on roadways.

Even though roadway infrastructure has been improved the evacuation clearance times have increased, presumably due to increased population.

IV. Imagine Manatee Key Elements and Actions

A multi-modal transportation system which maximizes accessibility while minimizing congestion.

A fully integrated system with the regional transportation network.

Implementation of intelligent transportation system technology.

Seek all possible funding sources to implement Transportation Master Plan.

V. Possible Plan Amendments

Consider revision of Policy 5.2.3.2 to require necessary improvements within the first year of approval of development.

Add / Revise thoroughfare plan consistent with findings of various studies and plans.

Recognize the development of the ITS.

VI. Other Possible Actions

Continue to seek creative means to fund roadway improvements / development.

Continue to implement the Intelligent Transportation System (ITS) project.

More Information
to follow
at later date

*Pages 114-118
to follow
in
future draft*

Mass Transit Subelement

Manatee County Area Transit (MCAT) provides two types of transportation services to the public. It operates a fixed route system, with complementary ADA service and a door-to-door paratransit service known as the Handybus. Both systems are safe and low-cost, providing accessible personal transportation.

I. Data and Trend Highlights

Manatee County Area Transit (MCAT) operates Nine fixed routes
6 days per week, 6 AM to 7 PM

Ridership surveys since 1990 indicates:

- over 40% ride MCAT because they don't drive,
- almost 40% ride MCAT because an automobile is not available, and 7% ride MCAT because its more economical.

Between 1998 and 2000:

- service area population increased by 8%,
- passenger trips increased by 2.7%,
- and route miles increased by 3.7%.

Over 50% of transit users walked 0 to 3 blocks to access MCAT,
over 40% of transit users walked 0 to 3 blocks from an MCAT stop to their destinations.

II. Accomplishments

New transfer points established at 30th Ave. and 9th St. W. , and at 8th Ave and 17th Street NE

Beach trolley service has been established with connections to the mainland, and operated on a half-hour headway.

Ridership has increased.

FDOT grants have been secured for bike lockers and 100 bus shelters.

III. Concerns and Opportunities

Transit Demand Plan is developed on a 5 year cycle with update due in July 2004.

Blue Ribbon Transportation Committee (Citizen based) recommended a greater emphasis on transit development.

Existing routes do not have bus pullouts i.e. busses stop in outside traffic lane to pick up and drop off passengers.

Service limitations that consist of one hour headways; limited service in developing areas, lack of sidewalks to certain bus stops, and lack of bus shelters at principal stops.

Development of the Intelligent Transportation System is in early planning stages and may offer an opportunity for preemptive signal development to assist in public transportation enhancement.

Major Transportation Development Program (TDP) update is underway for studying public transportation system and recommending improvements.

A Public Transportation Systems Analysis (PTSA) and Plan has been completed proposing a bus rapid transit system on US 41 throughout Sarasota and Manatee Counties, with east-west feeder routes within the urban area of the county.

A latent demand study regarding the proposed U.S. 41 bus rapid transit is currently being conducted.

The update of the MPO 2030 Long Range Transportation Plan is currently underway and this includes consideration of public transportation.

Most of the concerns in developing an improved public transportation system are operationally based such as;

- increasing service frequency,

- maintenance,

- funding,

- preemptive signalization,

- expansion to north and east county to meet development.

IV. Imagine Manatee Key Elements and Actions

A convenient, reliable, safe and dependable public transportation system.

A sidewalk system that is fully integrated with the bus routes.

More frequent and greater area of coverage for the transit system.

Greater integration with the Sarasota bus system.

V. Possible Plan Amendments

Consider policy to seek methods to better integrate the Manatee transit system with the Sarasota County system.

VI. Other Possible Actions

Continue to seek creative means to fund the transit system.

Continue to implement the Intelligent Transportation System (ITS).

The fixed route system is the regular MCAT buses and has advantages over the smaller Handybus in terms of freedom of movement (no advance reservations needed), and at lower cost due to many discounted fares. A bus ride costs \$1 without any discounts, and transfers are free. All buses are air conditioned, have wheel-chair lifts, bicycle racks (for two wheel bikes 16 inches and over) and a kneeling feature that makes it easier to access the first step. Buses typically have 1 hour headways systemwide, with the exception of the beach trolley system.

MCAT operates nine fixed routes within the urbanized area of Manatee County, six days a week (Monday thru Saturday) approximately 6 a.m. to 7 p.m. A tenth route to employment centers operates limited service Monday thru Friday. Almost all shopping centers and medical facilities are serviced by MCAT. The Handybus provides service for transportation disadvantaged individuals as well as service for social service agencies under contract with MCAT.

MCAT celebrated it's 25th Anniversary in 2001. MCAT began trolley service on the beaches in 2002. Now the most used MCAT route, the free trolleys have 20 minute headways and Sunday connector service to the mainland. The following ridership data shows a slight increase in use of the system:

MCAT Ridership 1998 - 2000			
Performance Indicator	1998	2000	% Change 1998-00
Service Area Population	247,028	266,689	8%
Passenger Trips	638,710	655,989	2.7%
Passenger Miles	2,280,114	2,282,824	0.1%
Route Miles	160.8	166.8	3.7%

Source: MCAT 2002 TDP.

Imagine Manatee

Public Transportation Goal: *A community with a convenient, safe, and reliable public transportation system for all that operates round-the-clock throughout the County on a predictable, frequent schedule; and has a variety of travel methods including light and high speed rail, buses, car pool lanes, bike lanes, park and ride options, which are interconnected with adjoining counties.*

- Strategies for implementing the *Public Transportation* Goal include:
- Initiate funding partnerships to accomplish goal.
- County Commissioners appoint an independent public transportation commission to implement a better public transportation system.
- Establish a public awareness campaign for the transportation programs and its system.
- Conduct a survey to determine development of park-and-ride facilities in the County.
- Develop a time schedule to implement steps to obtain the goal.

More Information
to follow
at later date

*Pages 122 - 125
to follow
in future
draft*

Aviation Subelement

The Sarasota-Bradenton International Airport's (SRQ) beginnings date back to early 1939 when government and business leaders from Sarasota and Manatee counties agreed to construct an airport together, designed to serve the aviation needs of the two-county area. The Authority leased the land to the Army Air Corps later in 1942 as a fighter pilot training base during World War II.

Although commercial airline service began as early as 1940 at Sarasota Bradenton Airport, it was not until 1965 that jet service was first provided to the area by National Airlines. Eastern Airlines began commercial service in 1961. General aviation service first appeared at the airport in the 1950's. The word "International" was added to the airport name in November 1992 when the U.S. Customs Service agreed to give "Port Of Entry" status to the airport.

Most of the airport property is in Manatee County, including about half of Airside B, a large portion of the runways and taxiways, the two fixed base operators and lands leased to businesses and other organizations. The major portion of the terminal and the rental return and short term lot lie within Sarasota County. The long term lot out to University Parkway is in the City of Sarasota. Airport property is approximately 1,100 acres.

Element Overview

The provision of sufficient general aviation facilities to meet the needs of area residents and businesses in a manner that is safe, economical, and environmentally sound.

Location, regulation, and operation of existing and future airports to minimize the impact on the natural environment and to minimize the conflicts between airport facilities and surrounding land uses.

In 1990, the Sarasota Manatee Airport Authority implemented a new noise abatement program designed to minimize the impact of aircraft noise from SRQ on the surrounding communities. The airport is located between the cities of Bradenton and Sarasota, on the county line separating Manatee and Sarasota County. The areas located to the north, west and south of SRQ are primarily residential.

The noise abatement program applies to all jet aircraft and all aircraft with a GTOW over 25,000 lbs. The extension of runway 14/32 to 9,500 ft. completed in 2002, was intended to bring international flights to SRQ. The extension enables the airport to serve CanJet's Boeing 737 aircraft with non-stop flights which would not have been otherwise possible.

Effective coordination of the operation, development, or expansion of all airports in manatee county with all appropriate federal, state, regional and local agencies.

Noise mitigation will be completed in 2004. There were concerns initially about being too restrictive. However, FAA requirements on aircraft engines (Stage III) has made complying with noise mitigation efforts easier. Even if traffic doubled or tripled, may not increase noise contour.

The airport has spent \$30 million in improvements to mitigate noise in addition to federal grants. Stage 4 aircraft engine improvements are coming in the near future. This will provide additional noise reduction benefits. A 24-hour complaint hotline for noise is also available.

In the late 1990's and into 2003, there was some discussion by different groups about proposing a mega airport to serve industry plans to provide ultra-long range jumbo aircraft that require extremely long runways. However, airport staff feels there is generally lack of FAA support for such facilities and environmental impacts, site planning, and other factors would push development over \$5 billion for one such facility.

There are 429 airports nationwide that compete for \$3.9 billion per year from FAA. \$5 billion for one airport in a rural area would not fit into their planning nor where they have been placing their investments previously.

Recent changes in laws have had an effect on a variety of Comprehensive Planning issues. Chapter 163.380 F.S. states that airports may abandon their DRI if the masterplan of the facility is made part of the local comprehensive plan. In this case, since the airport resides in three different jurisdictions, City of Sarasota, Sarasota County, and Manatee County, it would have to be implemented in all three.

I. Data and Trend Highlights

During the planning period, air passenger enplanements and deplanements remained at a relatively low level compared to previous air passenger activity.

General aviation operations have been below the projected annual operations within the Airport Master Plan.

Changeover to Stage III aircraft engines, required by the FAA, has been completed and has made noise mitigation compliance efforts easier.

Stage IV aircraft engines are coming in the future and will assist in additional noise mitigation.

II. Accomplishments

A noise abatement program was established in 1990 to minimize the impact of noise on surrounding residential communities. This program will be completed in 2004. Approximately \$30 million has been spent on this project.

The primary runway, 14/32, was extended to 9,500 feet in 2002, to accommodate longer range flights and larger aircraft.

Two noise barriers have been completed and landscaped as a part of the runway extension project.

III. Concerns and Opportunities

The County has recently assisted in funding to help attract a low cost carrier to the airport.

DRI process is cumbersome for developing projects on airport property (three jurisdictions and two Regional Planning Councils involved).

IV. Imagine Manatee Key Elements and Actions

A fully integrated transportation system with the regional system.

A transportation system that offers greater choices in modes and methods of transportation.

V. Possible Plan Amendments

No amendments anticipated at this time.

VI. Other Possible Actions

Work with the airport staff to review the desirability of incorporating an Airport Master Plan into the Comprehensive Plan similar to the Port Master Plan, consistent with 163.3177(6)(k) Florida Statutes.

Port Subelement

In 19xx, Manatee County adopted the Port Master Plan into the 2020 Comprehensive Plan. Port Manatee also has its own Port Authority, which is the Manatee County Board of County Commissioners. Port Manatee is one of the largest economic engines for the county and contributes \$2.3 billion per year to the local economy. The Port updates master plan on a regular basis and the Port does not collect taxes.

As Port Manatee continues to expand, there are two potential plan amendments.

The north county area has concerns about conflicting types of traffic to and from the Port. The Port does not want to be a mixed use urban area, but rather maintain the more intense industrial users in the area to prevent any incompatibilities with potential new industrial and port-related development. The port area has a High Intensity Industrial (IH) FLUC but additional planning work needs to be done in this area to maintain the port area as one the county's heavy industrial areas.

In order to keep shipping traffic flowing to the Port, maintenance dredging of the harbor, berths and channel must be done. In the maritime world, this spoil material consists of a variety of substances, but in Port Manatee's case this material is generally sand (*Deepwater*, June 2004.)

In order to regularly provide this maintenance, the Port must have its own dredge spoil disposal area on-site. In spring 2004, the Port expanded the dredge spoil site, raising the dikes of the 94 acre site from 29 to 34 feet. In late summer, after some maintenance dredging deposits more sand at the site, crews will return to raise the dikes to 55 feet. This work will allow the continued use of this spoil site for an estimated 30 years.

After the EAR, Planning staff will look at the Port Masterplan and the associated FLUC's to determine if any plan amendments need to be brought before the Port Authority and Board of County Commissioners.

I. Data and Trend Highlights

Need information regarding cargo amounts, berth utilization and revenue generation.

II. Accomplishments

The widening of the entrance channel and enlargement of the turning channel and berth expansion has been recently completed.

Maintenance dredging of the port access channel was completed in 1996.

Periodic maintenance dredging has been undertaken and was last completed in 1999, under Phase 1 of the agreement.

Two parcels of land on the waterfront and adjacent to the port, totaling 34.4 acres were purchased in 1999, increasing the land area of the port to approximately 1098 acres.

Approximately 185,000 square feet of warehouse space have been added on the port to the 385,000 square feet already existing, and, approximately 410,000 square feet of warehouse space is being constructed adjacent to the port by private enterprise.

A spoil island has been reclaimed and restored as natural habitat in conjunction with private development.

Natural gas pipeline crossing the Gulf of Mexico enters at the Port.

III. Concerns and Opportunities

The North County Gateway has been established in the text of the Comprehensive Plan.

Development pressures near the Port area and the adjacent industrial areas regarding traffic and land use.

Maintaining unimpeded truck access between the I-75 / I-275 interchange and the Port.

IV. Imagine Manatee Key Elements and Actions

A fully integrated transportation system with the regional transportation system.

Protection and continued development of the Port Manatee Industrial Area.

V. Possible Plan Amendments

Possible amendments relating to implementation of the North County Gateway (at this time undetermined).

VI. Other Possible Actions

County staffs continue to coordinate with Port staff regarding access and land use compatibility.

Possible actions relating to protection of unimpeded truck access to the Port from I-75 / I-275 interchange.

Historical/Cultural Element

The Manatee County Historic Preservation Board (HPB) has the authority to deem properties historically significant in Manatee County. The HPB recommends properties for designation as historic landmarks, historical and archaeological overlay districts, and historic vista protection areas. They also regulate and administer properties as historic landmarks and historic landmark districts.

Imagine Manatee

Historic and Cultural Resources Goal: A community with a thriving public events environment and facilities offering local and professional opportunities to experience arts, culture, entertainment, recreation, and historical resources.

- Strategies identified to implement goal include:
- Establish a historic preservation ordinance.
- Encourage city governments to join with the County and the School Board to support a downtown performance arts hall.
- Establish special tax districts and develop a project-funding plan to encourage long-term historic preservation.
- Create a voluntary board to work with elected officials and government staff throughout the County on implementing the goal.
- Direct a percentage of tourist development funds to the Arts Council of Manatee County.
- Encourage city and County governments to cooperate, coordinate, and fund activities related to this goal.

Element Overview

Objective 7.1.1 Historically Significant Neighborhoods: *Identify, preserve, and protect historically significant neighborhoods to:*

- *preserve the special character of existing residential uses;*
- *promote preservation of local neighborhood heritage;*
- *provide historical continuity for future residents and visitors;*
- *protect or improve property values; and*
- *promote pride in significant local neighborhoods.*

The 2020 Comprehensive Plan and Land Development Code include the identification of three Historic and Archeological Overlay Districts (HA) and two Historic Vista Protection Areas (see the Historical/Archeological Map in the Appendix). These areas include:

- Terra Ceia
- Whitfield
- Cortez Village
- Desoto Point Vista Protection Area
- Gamble Mansion Vista Protection Area

The Land Development Code requires citizens to acquire a Certificate of Appropriateness from the Historic Preservation Board before a Building Permit can be issued within these areas.

Thirty-four (34) applications for Certificates of Appropriateness have been reviewed by the Historic Preservation Board since 1996.

Each HA Overlay District has particular requirements that must be followed before an applicant can obtain a building permit.

As stated above, no structure shall be demolished without first receiving a Certificate of Appropriateness. Demolitions during the last Comprehensive Plan Evaluation and Appraisal Report have totaled four. Each request was reviewed by County Staff and the Historic Preservation Board against the Secretary of Interior Standards for Historic Preservation.

Objective 7.1.2 Historical Landmarks: *Identify and protect local historically significant landmarks to:*

- *preserve Manatee County history;*
- *recognize individual historic preservation efforts; and*
- *provide assistance to owners of historical properties.*

Since the last Evaluation and Appraisal Report, the Historic Preservation Board has reviewed 34 applications located within the Historical and Archeological Overlay Districts.

A map of historic structures listed on the National Registry has been created, but not locally protected unless within a recognized district.

To protect sensitive historic resources such as Indian burial mounds and archeological sites, the County will refrain from including this information on a County adopted map.

There are three processes in which to designate structures, districts or landmarks as historic: the National Registry, the Florida Master Site File Library, and County Designation. Manatee County currently has twenty-six (26) properties listed on the National Registry. As listed below, thirteen (13) have been listed since 1996.

NATIONAL REGISTRY SITES IN MANATEE COUNTY SINCE 1996

Austin House	227 Delmar Ave. in Whitfield Estates Subdivision	Sarasota	1998-02-05
Beasley, John M., House	7706 Westmoreland Dr.	Sarasota	1996-03-05
Kreissle Forge	7947 Tamiami Trail	Sarasota	1996-12-02
Manatee County Courthouse	1115 Manatee Ave. W	Bradenton	1998-06-11
Midway Subdivision Historic District	7201 15 th Street East	Sarasota	1998-05-29
Reid-Woods House	373 Whitfield Avenue	Sarasota	2000-08-31
Richardson House	1603 1 st Avenue West	Bradenton	2003-01-08
Shaw's Point Archeological District	Address Restricted	Bradenton	2001-04-06
Souder House	242 Greenwood Avenue	Sarasota	2000-11-02
Stevens-Gilchrist House	235 Delmar Avenue	Sarasota	2001-08-17
Terra Ceia Village Hall	1505 Center Road	Terra Ceia	2003-09-16
Villa Serena Apartments	7014 Willow Street	Sarasota	2000-09-29

Whitfield Estates Lantana Avenue District	332-336 Lantana Avenue	Sarasota	1997-03-08
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The Florida Master Site File is a paper file archive and computer data base of all known historical structures and archaeological sites in Florida. There are currently more than 106,000 historical structures and archaeological sites listed on the site file. Of the sites listed in the site file, 391 have been listed in Manatee County since 1997. These properties are not required to meet any minimum level of historical or scientific importance, but usually are at least fifty years old, and adequately located and documented. These sites represent the known physical remains of Florida's prehistoric and historic cultural heritage.

Other historic preservation activities include: the purchase of the 1912 Schoolhouse in Cortez Village; renovation of the Crosley Estate and establishment of the Crosley Foundation; expansion of the Gamble Mansion and the Historical Park; the establishment of the Cortez Waterfronts Florida Program and creation of the Cortez Design Guidelines; renovation of the Miller Dock in Cortez; and hosting of the first Historic Preservation Forum. Future projects include the renovation of the Myakka School House and 1912 Schoolhouse.

Objective 7.1.3 Archaeological Sites: *Preserve and protect significant archaeological sites from incompatible development to increase understanding of the settlement of the county.*

Land Development applications within the Historic and Archeological Overlay Districts and Historic Vista Protection Areas are reviewed by County staff prior to approval. The following stipulation is typically placed on land development applications that protect archeological resources from development if any archeological or historic artifacts are discovered:

"Any historical or archaeological resources discovered during development activities shall be immediately reported to the Florida Division of Historical Resources and treatment of such resources shall be determined in cooperation with the Division of Historical Resources and Manatee County. Treatment of the resources must be completed before resource disturbing activities are allowed to continue."

Manatee County has kept the Historical and Archeological Master Site File data current with the help of the Florida Master Site File Library. This information is updated annually and sent in an ArcView Geographic Information Systems format which the Information Services division can translate into maps.

The Archaeological Site Predictive map has not been updated since the last Evaluation and Appraisal Report; however, using the detailed information from the state, the majority of sites can be recorded for reference.

During the development review process, the site predictive map is utilized. If a site is considered to have potential for archeological resources, the developer is typically required, through plan development, to conduct a more detailed site assessment for county review.

Objective 7.1.4 Historical Sites Educational, Cultural and Recreational Value: *Increase utilization of state and locally designated historic neighborhoods, landmarks, and archaeological sites for historic and cultural education while providing passive recreational needs.*

Protection efforts continue at Madeira Bickle Mound, DeSoto National Memorial, Gamble Mansion, and other significant sites. Interpretive displays and educational facilities at Emerson Point are being constructed in phases. There are currently seven (7) interpretational signs, two (2) kiosks, and one (1) pavilion located at Emerson Point Park.

As a part of the renovation of Crosley Estates, the Crosley Foundation was created to educate the public on the history of the mansion and grounds, and to maintain the historic character of the building.

Objective 7.2.1 Inventory Performance Measures: *Purchase books and other library materials annually to approach a system-wide collection meeting national standards for quantity and diversity, as promulgated by the American Library Association or other recognized authority.*

Libraries

Currently, the Library Services maintains 430,318 volumes. At the current estimated population of 286,804, the volume per capita is 1.5.

Objective 7.2.2 Facilities Performance Measures: Progress toward meeting national standards for adequate library facilities to serve all citizens of Manatee County.

The total square footage of the libraries within the county total 100,824 square feet, which calculates to a total of 0.35 square feet per capita. To increase this number, Library Services will be increasing the Palmetto and Central Library system by several thousand square feet.

Objective 7.2.3 Broader Service: *Make progress toward improved service to all citizens of Manatee County.*

As the population increases, Library Services and its supporting divisions will continue increased number of special services to juveniles, the business community, and government services by increasing the inventory of volumes and square footage and expanding services where necessary.

Objective 7.3.1 Cultural Diversity and Accessibility: *Increase the diversity, accessibility and variety of cultural facilities and opportunities available to Manatee County residents and tourists.*

Create a provision to increase cultural possibilities for residents and visitors.

Objective 7.3.2 Coordinate Cultural Activities: *Increase coordination between the County and cultural organizations to meet the County's cultural needs and to improve the efficiency with which the County's cultural resources are utilized.*

Since the last review period, many cultural events are provided by Crosley Estates, Manatee Arts Council, the Art League of Manatee County, Village of the Arts and the Manatee Players. Additionally, Desoto National Memorial holds educational events to teach visitors of the landing of Hernando de Soto.

Objective 7.3.3 Promotion of Cultural Resources: Improve awareness of the County's cultural resources.

During the past years, there have been increased visits to local cultural and passive recreational facilities such as the Bishop Planetarium, Art League of Manatee County, Village of the Arts, Manatee Players, and Desoto National Memorial. Continued emphasis will be placed on encouraging visits to such facilities with educational and promotional brochures, and regular maintenance of the facilities.

Recreation/Open Space Element

Element Overview

I. Data and Trend Highlights

- County far ahead of LOS Requirements for Regional and District parks.
- From 1996-2003 there has been:
 - Growth in number of parks
 - 5 more local parks (including new schools)
 - 1 more regional park
 - 1 more district park
 - Growth in diversity of park type
 - Emerson Point vs. Lakewood Ranch
 - Growth in acres of conservation lands
 - From 1996-2003, growth of 6,653 acres
 - 29,856 acres in "Conservation"

II. Accomplishments

- County government coordination with School Board with creating school sites and parks.
- County government coordination with new development creating different types of private parks.
- Greenways Master Plan adopted by Board in 2002.
- Beach re-nourishment project completed in 2003.
- County Environmental Lands Study completed in 2002.
- Ecosystems Management Division of County Administrator's Office formed in 2002 to oversee management of conservation lands and to coordinate with ELMAC.
- Paddle Manatee - Blueways trail system established.

III. Concerns and Opportunities

- Growing need for local parks in developing areas.
- Parks Needs Assessment Study per Policy 8.1.2.3 not completed
- Overall parks system concern:
 - Are we building what the public wants,
 - Are we measuring our progress in the most appropriate manner
 - Two extremes – intense ballfields to pristine conservation lands -but little in between (e.g., non-intensive urban parks).

IV. Imagine Manatee Key Elements and Actions

- Active and passive parks
- Multi-use trails system

Parks in Manatee County 1995 - 2003					
Type	1995 # of Facilities	2003 # of Facilities	% Change	1995 Acres	2003 Acres
Local Parks*					
School Sites	25			237	
Non-School*	11			98	
Manatee Comm. College	1			100	
Historical Park	1			2	
District Parks	1			137	
Regional Parks	3			772	

There are also many privately owned and maintained park facilities that are not counted in this report. These facilities include recreation areas in residential subdivisions maintained by homeowner associations, private golf courses, gun ranges, and other facilities.

Imagine Manatee

Imagine Manatee included goals related to the Recreation/Open Space Element such as *Community Spaces, Parks and Trails, and Preservation of Natural Areas*.

Community Spaces Goal: *A community that has centers and areas for youth, adults and seniors to meet, communicate and recreate; promotes safety and a sense of community; has clean beaches and clear access to waterways; and has both neighborhood parks and events, and festivals and events for the whole County.*

Strategies identified to implement Community Spaces Goals include:

- Develop strict county wide requirements that builders and developers must follow to ensure we can enjoy and be proud of what is built here and develop a planning committee that has the authority and financial means to promote projects that will improve the community.
- Operate schools as full-time community centers.
- Implement cross-generational mentoring one-on-one or in small classes conducted by volunteers and paid staff.
- Develop youth programs and events with a teen planning board.
- Establish a planning committee for improving redeveloping areas.

Parks and Trails Goal: *A community that preserves and plans for more neighborhood, regional and state parks throughout the County with diverse uses for all ages and abilities such as dog parks, skate parks, gardens, fitness parks, historical and educational parks, etc.; connects a county-wide walking, biking and nature trail system, including sidewalks, with adjacent counties and statewide trail systems; improves the maintenance, safety, and public access of boat ramps, vistas, and blueways to our beaches and other waterways while considering the preservation of environmentally sensitive areas and natural ecosystems.*

Strategies identified to implement *Parks and Trails* Goals include:

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- Develop a parks and trails master plan.
- Identify funding sources.
- Seek and maintain the cooperation of landowners with the awareness of the special needs of agriculture.
- Maximize use of public land.
- Provide for public access to all publicly owned lands and facilities.

Preservation of Natural Areas Goal: *A community that preserves, protects, and restores its natural areas - including waterways, beaches and coastal areas, wetlands and sensitive lands, wildlife and wildlife habitats, trees and big trees in particular, and drinking water; acquires land for preservation, agricultural protection and community access; and provides open spaces and greenways in developed areas and biodiversified green space.*

Strategies identified to implement *Preservation of Natural Areas* Goals include:

- Establish an Environmental Preservation Department.
- Amend comprehensive plans to reflect the goal and include the map of identified natural areas needing preservation and provide a way to transfer development rights (TDR) from these lands to already disturbed lands.
- Develop a mandatory environmental education program in County schools.
- Establish a dedicated source of public funds; allow private sector partnerships for acquisition and management of natural areas, open spaces, and greenways; and pass an environmentally sensitive land acquisition tax.
- Create a group with authority to study needs and implement the goal.
- Through a citizens committee, review existing ordinances and regulations to determine if they meet the established goal and recommend revisions to bring ordinances and regulations into line.
- Enforce goals and laws to preserve and protect the environment and all natural resources through more patrols.
- Change zoning codes to include the preservation of old-growth trees, native vegetation, and the use of native plants in landscaping.

Element Overview

The following is an overview of the objectives of the Recreation and Open Space Element. Identification of potential plan amendments is also included.

Objective 8.1.1 Level of Service: *Maintain a park and recreation system consistent with the following level of service standards and with the performance measures contained in Table 8-1 (located at the end of this element).*

Manatee County maintains Recreation Facilities Performance Measures, an actual adopted performance LOS that is measure in units per residential population as follows:

- Local parks – 1 per 5,000 population
- District parks – 1 per 300,000 population
- Regional parks – 1 per 500,000 population

Manatee County collects and expends impact fees for parks by district (see Parks Impact Fee District Map in appendix). Parks are classified and defined in the Comprehensive Plan by

Regional, District, and Local parks.

Manatee County currently has 6 regional parks with current needs for 1 additional regional park. By 2025, the projected need is for 2 additional regional parks. Manatee County currently has 4 district parks with current needs for 1 additional district park. By 2025, the projected need is for 2 additional district parks.

Local parks needs are more prevalent. Impact Fee District C has 20 local parks but will need at least one or more additional local parks (depending on area growth) by 2020. Impact Fee District D currently has 6 local parks. It will need 8 or more (depending on area growth) by 2020. Impact Fee District E currently has 4 local parks. It will need 2 or more (depending on area growth) by 2020.

Manatee County also compares the adopted LOS annually to the Florida State LOS Standard (1994) and NRPA LOS Standard (1983). Manatee County meets its adopted performance standards. Manatee County may excel or fall short when comparing the specific type of recreation activity to FL or NRPA LOS standards.

Manatee County currently requires by development stipulation that new subdivisions in the UF-3 FLUC and typically Planned Development Residential projects to provide different types of recreational amenities. This requirement has been ongoing since the 1997 Plan adoption and many private recreational facilities have been developed and are maintained by the neighborhood homeowner associations. These private recreation amenities are not counted in the parks inventory. The Parks Dept. is working on creating a GIS database of these private parks improvements.

Due to the number of recreation amenities and local parks provided by the private sector, it may be worthwhile to look at raising the level-of-service on local parks or count the existing private parks. It also may be more reflective and honest to lower the level-of-service for district parks to 1 per 50,000. The park type definitions in the Comprehensive Plan also differ from the existing level-of-service policies. An amendment would most likely address both issues at the same time.

Future park improvements are funded via the Capital Improvements Program and by impact fees collected for the specific district. Unfortunately, there are not always enough impact fee dollars to improve parks in the older urban core areas of the county and a surplus of dollars in areas of the county that are developing. The residents of Manatee County voted in March 2004 against a tax that would have provided additional funds for conservation land purchases, parks, and greenways.

Potential Plan Amendments – Level of Service

Potential plan amendments may include:

- Overall countywide parks needs assessment – previously identified in 1996 EAR and 2020 Plan – to provide a more detailed analysis with citizen input of what is specifically desired for our parks system.
- Look at policy to partner with municipalities on the maintenance and upgrading of County-maintained parks inside or serving municipalities.
- Look at potentially counting private recreational amenities as parks for concurrency.

Objective 8.1.2 Provision of Public Parks: *Ensure funding and coordination with appropriate agencies for adequate parks provision to ensure that parks are provided which serve area users in the most economical way.*

Manatee County strives for efficiency of service delivery with it's parks. Funding is provided by several sources:

- User Fees
- General Fund
- Impact fees
- 5 Year CIP for improvements/development of new parks
- Various grants for programs/improvements

Due to Manatee County's growth, expanding and making large scale improvements in the existing areas of unincorporated county can be a challenge to find the funds. Impact fees are only permitted to be used in the district they are collected. Therefore, Manatee County must continue to strive to secure alternative funding sources to improve the existing parks network. For the 2004 CIP, there are \$5.6 million for park improvements for the next 5 years. However, there are over \$16 million of unfunded projects. The Board of County Commissioners has given staff direction to look at bonding improvements due to current low interest rates.

The funding commitment to greenways has increased since it began in 1999. In FY 2003-04, funding for greenways increased from \$100,000/year to \$300,000/year. However, in March 2004 the citizens voted against a tax for conservation land purchases, parks and greenway trail development.

In 2000, Manatee County became an "entitlement community" and receives \$1.8 million dollars through the Community Development Block Grant (CDBG) program. CDBG uses 20% of the funds for parks and is assisting with improvements to parks in the urban core areas the county where a significant amount of impact fees are not available.

Potential Plan Amendments – Provision of Public Parks

Manatee County has been very successful in coordinating with the School Board in the public utilization of schools as parks after school hours. In addition, the County has been coordinating heavily with joint use of many of it's facilities by other recreation providers such as the YMCA and Boy's and Girl's Clubs. Therefore, no plan amendments are foreseen for this section.

Manatee County will look at other coordination efforts with School Board and try to immitate past successes. Lakewood Ranch Park was the best example of school and park sharing property. County staff will look at repeating this effort as the School Board builds a new high school north of the Manatee River and east of Interstate 75.

Objective 8.1.3 New Development: *Ensure sufficient park facilities are available to support new residential development to ensure that new development does not negatively impact quality of life.*

Not only does the Board of County Commissioners look at future park sites to serve future residents as development continues, but many residential developments have been required to provide recreation amenities. The Board stipulates with the approval of a development a specific type of recreational amenity to be provided, usually if one is not proposed originally by the developer. These stipulations need to be coordinated via the Parks Dept. to determine what

specific parks needs are in the area to be developed or for consistency with any potential future parks master plan.

Manatee Forever, a non-profit group has taken the lead on promoting a ½ cent sales tax to expand the funding base for parks, trails, and environmentally significant lands. The tax will be a referendum in March 2004. The additional dollars will help the county meet the needs of a growing community for parks, recreational, and conservation lands.

Potential Plan Amendments – New Development

Potential plan amendment requiring the coordination of Board stipulations with the Parks Dept. to be consistent with area parks needs.

Manatee County provides the two extremes of parks consistently – lighted ball fields and conservation lands. However, there is a definite lack of something in between as well. Parks with open spaces you could throw a Frisbee, have a picnic, walk your dog, rollerblade, etc., more of a large manicured low intensity urban park.

Objective 8.2.1 Public Access: Provide appropriate public access for residents of all ages and physical abilities and ensuring compatibility with natural resource protection to allow all residents the opportunity to enjoy these recreational resources.

Manatee County continues to maintain public access points along the gulf beaches, bridges, and waterways in the most environmentally friendly manner possible.

Potential Plan Amendments – Public Access

No plan amendments are foreseen for this section.

Objective 8.2.2 Multi-Modal Access: Provide opportunities for a variety of access methods including connections to other recreational facilities, destinations, or points of interest to reduce dependence on motorized vehicles and promote non-vehicular recreational opportunities.

In July 2002 the Greenways Master Plan was adopted by the Board of County Commissioners. The master plan provides over 100 miles of potential greenway trails throughout the county linking parks and conservation lands.

Paddle Manatee, Manatee County's award winning blueway trail system was completed in 2003 and awarded designation as a State Trail by the Florida Greenways Coordinating Council. Paddle Manatee provides canoe and kayak trails linking various parks and conservation lands in the county and provides connections to neighboring counties. This linkage is also Manatee County's portion of the Florida Greenways Coordinating Council's vision for a circumnavigational paddle trail around the entire peninsula of Florida.

At the time of this plan's adoption, Manatee County has several trails under design and construction. The Bayshore Treewalk Trail, Coquina Beach Trail, and a portion of the Palma Sola Bay Trail are undergoing conceptual design. A portion of the West Coast Regional Greenway linking Rye Wilderness Park and the Lake Manatee State Park is also undergoing "design-build" in 2004.

Implementation of the County's greenway efforts is through the Manatee County Citizen Trail Committee. This dedicated group is made up of citizen volunteers that guide staff and the elected officials in trail decision making.

Manatee County provides alternative transportation options to its parks and Gulf beaches via Manatee County Area Transit (MCAT). MCAT began its trolley service in 2001 along the gulf beaches. The trolleys provide free service on the beaches and to malls that act as park and ride facilities on the mainland. The trolley service immediately became the most popular route on the MCAT system due to its ease of use, 20 minute headways, and no cost.

Potential Plan Amendments – Multi-Modal Access

Potential plan amendments for this section include:

- Amendments to policies to reflecting the creation of the Greenways Master Plan.

Available Natural Resource Areas

Objective 8.3.1 Conservation and Open Space: *Protect Conservation and open space lands from incompatible uses to maintain the function and value of open space lands as habitat for wildlife, promote unique communities, and for passive recreation.*

Manatee County continues to make strides in the preservation of open space and environmentally significant areas. Tools to achieve this objective includes utilizing various methods such as open space requirements of new development, setbacks and buffers of environmentally significant areas, and outright purchasing of property from willing sellers.

Manatee County's Environmental Land Management and Acquisition Advisory Committee (ELMAC) was set up to advise the Board of County Commissioners on matters related to environmental land acquisition and management, and recreational planning and programming for acquired lands. In 2002, ELMAC provided guidance to County staff in developing a countywide inventory of environmentally sensitive lands. This inventory along with various rating systems of specific environmental and other information is used to guide the Board of County Commissioners along with ELMAC for decision making with environmental lands purchasing.

Potential Plan Amendments – Conservation and Open Space

Potential plan amendments include:

- Changes to reflect creation and use of the ELMAC study.

Objective 8.3.2 Recreational Use of Public Lands: *Increase the utilization of public lands within the WO and CSVA districts and in other areas for compatible recreation, education, and open space activities to maintain pervious area and natural vegetative areas that aid in filtration of pollutants.*

Potential Plan Amendments – Recreational Use of Public Lands

- Look at amending policies to reflect creation of Ecosystems Management Division in 2000. They now manage County conservation lands instead of the Parks Dept.
- Policy 8.3.2.4 leaves out the Tampa Bay Buffer Preserve and Aquatic Buffer Preserve projects that are managed by DEP and the State Parks Division. Policy may need to be amended to reflect County coordination with this effort.
- Manatee County in summer 2004 contacted all state public land holders in the county. This was done to determine if their properties carried the appropriate FLUC. They were asked to advise the County if a change was desired. These FLUM amendments will be done consistent with the EAR amendment process.

Water Supply Subelement

Manatee County provides the unincorporated areas of Manatee County and the island communities (Anna Maria, Holmes Beach and Bradenton Beach) with all of their potable water needs. In addition, current contracts obligate Manatee County to provide reserve capacity to wholesale customers in the area as indicated in the following table. The wholesale users are the City of Bradenton and Palmetto, Longboat Key and Sarasota County. The contract with Sarasota County is based on a gradual reduction of water supply through the year 2025 as indicated in the following table. The Water Supply Service Area Map is located in the appendix.

Water Reserves	
Longboat Key	2,500,000 gpd
Palmetto	2,000,000 gpd
Bradenton	500,000 gpd

Source: Manatee County Utilities Operations Department – “Manatee County Water Supply Facilities Work Plan-April 2004”

Water Quantities Contracted with Sarasota County	
Year	Gallons Per Day (gpd)
2000-2003	12,000,000 gpd
2004-2007	10,000,000 gpd
2008-2014	8,000,000 gpd
2015-2024	5,000,000 gpd
2025	- 0 -

Source: Manatee County Utilities Operations Department – “Manatee County Water Supply Facilities Work Plan-April 2004”

There are several non-residential customers with large water requirements. Customers that demand over 25,000 gallons per day are identified as “significant users” by SWFWMD. In 2003, significant users accounted for approximately 2.1-mgd of the County’s demand. Manatee County’s largest significant user is Tropicana with approximately 1.6-mgd in 2003.

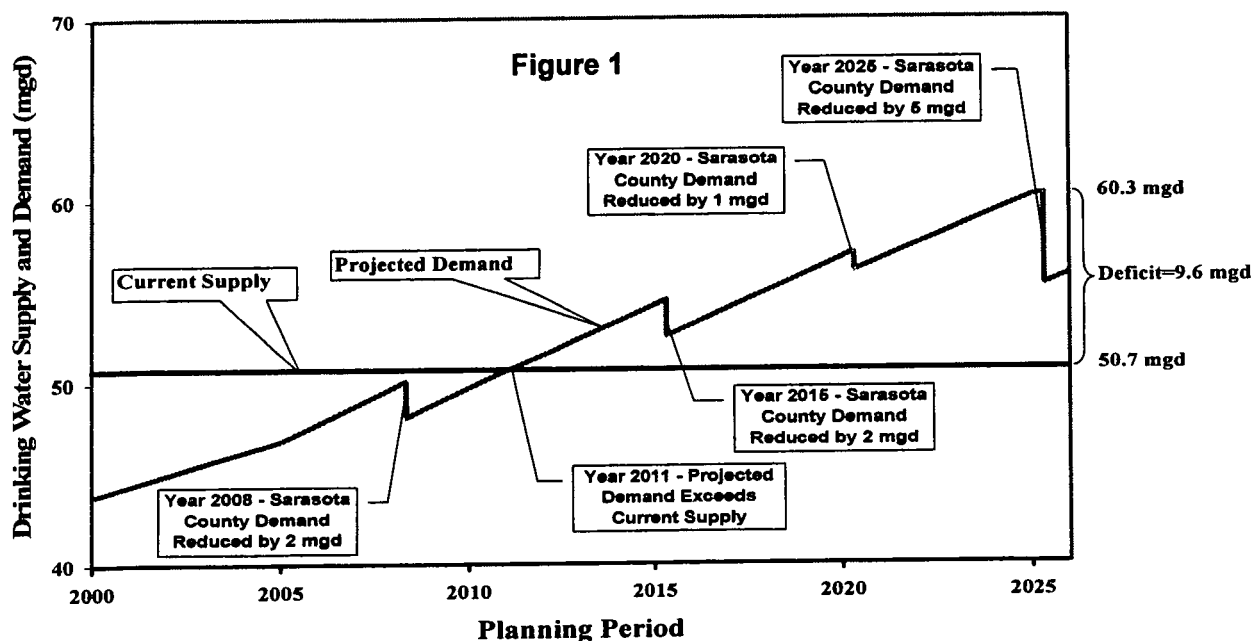
All of the wholesale users maintain some components of their treatment/transmission/distribution systems as follows:

- City of Bradenton has reservoir, water treatment plant, pumping, storage and distribution system.
- City of Palmetto maintains water distribution system but no storage.
- Town of Longboat Key has 2.5 million gallons of storage and maintains three pump stations.
- Sarasota County maintains distribution and pumping systems.

Based on population projections and today’s permitted supply of 50.68-mgd, the existing water supply will be available through the year 2011 (see Manatee County Potable Water Capacity Expectancy 2000-2030 in Appendix).

Manatee County has been experiencing rapid growth and the trend is expected to continue and will result in an increase in water demand. Reserve capacities available to wholesale users are set forth in fixed agreements. Projected potable water demands are projected on the following table and figure. These demand projections will serve as the basis for determining future water supply needs.

The water demand projections provided in the following Water Demand table only account for the potable water needed for public supply. Other water demands of the County include uses for agriculture, industrial/commercial, mining/dewatering, power generation, and recreation/aesthetic. All of these demands involve withdrawals from the natural water resources in the area and play a significant role in the County's overall water supply planning.



Source: Manatee County Utilities Operations Department – "Manatee County Water Supply Facilities Work Plan-April 2004"

Water Demand Projections from 2000 through 2025						
Annual Average Flows (mgd)						
Users	2000	2005	2010	2015	2020	2025
Unincorporated Manatee County	24.45**	26.17*	30.47*	34.58*	38.47*	42.22*
Cities of Anna Maria Island	1.47**	1.41*	1.47*	1.53*	1.59*	1.65*
City of Bradenton (wholesale)	0.18	0.50	0.50	0.50	0.50	0.50
City of Palmetto (wholesale)	1.39	2.00	2.00	2.00	2.00	2.00
Town of Longboat Key (wholesale)	2.58	2.50	2.50	2.50	2.50	2.50
Sarasota County (wholesale)	10.11	10.00	8.00	8.00	6.00	5.00
Significant Commercial Users	2.71	3.28	3.80	4.29	4.76	5.21
Total Demand	42.90	45.86	48.74	53.40	55.82	59.08
Demand + 2% Treatment Loss	43.76	46.78	49.71	54.47	56.94	60.26

** Demand based on 2000 water use information (120-gpcpd demand rate).
 * Demand based on population projections and Appraisal Report (EAR)

SOURCE: Manatee County Utilities Operations Department - Manatee County Water Supply Facilities Work Plan-April 2004
 Comprehensive Planning EAR_2004 EAR Doc Report earoutline.doc

Water Supply Needs and Deficiencies	
Projected Water Needs by 2025	60.3 million gallons per day
Current Water Supply (2005)	50.7 million gallons per day
Expected Water Deficiency by 2025	9.6 million gallons per day

Source: Manatee County Utilities Operations Department – “Manatee County Water Supply Facilities Work Plan-April 2004”

To address the projected water deficiency, there are several options for potential water sources which include:

Reclaimed Water

The Manatee Agricultural Reuse Supply (MARS) System will expand the reclaimed water distribution to agricultural users who would otherwise pump irrigation water from the Upper Floridan aquifer. Reclaimed water agreements with such users will include the provision of well credits to Manatee County which will provide the ability to permit all of the new water supply needed within the planning period with this new supply proposed to be developed as coastal wells or a new wellfield. However, this is dependent on the actual quantity of new water supply that will be permittable through MARS well credits. An increase in permittable water supply pumping available through MARS well-credits are estimated at 11.9-mgd (23.8-mgd /2). The MARS system construction is anticipated to allow the County to obtain 6.3-mgd well-credits at the system completion in 2005 and up to 11.9-mgd by 2025.

Surface Water to Agricultural Irrigation

Three potential locations have been identified for the development of reservoirs to store surface water diverted from nearby rivers. Since the location of the reservoirs are too far from the Water Treatment Plant to use for potable water, the water could be distributed to nearby agricultural users or piped to supplement flow in the MARS system. The County could obtain well credits for the offset groundwater pumping.

Tatum (Fancy Farms) Reservoir

The reservoir is estimated to yield 5.2-mgd. Development of this water supply source could produce an estimated 2.6-mgd in additional permitted water supply, assuming a well credit ratio of two-to-one.

IMC Phosphates Co. Reclamation Lakes

The reservoir is estimated to yield .40- mgd. Development of this water supply source would only produce an estimated 0.20-mgd in additional permitted water supply.

Lake Parrish (FPL) Reservoir

Potentially, 4.5-mgd of water may be available from this reservoir. This water would be used for agricultural irrigation in order to obtain well credit. Development of this water supply source could produce an estimated 2.25-mgd in additional permitted water supply, assuming a well credit ratio of two-to-one.

Negotiated Acquisition of Well Credits/Permit Transfers

Manatee County may be able to negotiate the acquisition of well credits and/or water use permits from existing permittees and use these to obtain an increase in permitted pumping from water supply wellfields.

Surface Water Supply through Storage Expansion

Several alternatives have been proposed to increase available surface water yields from the Lake Manatee Reservoir system by expanding the existing storage volume and seeking a water use permit modification through SWFWMD. The proposed methods to increase the yield include dredging of the Lake Manatee Reservoir, developing the Gilley Creek and/or the North and East Fork reservoir upstream of Lake Manatee, and expanding the aquifer storage and recovery (ASR) system at Lake Manatee.

Dredging of Lake Manatee

The increase in safe yield made available through this alternative is estimated to be 11.7-mgd.

Gilley Creek Reservoir

The increase in safe yield available through this alternative is estimated to be 9.2-mgd.

North and East Fork Reservoir

The increase in safe yield available through this alternative is estimated to be 10.6-mgd.

Further Expansion of ASR at Lake Manatee

The increase in yield from this proposed project is estimated to be 3.0-mgd. If 10% of the increased storage volume (4-mgd) is used to maintain baseflows below the dam for 60-days out of the year, it would leave approximately 2.3-mgd of additional supply water to be gained from this project.

Based on the anticipated difficulties in permitting and the small amount of additional water supply made available, this alternative is not considered a viable water supply option.

Surface Water Supply through Storage of Irrigation Runoff

The Flatford Swamp Irrigation Runoff project could potentially provide an average annual yield of 8-mgd. The development of the Flatford Swamp water supply alternative would not only expand the County's raw water supply, but also the treatment and distribution capacity of MCUOD's potable water system. This alternative provides an independent source that would significantly increase the County's emergency reserve capacities.

Flatford Swamp Supply Supplemented with Seasonal Diversions from the Myakka River

Approximately 3.4-mgd of flow could be obtained through seasonal diversions of the Myakka River at the Tatum site to supplement the estimated 8-mgd yield from the Flatford Swamp. This would bring the total supply alternative's yield to 11.4-mgd.

Desalinated Seawater Supply

Seawater is an abundant resource in Manatee County. Advantages of treating seawater for potable supply include drought resistance, high quality finished water, and an essentially unlimited supply. The main disadvantages of desalination include high construction costs, high

operation and maintenance costs, and concerns with concentrate disposal. Although the costs associated with desalination are higher than those associated with conventional water treatment methods, recent price reductions in reverse osmosis (RO) filtration equipment and SWFWMD's willingness to fund these types of projects have made seawater supply options more competitive with other potable water supply methods. SWFWMD's Regional Water Supply Plan and the County's Water Supply Plan have identified a proposed seawater desalination facility site at the Port Manatee area in the northern part of the County.

Significant regulatory issues are typically associated with a desalination facility. However, the proposed site is reported to offer a favorable opportunity for regulatory acceptance. It should be noted when comparing the finished water cost to that of other alternatives, that this option expands not only the raw water supply, but also the treatment, storage, and distribution capacity of MCUOD's potable water system.

A major concern is the effect of excessive withdrawals from the Florida Aquifer within areas identified as "water use caution areas" (see Water Use Caution Area map in appendix) by SWFWMD. Manatee County is fully contained within the Southern Water Use Caution Area (SWUCA). The entire western portion of the County is contained within the area known as the Most Impacted Area (MIA).

SWFWMD has prepared a "SWUCA Recovery Strategy" plan (Revised Draft – March 2004) which identifies projected additional water needed by 2025 as follows:

Under Average Conditions

Drought Conditions

Up to 216.4-mgd

up to 234.5-mgd

The totals are based on the need to meet salt water intrusion, public supply, residential irrigation wells, agriculture, phosphate, recreational and others.

The potential water sources are estimated to be 252-mgd based on public supply conservation of 10%, existing permitted but not fully used, potable supplies under construction/design, non-public supply conservation, groundwater quantities available when land use changes and groundwater quantities available when lands are acquired for conservation.

Subelement Overview

Objective 9.5.1 Level of Service Standards: *Maintain the following level of service standards to minimize urban sprawl, maximize the use of existing facilities, plan capital improvements, and to review development applications.*

Level of Service Standards require an average daily flow of 110 gallons per capita per day of total population served. The distribution is as follows:

65 gpcpd for all residential users

30 gpcpd for all businesses, industrial and institutional uses

15 gpcpd for all miscellaneous and unaccounted uses

All new development orders are reviewed to ensure compliance with concurrency level of service standards prior to development approvals. The original level of service standard was

established at 135 gpd based on analysis of historical use and in conformance with state standards.

The current level of service standard of 110 gallons per day was amended during the EAR-based amendment process in 1997/1998 based on recommendations of the Southwest Florida Water Management District for improving water conservation by the public within the Southern Water Use Caution Area (SWUCA).

The level of service standard was promulgated as part of the SWUCA rules issued in December 1994. These rules were challenged and were never fully adopted. The proposed standard for public supply within the new SWUCA Recovery Strategy is 150 gpcpd. This has resulted in the County adopting a level of service standard which is significantly more stringent than required by the proposed SWUCA Recovery Strategy.

This standard limits the ability of the Public Supply System to meet the level of service standard and provide water for outdoor irrigation. This limit is recognized in the Comprehensive Plan and policies have been adopted which prohibit the use of potable water for landscape irrigation (Policy 9.6.1.3) and require new development to plan on the use of alternative sources for outdoor irrigation unless the cost to extend reclaimed water lines is prohibitive and no access to alternative sources of irrigation are available.

Alternative sources include stormwater, shallow groundwater from either the surficial aquifer or the intermediate aquifer, or reclaimed water where it is available. Development is encouraged to utilize water conserving landscape principles to reduce or eliminate the need for supplemental irrigation. Lake Manatee still has a treatment capacity of 84-million gallons per day. Permitted water capacity from all sources total 50.68 million gallons per day.

1.96 – mgd – IMCP Wellfield

13.82 – mgd – East County (Duetta Park) Wellfield

34.90 – mgd – Lake Manatee

Objective 9.5.2 Potable Water Reservoir: *Preserve the Manatee River Reservoir as a long-term source of potable water.*

Manatee County continues to pursue acquisition of lands within the Manatee County watershed. The ten-year projected Capital Improvement Plan (FY 2005-2014) has \$8,431,444 earmarked for "Watershed Land Acquisition". \$4,481,444 has already been appropriated from prior years and \$3,950,000 is being budgeted for the next ten years for the total amount of \$8,431,444.

Manatee County continues to promote water conservation with incentive programs and numerous conservation rebate programs (water conservation, cistern, irrigation well and landscape irrigation system) Water conservation educational materials are distributed at the Manatee County Utilities Operations Department as well as in utility bills.

New development is required by the Manatee County Land Development Code LDC – Section 715) to conserve potable and non-potable water by the use of drought tolerant and low maintenance species. A minimum of 30% must be native species. Xeriscape-type landscaping is required when feasible.

Manatee County currently supplies reclaimed water for agricultural irrigation from each of its three wastewater treatment facilities. Despite an abundance of potential additional agricultural reclaimed water users within the County, not all of the plant effluent is currently distributed in this manner due to limitations in the existing reclaimed water distribution infrastructure (piping, pumping and storage facilities).

The Manatee Agricultural Reuse Supply (MARS) System will expand the reclaimed water distribution infrastructure, providing the capability to distribute more plant effluent as reclaimed water. The MAR System will provide sufficient capacity to distribute an average daily reclaimed water flow of 29.43 mgd, an amount equal to the projected combined wastewater treatment plant effluent in the year 2020.

Throughout the development of the MARS System, it has been intended that the increased reclaimed water flows will be distributed to agricultural users who would otherwise pump irrigation water from the Upper Floridan aquifer. Reclaimed water agreements with such users will include the provision of well credits to Manatee County for transfer of withdrawal quantities. Under this agreement, the existing user would retain his withdrawal permit for emergency/standby purposes such as frost and freeze protection and failure of the reclaimed water supply.

However, the permit could be modified to include a restriction on regular pumping by the permittee, and pumping privileges would be granted to Manatee County. Pumping privileges obtained in this manner are termed "well credits" and would be granted at a two-to-one ratio. For every two mgd of irrigation pumping eliminated, one mgd of increased water supply pumping could be allowed by SWFWMD. This two-to-one transfer ratio results in a 50% reduction in total Floridan Aquifer pumping providing a net benefit to the natural groundwater resource. An increase in permissible water supply pumping available through MARS well-credits are estimated at 11.9-mgd (23.8-mgd /2).

The MARS system construction is anticipated to allow the County to obtain 6.3-mgd well-credits at the system completion in 2005 and up to 11.9-mgd by 2025. There is some uncertainty about the quantity of well credits available through implementation of the MARS project. If future flows to the waste water treatment plants are less than expected, less reclaimed water would be available for distribution which means less well credits.

There is considerable interest in using reclaimed water for urban residential irrigation. Most urban users obtain landscaping irrigation from potable supply lines or shallow groundwater pumping, not from the Floridan Aquifer. Therefore, Floridan Aquifer well credits would not be granted by SWFWMD for reclaimed water offset of these users.

Objective 9.5.3 Wellfields and Alternative Emergency Sources: *Maintain self-sufficiency and redundancy in potable water supplies and water treatment capacity.*

The amount of reserve emergency capacity is summarized below:

<u>Pumping Facilities</u>	<u>Emergency Capacity</u>
Groundwater supply sources	28.1-mgd
<u>Aquifer Storage & Recovery (ASR)</u>	<u>10.0-mgd</u>
Total Emergency Capacity	38.1-mgp

Seventy-five percent (75%) of the 2010 projected average daily demand of 49.71- MGD equals 37.28- MGD. Currently, the emergency capacity is adequate to meet the projected water needs through 2010.

However, the pumping and transmission facilities in place at the wellfields, together with ASR, will not be able to deliver the required emergency capacity after 2011 without existing facility expansion or other new reserve sources. By 2025, approximately 7.1-mgd of additional reserve capacity will be needed to backup the Lake Manatee Reservoir. Potential water sources are discussed in the introductory section.

Objective 2.6.4 and associated policies protects an area within 200 feet of any public supply well as a zone of exclusion and prohibits new commercial or industrial uses, septic tanks, leaching fields, and other uses from locating within the zone of exclusion.

An area within 1000 feet of any public supply well is afforded a protection zone of secondary exclusion and prohibits all of the following uses from locating within the zone of secondary exclusion:

- landfills;
- facilities for the bulk storage, handling, or processing of materials on the Florida Substance List;
- commercial or industrial uses of hazardous materials or wastes;
- junkyards or salvage operations;
- mines;
- wastewater treatment plants and similar facilities;
- pesticide storage facilities;
- animal feed lots.

Objective 9.5.4 Potable Water Distribution: *Construct a potable water distribution system based on the potable water distribution plan to meet projected need for water storage tanks and distribution mains, capable of meeting fire flow performance standards in areas where potable water is used for fire protection, and capable of providing back up distribution systems to address failure of major system components.*

The Water Distribution Master Plan was updated in January 2003 by Parsons Engineering. Improvements recommended in the Master Plan has been incorporated into the Water Supply Facilities Work Plan. The Water Supply Facilities Work Plan is a 10-year work plan and sets out a 10-year capital improvement program for the period 2005-2014. (See 10-year spreadsheets in the Water Supply Facilities Work Plan). However, Manatee County approves the Capital Improvement Plan in five year increments on an annual basis.

Objective 9.5.5 Recurrent and Retrofit Capital Costs: *Establish fair and equitable cost recovery methods for capital and operating expenditures associated with the public potable water system.*

All entities benefiting from the extension of potable water service in developed areas, except persons meeting financial hardship, have paid for the extension of services. In some target areas, grants have helped to pay to extend service. Manatee County charges fees to the potable water customer to offset operational and maintenance costs. These fees are reviewed annually.

Objective 9.6.1 Development Requirements: *Require that new development provide adequate potable water and fire flow capacity and that potable water conservation is practiced to conserve water supplies for future residents.*

The ten-year projected Capital Improvement Plan, as listed in the Water Supply Facilities Work Plan-10year plan, includes over 64 million dollars for the budgeted for the renewal and replacement of water pipelines to increase pressure for both fire flow and potable water needs. All new development orders are reviewed to ensure minimum fire flows are achieved prior to development approvals.

Objective 9.6.2 Growth-Induced Capital Costs: *New growth assessed a fair share of capital costs associated with the County's potable water system.*

All new development is required to pay Facility Investment Fees (FIF) as it connects to the county water system. These fees are a dedicated source of funding for the expansion of potable water lines. All development orders are reviewed by the County and the developer is informed of required improvements. Site plans must show required improvements prior to issuance of a Concurrency Certificate of Level of Service.

Wastewater Treatment Subelement

Manatee County is provided waste water service that is divided into three (3) Regional Wastewater Service Areas. These regional service areas include the northern service area, the southeast service area, and the southwest service area, which includes the cities of Anna Maria, Holmes Beach, Bradenton Beach and the Town of Longboat Key.

Wastewater Treatment Facilities

The **North Waste Water Treatment Plant** has a current treatment capacity of 5.4-MGD. The County will be requesting a re-rate to increase capacity to a total of 7.2-MGD. Based on population projections and the permitted capacity of 5.4 mgd, the North WWTP will have treatment capacity through 2006. With an increase in capacity to 7.5 mgd, the plant will have treatment capacity through the year 2015. (see North WWTP -plant capacity table in Appendix)

The **Southwest Waste Water Treatment Plant** has a current treatment capacity of 22.0-MGD. Based on population projects and permitted capacity of 22 mgd, the Southwest WWTP will have treatment capacity beyond the year 2030. (see Southwest WWTP –plant capacity table in Appendix)

The **Southeast Waste Water Treatment Plant** has a current treatment capacity of 11.0-MGD. Based on population projections and permitted capacity of 11 mgd, the Southwest WWTP will have treatment capacity through 2012. To serve the entire Southwest WWTP area, an increase in treatment capacity will be required. The consulting firm, McKim & Creed, is currently conducting an analysis to determine the extent of expansion needed. (see Southeast WWTP – plant capacity table in Appendix)

2005 Waste Water Design Capacity		
Plant	Capacity	Current Demand
North	7.5-mgd	3.6-mgd
Southeast	11.0-mgd	3.8-mgd
Southwest	22.0-mgd	16.4-mgd

Source: Manatee County Utilities Operations Department- Wastewater Division – June 2004

Future Development Area Boundary and Wastewater Treatment Service Area

Currently, the Future Development Area Boundary and the Wastewater Treatment Service area are co-terminus south of Lake Manatee. Once north of Lake Manatee, the two boundaries are no longer consistent with one another (see Existing Future Development Area and Sanitary Sewer Boundaries map in Appendix).

The predominate future land use category east of the Future Development Area Boundary (FDAB) is AG/R (see Existing Future Development Area and Sanitary Sewer Service Boundaries map in appendix). However, there are areas east of the FDAB that are an urban/residential land use and several areas of AG/R that are west of the FDAB. This creates a conflict with several policies that indicate Agricultural and Rural Residential areas are primarily located east of the FDAB (Policy 2.2.1.8.1) and to limit urban sprawl by prohibiting future

development east of the FDAB (Policy 2.1.2.2). The FDAB is not co-terminus with the edge of the Urban & Future Land Use Designation on the Future Land Use Map (FLUM). This has created inconsistencies between the intent of the FDAB and the FLUM as well as the Wastewater Treatment Service Area boundary.

Reclaimed Water Use

Manatee County currently supplies reclaimed water for agricultural irrigation from each of its three wastewater treatment facilities. Despite an abundance of potential additional agricultural reclaimed water users within the County, not all of the plant effluent is currently distributed in this manner due to limitations in the existing reclaimed water distribution infrastructure (piping, pumping and storage facilities).

The Manatee Agricultural Reuse Supply (MARS) System will expand the reclaimed water distribution infrastructure, providing the capability to distribute more plant effluent as reclaimed water. The MARS System will provide sufficient capacity to distribute an average daily reclaimed water flow of 29.43 mgd, an amount equal to the projected combined wastewater treatment plant effluent in the year 2020.

Throughout the development of the MARS System, it has been intended that the increased reclaimed water flows will be distributed to agricultural users who would otherwise pump irrigation water from the Upper Floridan aquifer. Reclaimed water agreements with such users will include the provision of well credits to Manatee County for transfer of withdrawal quantities. Under this agreement, the existing user would retain his withdrawal permit for emergency/standby purposes such as frost and freeze protection and failure of the reclaimed water supply. However, the permit could be modified to include a restriction on regular pumping by the permittee, and pumping privileges would be granted to Manatee County. Pumping privileges obtained in this manner are termed "well credits" and would be granted at a two-to-one ratio. For every two mgd of irrigation pumping eliminated, one mgd of increased water supply pumping could be allowed by SWFWMD. This two-to-one transfer ratio results in a 50% reduction in total Floridan Aquifer pumping providing a net benefit to the natural groundwater resource. An increase in permissible water supply pumping available through MARS well-credits are estimated at 11.9-mgd (23.8-mgd /2). The MARS system construction is anticipated to allow the County to obtain 6.3-mgd well-credits at the system completion in 2005 and up to 11.9-mgd by 2025.

There is some uncertainty about the quantity of well credits available through implementation of the MARS project. If future flows to the waste water treatment plants are less than expected, less reclaimed water would be available for distribution which means less well credits.

There is considerable interest in using reclaimed water for urban residential irrigation. Most urban users obtain landscaping irrigation from potable supply lines or shallow groundwater pumping, not from the Floridan Aquifer. Therefore, Floridan Aquifer well credits would not be granted by SWFWMD for reclaimed water offset of these users.

Subelement Overview

Objective 9.1.1 Level of Service Standards: *Maintain the following sanitary sewer Level of Service Standards to minimize urban sprawl, maximize the use of existing facilities, plan capital improvements, and to review development applications.*

The current wastewater treatment capacity from the Southwest treatment plant is approximately 115 gallons per day per capita. However, since the Southeast and North treatment plants are newer and more efficient, approximately 95 gallons per day is the average per capita. The current level of service standard of 115 gpd will not be amended to reflect existing treatment capacities at each facility because as each facility ages and becomes less efficient, the gallons per day will increase at the SE and N treatment plants.

All three regional plants provide advanced secondary treatment to allow for the reuse of the effluent.

Objective 9.1.2 Mandatory Sanitary Sewer Collection: *Prioritize the extension of trunk mains, interceptors, and pump stations to collect wastewater from environmentally sensitive areas, existing high density areas, existing neighborhoods which are currently not connected to the Manatee County sanitary sewer system and all areas within the RES-6, RES-9, RES-12, RES-16, OL, ROR, MU, IL, IH, and IU Future Land Use Categories.*

All commercial, industrial, and development over 6 du/ac located within the wastewater treatment collection area and/or the Evers Watershed area are required to connect to county central sewer unless exempted by special approval. The County has participated in [DATA NEEDED] developer financed wastewater transmission projects.

Objective 9.1.3 Additional Treatment Capacity: *Develop, by 2005, sufficient wastewater treatment capacity to accommodate projected 2015 wastewater flows by each of three wastewater service areas.*

The **North Waste Water Treatment Plant** has a current treatment capacity of 5.4-MGD. The County will be requesting a re-rate to increase capacity to a total of 7.2-MGD. Based on population projections and the permitted capacity of 5.4 mgd, the North WWTP will have treatment capacity through 2006. With an increase in capacity to 7.5 mgd, the plant will have treatment capacity through the year 2015.

The **Southwest Waste Water Treatment Plant** has a current treatment capacity of 22.0-MGD. Based on population projects and permitted capacity of 22 mgd, the Southwest WWTP will have treatment capacity beyond the year 2030.

The **Southeast Waste Water Treatment Plant** has a current treatment capacity of 11.0-MGD. Based on population projections and permitted capacity of 11 mgd, the Southwest WWTP will have treatment capacity through 2012. To serve the entire Southwest WWTP area, an increase in treatment capacity will be required. The consulting firm, McKim & Creed, is currently conducting an analysis to determine the extent of expansion needed.

The peak hour factor of 1.31 at the plants remain valid to meet seasonal variations and for long range planning purposes. The dates 2005 and 2015 listed in the Objective will be amended to 2010 and 2020 respectively during the EAR-based amendment cycle.

Objective 9.1.4 Capital and Recurrent Costs: *Recapture the costs of establishing wastewater service to existing developed areas from users benefiting from such retrofit projects and recover all operating, maintenance, and other recurring costs from wastewater system users.*

The peak hour factor of 1.31 at the plants remain valid to meet seasonal variations and for long range planning purposes. Special assessments are required on all properties to which

wastewater collection lines have been extended. The cost of the assessment is added to the users real estate tax bill and amortized over a 15 year period.

There have been 8 sanitary sewer assessment projects since 1997 that resulted in 226 parcels being connected to central sewer. Twenty-three additional parcels are in the process of connecting to central sewer (Manatee County Project Management Department – June 2004).

Objective 9.1.5 Reclaimed Water Use: *Expand the practice of using reclaimed water for irrigation of agricultural, recreational, industrial, and urban land uses and establish a multi-modal, regional approach to ensure that changes in climactic, or other, conditions not limit Manatee County's ability to meet current disposal needs and to reduce the use of potable water sources and groundwater for irrigation purposes.*

There are four long term agreements with reclaimed water customers at this time as indicated by the following table:

Current Reclaimed Water Customers		
User	Effective Contract Date	Current Supply (MGD)
McClure Farms	Through Mar 25, 2006	1.49
Manatee Fruit Company	Through Dec 31, 2006	3.16
Blossom Grove*	Through Dec 29, 2003*	0.29*
Schroeder-Manatee, Inc.	Through Dec 17, 2005	3.08
Total (mgd)		8.02
The County is currently renegotiating their reclaimed water supply contract with Blossom Grove.		
SOURCE: Manatee County Water Supply Facilities Plan (pg 62) – April 2004		

As these agreements are up for renewal, Manatee County will have the opportunity to renegotiate the terms under which reclaimed water is provided. The County may opt to require the provision of well credits not only for increased reclaimed water flows (MARS well credits), but also for current flows. Any well credits associated with current flows would be in addition to those already anticipated through implementation of the MARS system.

At a two-to-one ratio, the amount of permitted water supply that could be available through well credits associated only with current reclaimed water flows if 4.0-mgd. (50% of 8.02-mgd).

Manatee County Land Development Code (Section 715.7 Irrigation) requires all irrigation systems to use the lowest quality water available which adequately and safely meets the water needs of the system. Stormwater reuse, reclaimed water use and grey water irrigation systems shall be used where feasible. Shallow wells and wet detention/detention ponds shall also be used as alternatives to potable water.

The Manatee County Comprehensive Plan(Policy 9.6.1.3) prohibits the use of potable water for landscaping irrigation in new development unless the cost to extend reclaimed water lines is prohibitive and there is no access to alternative sources of irrigation or all available reclaimed water in the service area is committed to other developments.

Policy 9.1.5.2 requires the use of reclaimed water to irrigate agricultural land, recreation lands, replenish the groundwater aquifer and to irrigate landscaping in the urban area. Manatee County currently supplies reclaimed water for agricultural irrigation from each of its three wastewater treatment facilities. Despite an abundance of potential additional agricultural reclaimed water users within the County, not all of the plant effluent is currently distributed in this manner due to limitations in the existing reclaimed water distribution infrastructure (piping, pumping and storage facilities).

The Manatee Agricultural Reuse Supply (MARS) System will expand the reclaimed water distribution infrastructure, providing the capability to distribute more plant effluent as reclaimed water. The MAR System will provide sufficient capacity to distribute an average daily reclaimed water flow of 29.43 mgd, an amount equal to the projected combined wastewater treatment plant effluent in the year 2020.

Throughout the development of the MARS System, it has been intended that the increased reclaimed water flows will be distributed to agricultural users who would otherwise pump irrigation water from the Upper Floridan aquifer. Reclaimed water agreements with such users will include the provision of well credits to Manatee County for transfer of withdrawal quantities. Under this agreement, the existing user would retain his withdrawal permit for emergency/standby purposes such as frost and freeze protection and failure of the reclaimed water supply. However, the permit could be modified to include a restriction on regular pumping by the permittee, and pumping privileges would be granted to Manatee County. Pumping privileges obtained in this manner are termed "well credits" and would be granted at a two-to-one ratio. For every two mgd of irrigation pumping eliminated, one mgd of increased water supply pumping could be allowed by SWFWMD. This two-to-one transfer ratio results in a 50% reduction in total Floridan Aquifer pumping providing a net benefit to the natural groundwater resource. An increase in permitable water supply pumping available through MARS well-credits are estimated at 11.9-mgd (23.8-mgd /2). The MARS system construction is anticipated to allow the County to obtain 6.3-mgd well-credits at the system completion in 2005 and up to 11.9-mgd by 2025.

There is some uncertainty about the quantity of well credits available through implementation of the MARS project. If future flows to the waste water treatment plants are less than expected, less reclaimed water would be available for distribution which means less well credits.

There is considerable interest in using reclaimed water for urban residential irrigation. Most urban users obtain landscaping irrigation from potable supply lines or shallow groundwater pumping, not from the Floridan Aquifer. Therefore, Floridan Aquifer well credits would not be granted by SWFWMD for reclaimed water offset of these users.

Manatee County is in the process of interconnecting all three WWTP facilities to better utilize and distribute reclaimed water. The County is also looking at the possibility of using Piney Point for water storage to add to the supply. The disposal of treated effluent (reclaimed water) from any public wastewater treatment plant is prohibited in the "WO" overlay district (Policy 3.2.1.8).

Objective 9.2.1 Concurrency: *Require the issuance of a Certificate of Level of Service*

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for wastewater disposal concurrent with the impacts of new development and consistent with adopted level of service standards.

The County is meeting level of service requirements. Development orders are issued only when the proposed development complies with adopted wastewater disposal level of service standards. The Manatee County Comprehensive Plan (Policy 9.2.1.2) requires projects located within the wastewater treatment service area to connect to central sewer. Policy 9.2.2.2 prohibits the use of septic tanks in the Evers Reservoir portion of the watershed except for isolated single family dwelling units.

Objective 9.2.2 Evers Reservoir Watershed Protection: *Connect all new development located in the urban portion of the Evers Reservoir Watershed that produces wastewater to the Manatee County sanitary sewer system.*

All new development within the Evers Reservoir watershed has been connected to sanitary sewer except for single family lots of record without access to sanitary sewer.

Objective 9.2.3 Growth-Induced Capital Costs: *Assess new growth a fair share of capital costs associated with the County's wastewater system.*

All new development is required to pay Facility Investment Fees (FIF). The Facility Investment Fees are reviewed annually to ensure new growth is paying its fair share to fund the necessary expansion of wastewater disposal, treatment and major collection systems associated with growth.

All development orders are reviewed by the County and the developer is informed of required improvements. Site plans must show required improvements prior to issuance of a Concurrency Certificate of Level of Service.

Objective 9.2.4 Onsite Wastewater Treatment Systems: *Provide for the limited use of septic tanks and interim wastewater treatment plants only in areas where sanitary sewer extension is not reasonably feasible.*

There have been no 'interim' wastewater treatment plants approved within the Future Development Area Boundary. However, as of June 2004, four private wastewater plants remain operational in unincorporated Manatee County:

Florida Power & Light
IMC Four Corners Mine
Lake Manatee State Recreation Park
Wingate Creek Mine

From January 1998 to April 2004, 2113 septic tanks were permitted in Manatee County. During the same time frame, just under 200 septic tanks were abandoned. (see Location and Number of Septic Systems Installed, 1998—2004 and Number of Septic Systems Removed from Use, 1998-2004 in Appendix).

From October 1997 through September 2003, approximately 244 lots, within the wastewater treatment service area, were approved through minor subdivision approval for septic tank use as no central sewer was immediately available. The Manatee County Comprehensive Plan

(Policy 9.2.1.2) requires connection to sanitary sewer if the project is located within the wastewater treatment collection area except as allowed by special approval. One of the special approvals is accessibility of the central system.

Solid Waste Subelement

Element Overview

Objective 9.3.1 Level of Service Standards: *Maintain the following level of Service standards for planning capital improvements and reviewing applications for development approval.*

The current level of service standard is "a per capita solid waste generation rate of 7.1 pounds per day with a solid waste compaction rate of 940 pounds per cubic yard".

Using the current level of service parameters of "solid waste generation rate" of 7.1 pounds per day – which does not include waste diversion - and a compaction rate of 940 lbs. per cubic yard, the landfill life is estimated through the year 2023.

To more closely reflect existing conditions, the level of service standard will be modified using the national average "landfill disposal rate" – which is the generation rate less diverted materials) of 4.5 pounds per capita and a compaction rate of 1200 pounds per cubic yard. Based on the recommended level of service parameters and population projections, the landfill is estimated to be good through 2039.

Seven years ago, the life of the landfill was estimated at 20 years. The Lena Road Landfill has now been estimated to have a life of 38 years, good until 2042. The longer life estimate is due to the re-estimate of the landfill design capacity to present times, better compaction rates and recycling programs, settlement at the landfill and steeper side slopes and increased heights.

SOURCE: PBS&J Final Report – October 2002 and MCUO Department – Solid Waste Division 02/04

Using population projections and the modified level of service parameters more closely reflects the predicted life of the landfill to the year 2042.

(See Manatee County Solid Waste Landfill Life Expectancy Tables in Appendix)

Objective 9.3.2 Solid Waste Collection and Disposal: *Provide efficient collection, disposal and recycling of solid wastes in a cost effective and environmentally sound manner.*

The County will continue contractual agreements between the County and private waste haulers and public education programs on recycling. The BOCC periodically reviews resource recovery methods as an alternative to landfilling. The County has been one of the top recyclers in the state in recent years.

Objective 9.3.3 Hazardous Material Management: *Ensure proper management of all types of hazardous waste or material at the appropriate facilities to provide cost effective waste management and to protect the health of residents and visitors.*

The County will continue the operation of the hazardous waste transfer facility at the Lena Road landfill and inspect haulers for, and refusal of, hazardous wastes at the Lena Road Landfill.

The Florida Solid Waste Management Act of 1988 required each county to establish a recycling program by July 1, 1989. By December 31, 1994, counties were to achieve a 30% reduction in the amount of waste landfilled. Manatee County recycling rate is currently estimated at 42%. This recycling rate is achieved through the efforts of municipalities, private sectors and the County.

Manatee County's recycling efforts include all single and multi-family residents in recycling mixed paper, aluminum/tin cans and glass. Recycling efforts also include special waste which includes yard waste (yard waste and wood pallets ground and sold as fuel for boilers), tires (compacted on site, shredded and sold as fuel) and household appliances. There are also several drop-off locations for recyclable materials.

Manatee County's Household Hazardous Waste program is free to households every 3rd Saturday of the month and offers "Amnesty Day" twice a year. In 2002, Manatee County started the Electronic Scrap (e-scrap) program that is similar to the household hazardous waste program in which households can drop off computers, TV's, radios, etc, at the landfill at no charge.

A limited amount of Construction & Demolition (C&D) debris is accepted at the landfill currently estimated at 6% of the over-all-in-coming waste stream. Most C & D material is diverted by and to private companies. The county landfill tipping fee is \$45 per ton (-vs- \$23 per ton for regular garbage) to discourage this type of material at the landfill.

Manatee County recently instituted a Commercial Recycling Pilot Program. The program is now up and running with Manatee County School Board agreeing to participate. This recycling program will be offered to all business segments.

Manatee County has a comprehensive recycling promotion and education program in place. Recycling materials and promotional items are distributed to the public, at different county wide functions as well at neighborhood associations.

Capital Improvements Subelement

The Capital Improvements Element (CIE) functions as an executive summary of the short range public facility needs identified in the other elements of the Comprehensive Plan. It serves as the public sector's development plan by scheduling the construction of major capital projects. The CIE also tabulates the estimated cost of major capital projects and analyzes the capability of Manatee County to finance and construct these improvements. Therefore, the CIE contains important financial policies which will be used to guide the funding of capital improvements. The intent of the CIE is to ensure the public sector's implementation of the Comprehensive Plan, just as the entire development review process, described in the Future Land Use Element and in other plan elements, is intended to guide private sector development in a manner consistent with Manatee County's Comprehensive Plan.

The public sector's implementation of the Comprehensive Plan via the Capital Improvements Element ensures compliance with adopted Level of Service standards for major public facilities addressed in other Comprehensive Plan elements, while meeting other projected needs for facilities and services not addressed in this Comprehensive Plan, and while meeting project operating costs and debt service.

Element Overview

Objective 10.1.1 Debt Obligations: *Cautious use of long-term financing to implement certain major capital projects.*

The average annual debt service from non ad valorem revenues limited to 50 percent of gross non ad-valorem revenues of preceding year. The average annual debt service of all indebtedness payable from non ad-valorem revenues cannot not exceed 90% of net non ad-valorem revenue from the preceding year.

Objective 10.1.2 Capital Improvements Prioritization Criteria: *Prioritization of capital improvement projects in a manner that achieves and maintains adopted Level of Service standards within the shortest time frame possible, while maintaining and protecting the County's investment in existing capital facilities.*

The concurrency management system warns of early deficiencies and annual review of LOS compliance. The Board of County Commissioners receives a yearly briefing on the status of LOS and concurrency for the county. The CIP process also identifies specific projects that are for correcting LOS deficiencies. The County does not accept public dedication of public facilities inside the Coastal Evacuation Area.

Objective 10.1.3 Non Ad Valorem Funding Sources: *Maximum utilization of user fees, intergovernmental transfers, and other funding sources to limit reliance on local ad valorem revenues for funding capital improvements.*

Objective 10.1.4 Level of Service Standards: *Maintenance of adopted Level of Service standards, and meeting existing and future facility needs by coordinating land use decisions with a schedule of capital improvements.*

The Concurrency Management System coordinates land use decisions with the 5-year Capital Improvements Plan. No Certification of Level of Service is provided to a development unless it can meet adopted levels-of-service immediately or with the developer providing the improvements specified by the County.

Objective 10.1.5 Growth Management: *Management of the land development and capital improvements programming processes so that public facility needs do not exceed Manatee County's ability to fund and provide needed capital improvements.*

The Concurrency Management System coordinates land use decisions with the 5-year Capital Improvements Plan. No Certification of Level of Service is provided to a development unless it can meet adopted levels-of-service immediately or with the developer providing the improvements specified by the County. The 5-year Capital Improvements Plan is presented to the Board in a public hearing format as part of the annual budget process.

Development and redevelopment activities inside the urban core have been identified as a major issue in the EAR. Maximizing the use of existing public facilities is key to both maintaining finite levels-of-service and the livability of the urban core.

The County also utilized developer agreements to maximize the use of joint venture solutions to overcoming level-of-service issues. One such case is the widening of SR 64 from 4 to 6 lanes ahead of schedule with the Heritage Harbor development as a participant.

Objective 10.1.6 Capital Improvements Program and Funding: *Programming and funding of capital projects consistent with the goals, objectives, and policies of the comprehensive plan and the future land use map, to maintain adopted level of service standards, and to meet other public facility needs not dictated by level of service standards.*

The County maintains an annual capital improvements element/planning review process with appropriate citizen participation. The County also funds the completion of all identified capital improvements within time frames specified in the Schedule of Capital Improvements Projects (Table 10-1) as available funding warrants.

The County has multiple funding sources for CIP projects, including gas taxes and impact fees. Ad valorem millage as a revenue source of last resort to fund capital improvements.

The County also provides funding for public facilities needs not related to maintaining adopted level of service standards. For example, some of the transportation CIP projects are not capacity level-of-service driven improvements, but safety improvements associated with pedestrian crossings, sidewalk construction, and street lighting.

Objective 10.1.7 Infrastructure Connections: *Maintenance and appropriate improvement of infrastructure which connects Manatee County to the Tampa Bay Region, the entire State of Florida, other states, and international markets.*

Manatee County continues to participate in regional cooperation efforts to improve connective infrastructure via the Metropolitan Planning Organization and Regional Planning Council.

Objective 10.1.8 Development Orders: *Maintain adopted Level of Service Standards by ensuring that the impacts of previously issued development orders can be accommodated.*

The County provides the issuance of Certificate of Level of Service Compliance with approval of development order and prohibits issuance of a building permit for any structure that does not have an approved Certificate of Level of Service Compliance.

Objective 10.1.9 Coastal Infrastructure: *Limiting public investments in the Coastal High Hazard Area to those necessary or those designed to minimize loss of public investment.*

The County limits the expenditure of public funds in the coastal high hazard area based on policies guiding public investment in this area. The County also does not accept dedication of new private development-related infrastructure in these areas.

Objective 10.1.10 Funding of Needs Related to New Growth: *Utilize funding derived directly from growth to offset costs for provision of public facilities to serve this new growth where a nexus between both is established.*

The County utilizes gas taxes and impact fees for additional funding sources that recapture the cost of facilities and services to new growth.

Imagine Manatee

Delivery of Services and Water Supply: *A community that delivers services that are responsive to neighborhood*

Strategies to implement *Delivery of Services and Water Supply* Goal:

- Establish a historic preservation ordinance.
- Encourage city governments to join with the County and the School Board to support a downtown performance arts hall.
- Establish special tax districts and develop a project-funding plan to encourage long-term historic preservation.
- Create a voluntary board to work with elected officials and government staff throughout the County on implementing the goal.
- Direct a percentage of tourist development funds to the Arts Council of Manatee County.
- Encourage city and County governments to cooperate, coordinate, and fund activities related to this goal.

Potential Amendments to the Capital Improvements Element:

- TBD

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Intergovernmental Coordination Element

I. Data and Trend Highlights

There are over 360 existing interlocal agreements between Manatee County and various agencies, governmental units, non-profits and other entities.

II. Accomplishments

THE ACCORD was signed by the County, School Board and all the municipalities within Manatee County in 2002. This document provides a framework for intergovernmental coordination in Manatee County. A principal focus of the ACCORD was to provide a coordinating method regarding issues relative to annexation through a Joint Planning Committee.

The ACCORD also addressed the following issues in some manner:

- Implementation of the Imagine Manatee Vision
- Density
- Height
- Impact Fee Equivalency
- Service Delivery
- Government Efficiency (eliminate duplication of services)
- Seeking a Sales Tax Initiative
- Environmentally Sensitive Lands
- Dispute Resolution
- Mutual Support

The General Interlocal to Implement THE ACCORD was adopted in 2003.

The Interlocal establishing the Joint Planning Committee was adopted in 2003.

The School Planning Interlocal was adopted in 2003.

The Palmetto Urban Development Zone was adopted in 2004. Council of Governments established which allows all local elected officials to meet on issues of common concern and interest.

Local Mayors meeting with the BCC Chairman on a monthly basis.

School Board representative serving in ex-officio capacity on the Planning Commission.

III. Concerns and Opportunities

Opportunities for joint development of parks, schools, and community centers.

IV. Imagine Manatee Key Elements and Actions

Expand outreach methods and frequency to inform and involve the general public in developing and implementing future programs, policies and actions.

Increased level of efficiency, cooperation and coordination among government entities which will also address consolidation of services such as law enforcement, fire and medical response.

Increase partnerships between business, government, schools and local colleges to provide workforce education and training consistent with changing needs.

Establish a Social Services Coordinating Council to increase opportunities for collaboration and efficiency in the delivery of services.

Establish neighborhood based citizen organizations to communicate community needs to elected officials.

V. Possible Plan Amendments

Amend Comprehensive Plan text to recognize THE ACCORD and Joint Planning Committee.

VI. Other Possible Actions

Actions consistent with Vision recommendations and THE ACCORD.

Element Overview

Objective 11.1.1 Open Communication: *Establish effective formal and informal communication mechanisms with other local governments regarding planning issues to ensure effective and efficient implementation of this Comprehensive Plan.*

In 2002, the Board of County Commissioners, School Board and municipalities adopted the Accord. The Accord and subsequent interlocal agreements provides various forums for the officials to meet with the other local governmental entities. In addition there are other agencies such as the Metropolitan Planning Organization and Tampa Bay Regional Planning Council that provide opportunity for interagency coordination.

The associated policies will be updated with the EAR amendments.

Objective 11.1.2 Coordination of Annexations: *Allow annexations which maintain consistency with this Comprehensive Plan to promote efficient extension of government services and identity.*

Through the Accord, the County and cities meet prior to any annexation application. This is through the Joint Planning Committee. The County will take appropriate actions to

raise objections to and preclude proposed annexations that are inconsistent with the Comprehensive Plan.

Objective 11.1.3 Implementation Framework: *Provide an effective framework for Comprehensive Plan implementation which identifies the inter- and intra- governmental impacts and responsibilities of planning policies to ensure Comprehensive Plan compliance.*

There is a consistent framework for the Regional Agency Review (f.k.a. Development Review Committee) membership and procedures in the Land Development Code for its use.

Objective 11.1.4 Efficiency in Service Delivery: *Maintain a government environment conducive to the efficient and effective provision of services to County citizens.*

As indicated by Imagine Manatee, the County continues to study potential consolidation plans of government as opportunities arise. The County has been a leader in maintaining or decreasing the ratio of county employees per capita. Audits of performance are regularly undertaken by the Clerk of Circuit Court for County departments which provide a systematic approach to determine efficiency and completion of assigned tasks.

Objective 11.1.5 Coordination: *Promote consistency between this Comprehensive Plan and the plans of the School Board and other units of government which affect or provide services within the County, which have no regulatory authority over the use of land to further plan implementation.*

Through the Accord, the County and School Board meet prior to any decision making by the School Board for new school sites. The School Board also has an ex-officio representative present on the Planning Commission and provides comments during the development review process on the potential effects/capacities to area schools by new development.

Objective 11.1.6 Cross-jurisdictional Impacts of Development: *Evaluate any significant impacts of development proposed in the Comprehensive Plan upon development in adjacent municipalities, adjacent counties, the region and in the State to advance the growth management goals of the county, region, and state.*

During the development review process, Manatee County send copies development applications to adjacent jurisdictions when the projects are near their borders or could have an effect on their infrastructure. On the larger scale, applications and amendments to Developments of Regional Impact are reviewed by the region's jurisdictions via the Regional Planning Council.

Objective 11.1.7 Level of Service Coordination: *Adopt and maintain level of service standards for public facilities that are compatible across jurisdictional lines, and which are coordinated with the affected jurisdiction.*

Manatee County coordinates with other local governments to achieve consistency in level of service standards for public facilities which cross jurisdictions. Level of Service standards on state roads within Manatee County are consistent with FDOT requirements

for access, drainage and traffic volumes. Coordination is done with surrounding local governments which share roadways to ensure Level of Service standards are consistent with planned improvements.

The County also cooperates with the School Board in efforts to coordinate parks and new school sites to accommodate necessary infrastructure and better serve the public by providing enhanced recreational amenities at schools that are County parks after-school hours.

Objective 11.1.8 Local/State Plan Consistency: *Maintain consistency between this Comprehensive Plan and both the regional and state Comprehensive Plans.*

Maintenance of the "in-compliance" status of the Comprehensive Plan. (13.1.8.1)

Objective 11.1.9 Effective Interlocal Coordination: *Provide coordination mechanisms that are effective in achieving Comprehensive Plan policy compliance.*

The County periodically evaluates the effectiveness of the implementation mechanisms in the plan and makes necessary changes to ensure efficiency of service. The County works diligently to adopt necessary and appropriate interlocal agreements to ensure implementation of the Plan. The County via the Environmental Management Department and through participation with the National Estuary Programs (Charlotte, Tampa Bay, and Sarasota Bay) and the SWFWMD CCMP efforts, coordinates extensively to improve the management of local water bodies.

Imagine Manatee

Government and Leadership Goal: *A community with an interactive, responsive, and communicative government that encourages public participation; enhances problem solving through public-private partnerships and government accountability; places priority in cooperation with other units of government; maintains and enhances infrastructure; and provides diversified revenue generation.*

Strategies to implement Government and Leadership Goal:

- Encourage governmental units and private entities to hold forums with citizens, brainstorm ideas, and form partnerships to achieve the goal.
- Review and recommend proposed changes to the land use and comprehensive plans by a joint planning committee that will interactively approve appropriate changes.
- Establish a citizen advisory group in each County district to work with the respective Commissioner to monitor, track, and generate issues to come before the County Commission.
- Establish a committee of citizens representing the community to meet with Commissioners and to state problems/needs quarterly at convenient times and places.



CHAPTER 4

SPECIAL TOPICS

Chapter 4 – Special Topics

Chapter 4 – Special Topics

Chapter 163, F.S. was amended since the last EAR in 1996 to include some Special Topics. These include:

- School Facility Planning Agreement – Completed in 2003
- Interlocal Service Delivery Report – Completed in 2003
- Land Use and Water Supply Work Plan – scheduled for adoption in August 2004
- Economic development

Economic Development

Manatee County is home to a strong and diverse economy. Manatee County's economy is made up of a strong service sector, manufacturing, agriculture, and development-related industry.

There are several key indicators that best describe Manatee County's economic condition. These include unemployment, median household income, poverty rate, per capita income, housing starts, trends in number of dwelling units constructed, and value of homes.

Unemployment. According to the University of Florida Bureau of Economic and Business Research *FL Long-term Economic Forecast of 2002*, Manatee County's unemployment rate has risen from 2.6% in 1996, a high of 4.4% in 2002, due to post-9/11 lull in tourism, returning to 3.4% in 2004. This change is typical with most local FL economies affected by the events of Sept. 11, 2001.

Median Household Income. According to the 2000 US Census, median household income has risen from \$25,951 in 1990 to \$38,673 in 2000. This trend is consistent with state and national trends.

Poverty. According to the 2000 US Census, the poverty rate has remained steady, at 10.2% in 1990 with a poverty level income defined as being below \$13,359 to 10.1% in 2000 with a poverty level of income below \$17,761.

Per Capita Income. According to the University of Florida Bureau of Economic and Business Research *FL Long-term Economic Forecast of 2002*, Manatee County's per capita income in 1998 was \$28,646, rising to \$29,871 in 2003, and projected at \$30,899 in 2004 (all 1997 dollars).

Housing Starts. According to the University of Florida Bureau of Economic and Business Research *FL Long-term Economic Forecast of 2002*, county-wide housing starts in 1998 were 2,900, rising to 4,800 in 2002 and in 2003 returned to 3,598. Housing starts are projected to be at least 3,000 units per year thru 2012.

New Construction. In unincorporated Manatee County, the following units were constructed by year with the associated value based upon builder's estimated selling price at building plans review/permit phase as indicated by the following tables. From

1997 to 2003, approximately 18,490 single-family dwelling units were constructed with an estimated value at over \$2.6 billion.

Unincorporated Manatee County Single-Family Units And Estimated Value		
Year	Single-Family Units	Value (\$)
1997	1,987	198,019,929
1998	2,346	263,504,113
1999	2,470	307,998,333
2000	2,623	363,633,064
2001	3,465	519,877,858
2002	2,441	421,899,978
2003	3,158	608,525,676
Totals	18,490	2,683,458,951

Source: Manatee County Building Dept., 2004.

In any typical year, developers construct 5 times as many single-family units as multi-family units. From 1997 to 2003, approximately 4,293 multi-family units were constructed with an estimated value at over \$340 million.

Unincorporated Manatee County Multi-Family Units And Estimated Value		
Year	Multi-Family Units	Value (\$)
1997	674	26,936,946
1998	278	14,888,200
1999	438	31,320,000
2000	1,096	133,258,424
2001	722	61,933,817
2002	645	31,822,207
2003	440	39,983,878
Totals	4,293	340,203,472

Source: Manatee County Building Dept., 2004.

With over \$2.6 billion in economic impact from the single-family unit construction and over \$340 million in multi-family construction in unincorporated Manatee County since 1997, the total value of new construction is over \$3 billion dollars from 1997 to 2003.

Housing Values. The value of housing continues to increase county-wide. The following table from the 2000 US Census illustrates this shift.

Manatee County Housing Values 1990 & 2000				
Value	Number and Percentage of Units			
	1990	% Total	2000	% Total
< \$50,000	5,725	15	2,160	4
\$50-99,999	20,725	4	18,592	34
\$100-149,999	7,247	19	16,086	29
\$150-199,999	2,397	6	8,110	15
\$200-299,999	1,291	3	6,058	11
\$300-499,999	583	2	2,759	5
\$500,000+	213	1	877	2
Totals	38,181	-	54,642	-

Source: 2000 US Census.

Consistent with recent sales trends noticed in the county, the value of single-family homes in unincorporated Manatee County continues to increase sharply. According to Manatee County Building Dept. data, in 2000, the average value of a new single-family home was \$138,632. In 2003, it jumped to \$192,633 representing increases over 10% per year.

In June 2002, Manatee County passed Resolution 02-512 supporting the Tampa Bay Regional Planning Council applying for and accepting designation as an Economic Development District. This designation authorized the County and its municipalities and eligible entities within the district's jurisdiction to apply for US Economic Development Administration (EDA) grant funding and federal disaster funding. This provides a broader array of programs and funding for the county. Grants are available through the EDA in areas such as public works, technical assistance, planning, revolving loan fund and economic adjustment. In addition, Manatee County and its jurisdictions receive an additional 10% bonus under EDA funded programs (i.e., 60% Federal participation instead of 50%).

Imagine Manatee

Economic Development Goal: *A community with a diverse economy driven by a mix of tourism, agriculture, high-tech industrial companies, quality employers, and small, independently- and minority-owned businesses; providing employment and continuing skills-development opportunities for people of all ages and skill levels; and encouraging variety and quality commercial development including a vibrant downtown core supported by appropriate infrastructure.*

Strategies identified to implement the *Economic Development* Goal include:

- Identify and implement a dedicated source of funding to support economic development initiatives that attract and grow high-skill, high-wage jobs with help from the Economic Development Council.
- Coordinate education and training necessary to attract and maintain a viable workforce and promote Manatee County as a learning community.
- Develop effective, targeted marketing to promote the County as a business-friendly destination with supportive resources and incentives.
- Enhance public services that support recreation and tourism activities in downtown areas.
- Emphasize the importance of the Manatee River as a recreational playground involving all ages in water activities from kayaking to yachting.



APPENDICES

APPENDICIES

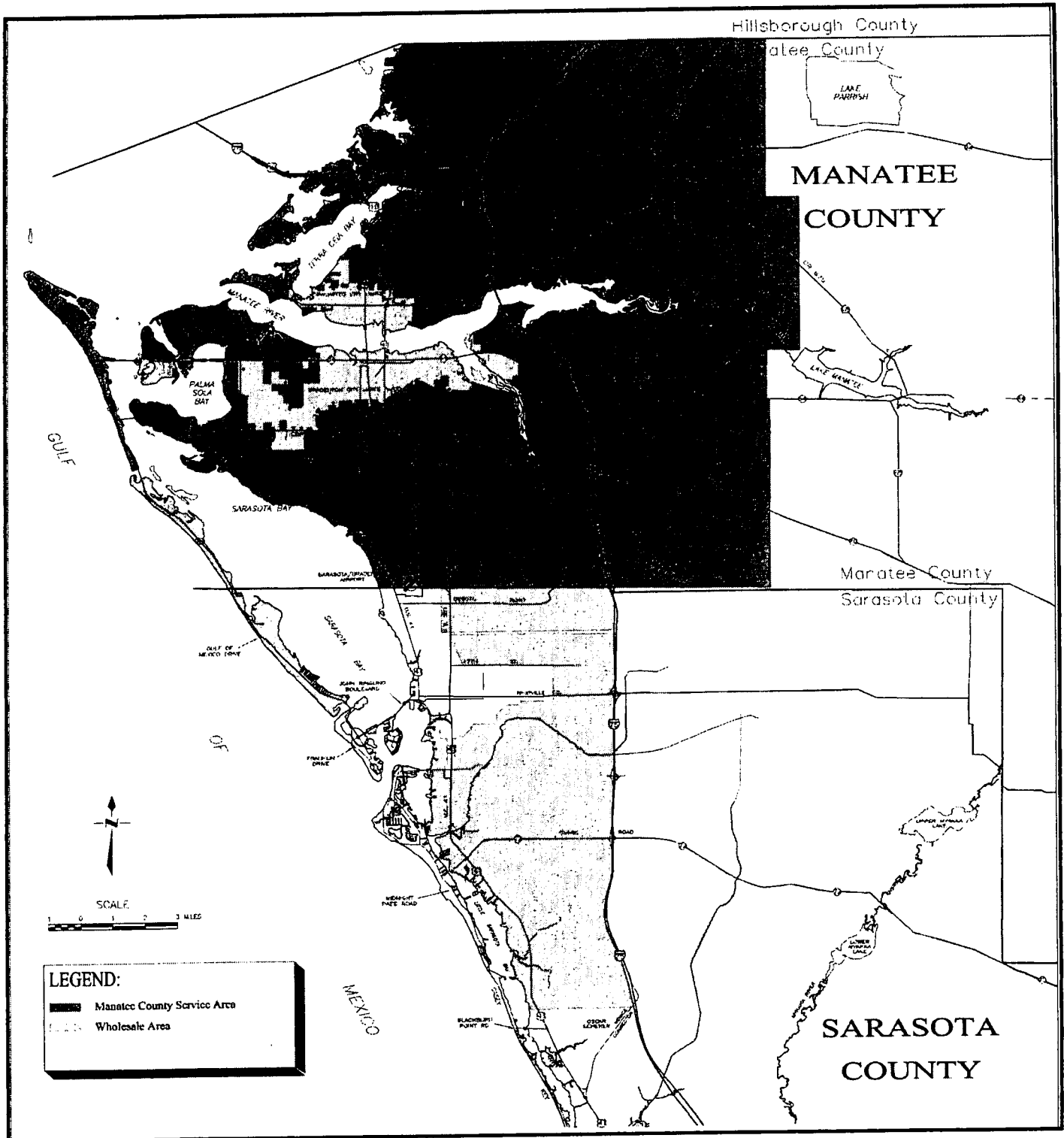
Lists of Maps, Tables, References, Reports, Studies, and other documents used as data and analysis for the EAR.

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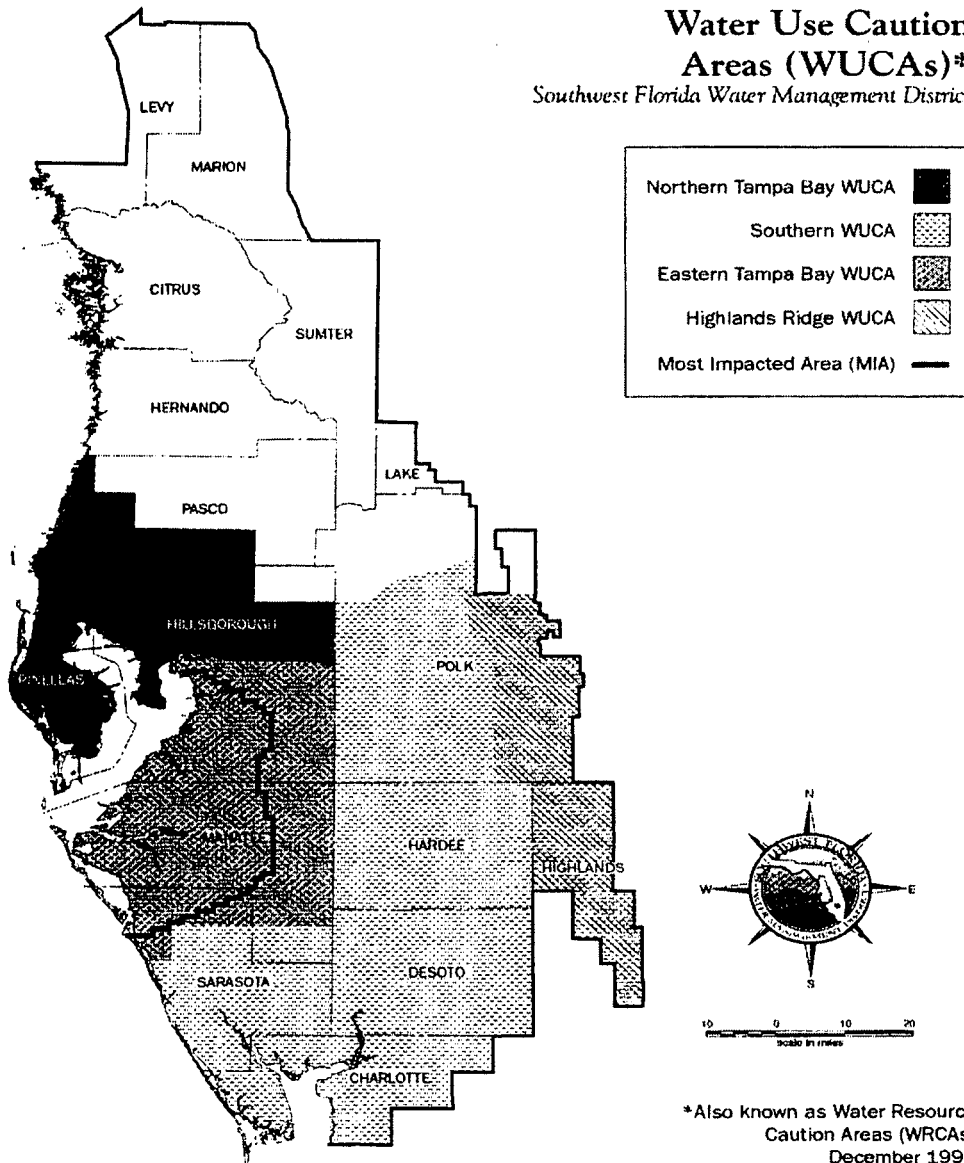
Water Supply Service Area Map
Water Use Caution Areas Map

Water Supply Service Areas



SOURCE: Manatee County Utilities Operations Department –
 “Manatee County Water Supply Facilities Work Plan-April 2004”

Water Use Caution Areas (WUCAs)* *Southwest Florida Water Management District*



*Also known as Water Resource
Caution Areas (WRCAs)
December 1999

Source: Manatee County Utilities Operations Department – “Manatee County Water Supply
Facilities Work Plan-April 2004”

Tables

RESIDENT POPULATION PROJECTIONS AND DISTRIBUTION 2000 - 2030
MANATEE COUNTY, FLORIDA
(2004)

Year	W. Brad. A-1	Islands A-2	SW. Co. A-3	Palmetto B-1	NW. Co. B-2	E. Brad. C-1	SC. Co. C-2	EC. Co. D	NC. Co. E	E. Co. F	Total County	Total Municip.	Total Unincorp. County	Percent Municip.	Percent Unincorp. County
2000	33,106	10,853	62,343	12,571	20,024	16,398	74,501	15,378	13,765	5,063	264,002	72,928	191,074	27.62%	72.38%
2004	34,700	11,307	63,506	13,022	21,991	18,188	83,936	26,093	19,847	6,407	298,997	77,217	221,780	25.83%	74.17%
2005	35,098	11,420	63,796	13,135	22,483	18,636	86,294	28,772	21,367	6,743	307,744	78,289	229,455	25.44%	74.56%
2010	37,086	11,986	66,034	13,998	24,936	20,869	94,443	45,753	29,367	8,419	352,891	83,939	268,952	23.79%	76.21%
2015	37,686	12,533	68,195	14,641	27,286	22,003	102,082	62,173	37,129	10,009	393,737	86,863	306,874	22.06%	77.94%
2020	38,286	13,058	70,252	15,057	29,501	22,995	109,084	77,852	44,577	11,489	432,151	89,396	342,755	20.69%	79.31%
2025	38,786	13,570	72,249	15,456	31,634	23,902	115,625	93,088	51,856	12,902	469,068	91,714	377,354	19.55%	80.45%
2030	39,286	14,081	74,246	15,854	33,767	24,808	122,195	108,323	59,095	14,314	505,969	94,029	411,940	18.58%	81.42%
Inc. '00 - '30	6,180	3,228	11,903	3,283	13,743	8,410	47,694	92,945	45,330	9,251	241,967	21,101	220,866	8.72%	91.28%
% Inc. '00 - '30	18.67%	29.74%	19.09%	26.12%	68.63%	51.29%	64.02%	604.40%	329.31%	182.72%	91.65%	28.93%	115.59%		

Source U.S. Census 2000. Population data for 2004 are based on residential building permits of all types issued between 1 April 2000 and 1 April 2004, and application of Subarea population per dwelling units statistics from 2000 census tracts within each Subarea. Population data for 2005 through 2030 are based on residential building permits of all types issued between 1 April 2000 and 1 April 2004, and application of population per dwelling unit statistics from 2000 census tracts within each Subarea, with totals modified based on buildout of some Subareas, and calculated for years shown. Prepared by Comprehensive Planning Section, Manatee County Planning Department. May 2004.

SEASONAL POPULATION PROJECTIONS AND DISTRIBUTION 2000 - 2030
MANATEE COUNTY, FLORIDA
(2004)

Note: Seasonal populations shown below include resident populations.

Year	W. Brad. A-1	Islands A-2	SW Co. A-3	Palmetto B-1	NW Co. B-2	E. Brad. C-1	SC Co. C-2	EC Co. D	NC Co. E	E Co. F	Total County	Total Municip.	Total Unincorp. County	Percent Municip.	Percent Unincorp. County
2000	35,556	21,478	72,817	14,658	25,651	19,317	87,166	17,592	15,692	5,478	315,405	91,009	224,396	28.85%	71.15%
2004	37,268	22,377	74,175	15,184	28,170	21,425	98,205	29,850	22,626	6,932	356,212	96,253	259,959	27.02%	72.98%
2005	37,695	22,600	74,514	15,315	28,801	21,953	100,964	32,915	24,358	7,296	366,412	97,564	268,848	26.63%	73.37%
2010	39,830	23,720	77,128	16,322	31,943	24,584	110,498	52,341	33,478	9,109	418,954	104,456	314,498	24.93%	75.07%
2015	40,475	24,803	79,652	17,071	34,953	25,920	119,436	71,126	42,327	10,830	466,592	108,269	358,324	23.20%	76.80%
2020	41,119	25,842	82,054	17,556	37,791	27,088	127,628	89,063	50,818	12,431	511,390	111,606	399,785	21.82%	78.18%
2025	41,656	26,855	84,387	18,022	40,523	28,157	135,281	106,493	59,116	13,960	554,449	114,689	439,760	20.69%	79.31%
2030	42,193	27,866	86,719	18,486	43,256	29,224	142,968	123,922	67,368	15,488	597,490	117,769	479,721	19.71%	80.29%
Inc. '00 - '30	6,637	6,388	13,903	3,828	17,605	9,907	55,802	106,329	51,676	10,010	282,085	26,760	255,324	9.49%	90.51%
% Inc. '00 - '30	18.67%	29.74%	19.09%	26.12%	68.63%	51.29%	64.02%	604.40%	329.31%	182.72%	89.44%	29.40%	115.59%		

Source Seasonal population is obtained for the years shown by the application of a calculated seasonal population increase factor based on the number of seasonal dwelling units, hotel and motel rooms, campgrounds, recreational vehicle spaces, bed and breakfasts, and condominiums/villas/cottages seasonally available, and population per dwelling unit statistics within each subarea.
 Prepared by Comprehensive Planning Section, Manatee County Planning Department. May 2004.

**MANATEE COUNTY POTABLE WATER
CAPACITY EXPECTANCY 2000 - 2030
MANATEE COUNTY, FLORIDA
(2004)**

Page 1 of 2

Year	Funct. Pop.	Flow Rate (G/C/D) (Comp Plan LOS)	Manatee County Flow (G/D)	Bradens Reserve Flow (G/D)	Longboat Key Reserve Flow (G/D)	Palmato Reserve Flow (G/D)	Sarasota County Contracts Flow (G/D)	Significant Users (G/D)	Total Average Daily Flow (G/D)	Total Reserve & Contract Flow (G/D)	Peak Flow Manatee County (Comp Plan Policy 9.5.5.2) (G/D)	Peak Flow Reserve & Contract (Comp Plan Policy 9.5.5.2) (G/D)	Total Peak Flow (G/D)	Treatment Plant Capacity (G/D)	SWF-WAID Permitted Capacity (G/D)	Available Permitted Capacity (Permitted less 2% Treatment Loss) (G/D)	Total Capacity Remaining (Available Permitted Cap.-Ave. Daily Flow) (G/D)	Total Average Daily Flow/Total Available Permitted Capacity
2000	212,161	119.5	25,353,240	500,000	2,500,000	2,000,000	12,000,000	2,772,944	45,126,184	19,772,944	38,029,859	24,716,180	62,746,040	84,000,000	48,860,000	47,882,800	2,736,616	94.2%
01	219,877	117	25,725,609	500,000	2,500,000	2,000,000	12,000,000	2,873,792	45,599,401	19,873,792	38,588,414	24,842,240	63,430,654	84,000,000	48,860,000	47,882,800	2,283,399	95.2%
02	227,592	115	26,173,080	500,000	2,500,000	2,000,000	12,000,000	2,974,627	46,147,707	19,974,627	39,259,620	24,968,284	64,227,904	84,000,000	50,680,000	49,666,400	3,518,693	92.9%
03	235,309	113	26,589,917	500,000	2,500,000	2,000,000	12,000,000	3,075,489	46,665,406	20,075,489	39,884,876	25,094,361	64,979,236	84,000,000	50,680,000	49,666,400	3,000,994	94.0%
04	243,025	111	26,975,775	500,000	2,500,000	2,000,000	10,000,000	3,176,337	45,152,112	18,176,337	40,463,663	22,720,421	63,184,083	84,000,000	50,680,000	49,666,400	4,514,288	90.9%
2005	250,741	110	27,581,510	500,000	2,500,000	2,000,000	10,000,000	3,277,185	45,858,695	18,277,185	41,372,265	22,846,481	64,218,746	84,000,000	50,680,000	49,666,400	3,807,705	92.3%
06	258,668	110	28,453,480	500,000	2,500,000	2,000,000	10,000,000	3,380,791	46,834,271	18,380,791	42,680,220	22,975,988	65,656,208	84,000,000	50,680,000	49,666,400	2,832,129	94.3%
07	266,595	110	29,325,450	500,000	2,500,000	2,000,000	10,000,000	3,484,397	47,809,847	18,484,397	43,988,175	23,105,496	67,093,671	84,000,000	50,680,000	49,666,400	1,836,533	96.3%
08	274,523	110	30,197,530	500,000	2,500,000	2,000,000	8,000,000	3,588,016	46,785,546	16,588,016	45,296,295	20,735,020	66,031,315	84,000,000	50,680,000	49,666,400	2,880,854	94.2%
09	282,450	110	31,069,500	500,000	2,500,000	2,000,000	8,000,000	3,691,622	47,761,122	16,691,622	46,604,250	20,864,527	67,468,777	84,000,000	50,680,000	49,666,400	1,905,279	96.2%
2010	290,378	110	31,941,580	500,000	2,500,000	2,000,000	8,000,000	3,795,240	48,736,820	16,795,240	47,912,370	20,994,051	68,906,421	84,000,000	50,680,000	49,666,400	929,580	98.1%
11	297,958	110	32,775,380	500,000	2,500,000	2,000,000	8,000,000	3,894,311	49,669,691	16,894,311	49,163,070	21,117,889	70,280,959	84,000,000	50,680,000	49,666,400	(3,291)	100.0%
12	305,539	110	33,609,290	500,000	2,500,000	2,000,000	8,000,000	3,993,395	50,602,685	16,993,395	50,413,935	21,241,743	71,655,678	84,000,000	50,680,000	49,666,400	(936,285)	101.9%
13	313,120	110	34,443,200	500,000	2,500,000	2,000,000	8,000,000	4,092,478	51,535,678	17,092,478	51,664,800	21,365,598	73,030,398	84,000,000	50,680,000	49,666,400	(1,869,278)	103.8%

14	320,702	110	35,277,220	500,000	2,500,000	2,000,000	8,000,000	4,191,575	52,466,795	17,191,575	52,915,830	21,489,469	74,405,299	84,000,000	50,680,000	49,666,400	(2,802,395)	105.6%
2015	328,282	110	36,111,020	500,000	2,500,000	2,000,000	6,000,000	4,290,646	51,401,666	15,290,646	54,166,530	19,113,307	73,279,837	84,000,000	50,680,000	49,666,400	(1,735,266)	103.5%
16	333,466	110	36,901,260	500,000	2,500,000	2,000,000	6,000,000	4,384,541	52,285,801	15,384,541	55,351,890	19,230,676	74,582,566	84,000,000	50,680,000	49,666,400	(2,619,401)	105.3%
17	342,650	110	37,691,500	500,000	2,500,000	2,000,000	6,000,000	4,478,436	53,169,936	15,478,436	56,537,250	19,348,044	75,885,294	84,000,000	50,680,000	49,666,400	(3,503,536)	107.1%
18	349,834	110	38,481,740	500,000	2,500,000	2,000,000	6,000,000	4,572,330	54,054,070	15,572,330	57,722,610	19,465,413	77,188,023	84,000,000	50,680,000	49,666,400	(4,387,670)	108.8%
19	357,017	110	39,271,870	500,000	2,500,000	2,000,000	6,000,000	4,666,212	54,938,082	15,666,212	58,907,805	19,582,765	78,490,570	84,000,000	50,680,000	49,666,400	(5,271,682)	110.6%
2020	364,201	110	40,062,110	500,000	2,500,000	2,000,000	5,000,000	4,760,107	54,822,217	14,760,107	60,093,165	18,450,134	78,543,299	84,000,000	50,680,000	49,666,400	(5,155,817)	110.4%
21	371,131	110	40,824,410	500,000	2,500,000	2,000,000	5,000,000	4,850,682	55,675,092	14,850,682	61,236,615	18,563,353	79,799,968	84,000,000	50,680,000	49,666,400	(6,008,692)	112.1%
22	378,061	110	41,586,710	500,000	2,500,000	2,000,000	5,000,000	4,941,257	56,527,967	14,941,257	62,380,065	18,676,572	81,056,637	84,000,000	50,680,000	49,666,400	(6,861,567)	113.8%
23	384,990	110	42,348,900	500,000	2,500,000	2,000,000	5,000,000	5,031,819	57,380,719	15,031,819	63,523,350	18,789,774	82,313,124	84,000,000	50,680,000	49,666,400	(7,714,319)	115.5%
24	391,919	110	43,111,090	500,000	2,500,000	2,000,000	5,000,000	5,122,381	58,233,471	15,122,381	64,666,635	18,902,977	83,569,612	84,000,000	50,680,000	49,666,400	(8,567,071)	117.2%
2025	398,849	110	43,873,390	500,000	2,500,000	2,000,000	0	5,212,956	54,086,346	10,212,956	65,810,085	12,766,196	78,576,281	84,000,000	50,680,000	49,666,400	(4,419,946)	108.9%
26	405,778	110	44,635,580	500,000	2,500,000	2,000,000	0	5,303,518	54,939,098	10,303,518	66,953,370	12,879,398	79,832,768	84,000,000	50,680,000	49,666,400	(5,272,698)	110.6%
27	412,708	110	45,397,880	500,000	2,500,000	2,000,000	0	5,394,094	55,791,974	10,394,094	68,096,820	12,992,617	81,089,437	84,000,000	50,680,000	49,666,400	(6,125,574)	112.3%
28	419,637	110	46,160,070	500,000	2,500,000	2,000,000	0	5,484,656	56,644,726	10,484,656	69,240,105	13,105,819	82,345,924	84,000,000	50,680,000	49,666,400	(6,978,326)	114.1%
29	426,565	110	46,922,150	500,000	2,500,000	2,000,000	0	5,575,205	57,497,355	10,575,205	70,383,225	13,219,006	83,602,231	84,000,000	50,680,000	49,666,400	(7,830,955)	115.8%
2030	433,579	110	47,693,690	500,000	2,500,000	2,000,000	0	5,666,878	58,360,568	10,666,878	71,540,535	13,333,597	84,874,132	84,000,000	50,680,000	49,666,400	(8,694,168)	117.5%

Sources: Potable water service area population projections by Manatee County Planning Department. Water flow data provided by Manatee County Potable Water Division, Utility Operations Department.
Prepared by: Comprehensive Planning Section, Manatee County Planning Department. January, 2004.

MANATEE COUNTY SOLID WASTE LANDFILL LIFE EXPECTANCY
MANATEE COUNTY, FLORIDA
Based on generation rate of 7.1 and compaction rate of 940 lbs. per cu/yd
(Current Comprehensive Plan Level of Service Standard)
(2004)

YEAR	POPULATION	POUNDS/ CAPITA/ DAY	POUNDS GENERATED	COMP. RATE/ CU. YD.	CUBIC YARDS/ DAY	OPERATING DAYS	CUBIC YARDS/ YEAR	TOT. CU. YDS. AVAIL.	TOT. CU. YDS. REMAINING
2000	264,002	7.1	1,874,414	940	1,562	308	481,100	20,186,527	19,705,427
01	272,750	7.1	1,936,525	940	2,060	308	634,521		19,070,906
02	281,498	7.1	1,998,636	940	2,126	308	654,872		18,416,034
03	290,246	7.1	2,060,747	940	2,192	308	675,223		17,740,811
04	298,995	7.1	2,122,865	940	2,258	308	695,577		17,045,234
2005	307,744	7.1	2,184,982	940	2,324	308	715,930		16,329,304
06	316,773	7.1	2,249,088	940	2,393	308	736,935		15,592,368
07	325,802	7.1	2,313,194	940	2,461	308	757,940		14,834,428
08	334,832	7.1	2,377,307	940	2,529	308	778,947		14,055,481
09	343,861	7.1	2,441,413	940	2,597	308	799,952		13,255,528
2010	352,891	7.1	2,505,526	940	2,665	308	820,960		12,434,569
11	361,060	7.1	2,563,526	940	2,727	308	839,964		11,594,605
12	369,229	7.1	2,621,526	940	2,789	308	858,968		10,735,637
13	377,398	7.1	2,679,526	940	2,851	308	877,972		9,857,664
14	385,367	7.1	2,736,106	940	2,911	308	896,511		8,961,153
2015	393,737	7.1	2,795,533	940	2,974	308	915,983		8,045,170
16	401,419	7.1	2,850,075	940	3,032	308	933,854		7,111,316
17	409,102	7.1	2,904,624	940	3,090	308	951,728		6,159,588
18	416,785	7.1	2,959,174	940	3,148	308	969,602		5,189,986
19	424,468	7.1	3,013,723	940	3,206	308	987,475		4,202,511
2020	432,151	7.1	3,068,272	940	3,264	308	1,005,349		3,197,162
21	439,534	7.1	3,120,691	940	3,320	308	1,022,524		2,174,638
22	446,917	7.1	3,173,111	940	3,376	308	1,039,700		1,134,938
23	454,301	7.1	3,225,537	940	3,431	308	1,056,878		78,060
24	461,684	7.1	3,277,956	940	3,487	308	1,074,054		(995,994)
2025	469,068	7.1	3,330,383	940	3,543	308	1,091,232		(2,087,226)
26	476,448	7.1	3,382,781	940	3,599	308	1,108,401		(3,195,626)
27	483,828	7.1	3,435,179	940	3,654	308	1,125,569		(4,321,195)
28	491,208	7.1	3,487,577	940	3,710	308	1,142,738		(5,463,933)
29	498,588	7.1	3,539,975	940	3,766	308	1,159,907		(6,623,840)
2030	505,969	7.1	3,592,380	940	3,822	308	1,177,078		(7,800,918)

MANATEE COUNTY SOLID WASTE LANDFILL LIFE EXPECTANCY

MANATEE COUNTY, FLORIDA

Based on actual Landfill Disposal Rate which is the per capita generation rate of 11.48 pounds less diverted materials (recyclables, CnD materials, tires, white goods and yard waste) = 4.5 pounds landfill disposal per capita and current compaction rate of 1200 lbs. per cubic yard

(2004)

YEAR	POPULATION	LANDFILL DISPOSAL POUNDS/CAPITA/DAY	POUNDS GENERATED	COMP. RATE/ CU. YD.	CUBIC YARDS/ DAY	OPERATING DAYS	CUBIC YARDS/ YEAR	TOT. CU. YDS. AVAIL.	TOT. CU. YDS. REMAINING
2000	264,002	4.5	1,188,009	1,200	990	308	304,922	20,186,527	19,881,605
01	272,750	4.5	1,227,375	1,200	1,023	308	315,026		19,566,578
02	281,498	4.5	1,266,741	1,200	1,056	308	325,130		19,241,448
03	290,246	4.5	1,306,107	1,200	1,088	308	335,234		18,906,214
04	298,995	4.5	1,345,478	1,200	1,121	308	345,339		18,560,875
2005	307,744	4.5	1,384,848	1,200	1,154	308	355,444		18,205,431
06	316,773	4.5	1,425,479	1,200	1,188	308	365,873		17,839,558
07	325,802	4.5	1,466,109	1,200	1,222	308	376,301		17,463,256
08	334,832	4.5	1,506,744	1,200	1,256	308	386,731		17,076,525
09	343,861	4.5	1,547,375	1,200	1,289	308	397,159		16,679,366
2010	352,891	4.5	1,588,010	1,200	1,323	308	407,589		16,271,777
11	361,060	4.5	1,624,770	1,200	1,354	308	417,024		15,854,753
12	369,229	4.5	1,661,531	1,200	1,385	308	426,459		15,428,293
13	377,398	4.5	1,698,291	1,200	1,415	308	435,895		14,992,398
14	385,367	4.5	1,734,152	1,200	1,445	308	445,099		14,547,300
2015	393,737	4.5	1,771,817	1,200	1,477	308	454,766		14,092,533
16	401,419	4.5	1,806,386	1,200	1,505	308	463,639		13,628,894
17	409,102	4.5	1,840,959	1,200	1,534	308	472,513		13,156,382
18	416,785	4.5	1,875,533	1,200	1,563	308	481,387		12,674,995
19	424,468	4.5	1,910,106	1,200	1,592	308	490,261		12,184,734
2020	432,151	4.5	1,944,680	1,200	1,621	308	499,134		11,685,600
21	439,534	4.5	1,977,903	1,200	1,648	308	507,662		11,177,938
22	446,917	4.5	2,011,127	1,200	1,676	308	516,189		10,661,749
23	454,301	4.5	2,044,355	1,200	1,704	308	524,718		10,137,031
24	461,684	4.5	2,077,578	1,200	1,731	308	533,245		9,603,786
2025	469,068	4.5	2,110,806	1,200	1,759	308	541,774		9,062,013
26	476,448	4.5	2,144,016	1,200	1,787	308	550,297		8,511,715
27	483,828	4.5	2,177,226	1,200	1,814	308	558,821		7,952,894
28	491,208	4.5	2,210,436	1,200	1,842	308	567,345		7,385,549
29	498,588	4.5	2,243,646	1,200	1,870	308	575,869		6,809,680
2030	505,969	4.5	2,276,861	1,200	1,897	308	584,394		6,225,285

31	513,457	4.5	2,310,557	1,200	1,925	308	593,043		5,632,243
32	521,056	4.5	2,344,752	1,200	1,954	308	601,820		5,030,423
33	528,767	4.5	2,379,452	1,200	1,983	308	610,726		4,419,697
34	536,592	4.5	2,414,664	1,200	2,012	308	619,764		3,799,933
35	544,534	4.5	2,450,403	1,200	2,042	308	628,937		3,170,997
36	552,593	4.5	2,486,669	1,200	2,072	308	638,245		2,532,752
37	560,771	4.5	2,523,470	1,200	2,103	308	647,691		1,885,061
38	569,070	4.5	2,560,815	1,200	2,134	308	657,276		1,227,785
39	577,492	4.5	2,598,714	1,200	2,166	308	667,003		560,782
40	586,039	4.5	2,637,176	1,200	2,198	308	676,875		(116,093)

Source: Prepared by Comprehensive Planning Section, Manatee County Planning Department. February, 2004

NORTH WASTEWATER TREATMENT PLANT

Treatment Plant Capacity @ 5.4 mgd

CAPACITY EXPECTANCY 2000 - 2030

MANATEE COUNTY, FLORIDA

(2004)

Year	Resident Population	Flow Rate (Gal/Cap/Day) (Comp./Plan LOS)	Flow (Gal/Day)	Treatment Plant Capacity (Gal/Day)	Total Capacity Remaining (Gal/Day)	Percent (Flow/Capacity)
2000	33,729	115	3,878,835	5,400,000	1,521,165	71.8%
01	35,783	115	4,115,045	5,400,000	1,284,955	76.2%
02	37,738	115	4,339,870	5,400,000	1,060,130	80.4%
03	39,743	115	4,570,445	5,400,000	829,555	84.6%
04	41,748	115	4,801,020	5,400,000	598,980	88.9%
2005	43,753	115	5,031,595	5,400,000	368,405	93.2%
06	45,756	115	5,261,940	5,400,000	138,060	97.4%
07	47,760	115	5,492,400	5,400,000	(92,400)	101.7%
08	49,764	115	5,722,860	5,400,000	(322,860)	106.0%
09	51,767	115	5,953,205	5,400,000	(553,205)	110.2%
2010	53,771	115	6,183,665	5,400,000	(783,665)	114.5%
11	55,754	115	6,411,710	5,400,000	(1,011,710)	118.7%
12	57,737	115	6,639,755	5,400,000	(1,239,755)	123.0%
13	59,720	115	6,867,800	5,400,000	(1,467,800)	127.2%
14	61,703	115	7,095,845	5,400,000	(1,695,845)	131.4%
2015	63,686	115	7,323,890	5,400,000	(1,923,890)	135.6%
16	65,642	115	7,548,830	5,400,000	(2,148,830)	139.8%
17	67,598	115	7,773,770	5,400,000	(2,373,770)	144.0%
18	69,554	115	7,998,710	5,400,000	(2,598,710)	148.1%
19	71,510	115	8,223,650	5,400,000	(2,823,650)	152.3%
2020	73,466	115	8,448,590	5,400,000	(3,048,590)	156.5%
21	75,405	115	8,671,575	5,400,000	(3,271,575)	160.6%
22	77,345	115	8,894,675	5,400,000	(3,494,675)	164.7%
23	79,284	115	9,117,660	5,400,000	(3,717,660)	168.8%
24	81,224	115	9,340,760	5,400,000	(3,940,760)	173.0%
2025	83,164	115	9,563,860	5,400,000	(4,163,860)	177.1%

26	85,103	115	9,786,845	5,400,000	(4,386,845)	181.2%
27	87,043	115	10,009,945	5,400,000	(4,609,945)	185.4%
28	88,982	115	10,232,930	5,400,000	(4,832,930)	189.5%
29	90,922	115	10,456,030	5,400,000	(5,056,030)	193.6%
2030	92,862	115	10,679,130	5,400,000	(5,279,130)	197.8%

Prepared by: Comprehensive Planning Section Manatee County Planning Department, February, 2004

NORTH WASTEWATER TREATMENT PLANT

Treatment Plant Capacity @ 7.5 mgd

CAPACITY EXPECTANCY 2000 - 2030

MANATEE COUNTY, FLORIDA

(2004)

Year	Resident Population	Flow Rate (Gal/Cap/Day) (Comp./Plan LOS)	Flow (Gal/Day)	Treatment Plant Capacity (Gal/Day)	Total Capacity Remaining (Gal/Day)	Percent (Flow/Capacity)
2000	33,729	115	3,878,835	7,500,000	3,621,165	51.7%
01	35,783	115	4,115,045	7,500,000	3,384,955	54.9%
02	37,738	115	4,339,870	7,500,000	3,160,130	57.9%
03	39,743	115	4,570,445	7,500,000	2,929,555	60.9%
04	41,748	115	4,801,020	7,500,000	2,698,980	64.0%
2005	43,753	115	5,031,595	7,500,000	2,468,405	67.1%
06	45,756	115	5,261,940	7,500,000	2,238,060	70.2%
07	47,760	115	5,492,400	7,500,000	2,007,600	73.2%
08	49,764	115	5,722,860	7,500,000	1,777,140	76.3%
09	51,767	115	5,953,205	7,500,000	1,546,795	79.4%
2010	53,771	115	6,183,665	7,500,000	1,316,335	82.4%
11	55,754	115	6,411,710	7,500,000	1,088,290	85.5%
12	57,737	115	6,639,755	7,500,000	860,245	88.5%
13	59,720	115	6,867,800	7,500,000	632,200	91.6%
14	61,703	115	7,095,845	7,500,000	404,155	94.6%
2015	63,686	115	7,323,890	7,500,000	176,110	97.7%
16	65,642	115	7,548,830	7,500,000	(48,830)	100.7%
17	67,598	115	7,773,770	7,500,000	(273,770)	103.7%
18	69,554	115	7,998,710	7,500,000	(498,710)	106.6%
19	71,510	115	8,223,650	7,500,000	(723,650)	109.6%
2020	73,466	115	8,448,590	7,500,000	(948,590)	112.6%
21	75,405	115	8,671,575	7,500,000	(1,171,575)	115.6%
22	77,345	115	8,894,675	7,500,000	(1,394,675)	118.6%
23	79,284	115	9,117,660	7,500,000	(1,617,660)	121.6%
24	81,224	115	9,340,760	7,500,000	(1,840,760)	124.5%
2025	83,164	115	9,563,860	7,500,000	(2,063,860)	127.5%

26	85,103	115	9,786,845	7,500,000	(2,286,845)	130.5%
27	87,043	115	10,009,945	7,500,000	(2,509,945)	133.5%
28	88,982	115	10,232,930	7,500,000	(2,732,930)	136.4%
29	90,922	115	10,456,030	7,500,000	(2,956,030)	139.4%
2030	92,862	115	10,679,130	7,500,000	(3,179,130)	142.4%

Prepared by: Comprehensive Planning Section Manatee County Planning Department, February, 2004

SOUTHEAST WASTEWATER TREATMENT PLANT

Treatment Plant Capacity @ 11 mgd

CAPACITY EXPECTANCY 2000 - 2030

MANATEE COUNTY, FLORIDA

(2004)

Year	Resident Population	Flow Rate (Gal/Cap/Day) (Comp. Plan LOS)	Flow (Gal/Day)	Treatment Plant Capacity (Gal/Day)	Total Capacity Remaining (Gal/Day)	Percent (Flow/Capacity)
2000	43,990	115	5,058,850	11,000,000	5,941,150	46.0%
01	48,111	115	5,532,765	11,000,000	5,467,235	50.3%
02	52,061	115	5,987,015	11,000,000	5,012,985	54.4%
03	55,362	115	6,366,630	11,000,000	4,633,370	57.9%
04	60,419	115	6,948,185	11,000,000	4,051,815	63.2%
2005	64,418	115	7,408,070	11,000,000	3,591,930	67.3%
06	68,727	115	7,903,605	11,000,000	3,096,395	71.9%
07	72,856	115	8,378,440	11,000,000	2,621,560	76.2%
08	76,985	115	8,853,275	11,000,000	2,146,725	80.5%
09	81,114	115	9,328,110	11,000,000	1,671,890	84.8%
2010	85,242	115	9,802,830	11,000,000	1,197,170	89.1%
11	89,425	115	10,283,875	11,000,000	716,125	93.5%
12	93,609	115	10,765,035	11,000,000	234,965	97.9%
13	97,793	115	11,246,195	11,000,000	(246,195)	102.2%
14	101,976	115	11,727,240	11,000,000	(727,240)	106.6%
2015	106,160	115	12,208,400	11,000,000	(1,208,400)	111.0%
16	110,398	115	12,695,770	11,000,000	(1,695,770)	115.4%
17	114,636	115	13,183,140	11,000,000	(2,183,140)	119.8%
18	118,874	115	13,670,510	11,000,000	(2,670,510)	124.3%
19	123,113	115	14,157,995	11,000,000	(3,157,995)	128.7%
2020	127,351	115	14,645,365	11,000,000	(3,645,365)	133.1%
21	131,644	115	15,139,060	11,000,000	(4,139,060)	137.6%
22	135,937	115	15,632,755	11,000,000	(4,632,755)	142.1%
23	140,230	115	16,126,450	11,000,000	(5,126,450)	146.6%
24	144,523	115	16,620,145	11,000,000	(5,620,145)	151.1%
2025	148,816	115	17,113,840	11,000,000	(6,113,840)	155.6%

26	153,109	115	17,607,535	11,000,000	(6,607,535)	160.1%
27	157,402	115	18,101,230	11,000,000	(7,101,230)	164.6%
28	161,695	115	18,594,925	11,000,000	(7,594,925)	169.0%
29	165,988	115	19,088,620	11,000,000	(8,088,620)	173.5%
2030	170,281	115	19,582,315	11,000,000	(8,582,315)	178.0%

Prepared by: Comprehensive Planning Section, Manatee County Planning Department. February, 2004

SOUTHWEST WASTEWATER TREATMENT PLANT

Treatment Plant Capacity @ 22 mgd

CAPACITY EXPECTANCY 2000 - 2030

MANATEE COUNTY, FLORIDA

(2004)

Year	Resident Population	Flow Rate (Gal/Cap/Day) (Comp. Plan LOS)	Flow (Gal/Day)	Treatment Plant Capacity (Gal/Day)	Total Capacity Remaining (Gal/Day)	Percent (Flow/ Capacity)
2000	122,613	115	14,100,495	18,000,000	3,899,505	78.3%
01	123,262	115	14,175,130	18,000,000	3,824,870	78.8%
02	123,911	115	14,249,765	18,000,000	3,750,235	79.2%
03	124,559	115	14,324,285	22,000,000	3,675,715	65.1%
04	125,209	115	14,399,035	22,000,000	7,600,965	65.5%
2005	125,857	115	14,473,555	22,000,000	7,526,445	65.8%
06	126,568	115	14,555,320	22,000,000	7,444,680	66.2%
07	127,274	115	14,636,510	22,000,000	7,363,490	66.5%
08	127,990	115	14,718,850	22,000,000	7,281,150	66.9%
09	128,701	115	14,800,615	22,000,000	7,199,385	67.3%
2010	129,413	115	14,882,495	22,000,000	7,117,505	67.6%
11	130,085	115	14,959,775	22,000,000	7,040,225	68.0%
12	130,758	115	15,037,170	22,000,000	6,962,830	68.4%
13	131,430	115	15,114,450	22,000,000	6,885,550	68.7%
14	132,103	115	15,191,845	22,000,000	6,808,155	69.1%
2015	132,776	115	15,269,240	22,000,000	6,730,760	69.4%
16	133,405	115	15,341,575	22,000,000	6,658,425	69.7%
17	134,039	115	15,414,485	22,000,000	6,585,515	70.1%
18	134,663	115	15,486,245	22,000,000	6,513,755	70.4%
19	135,243	115	15,552,945	22,000,000	6,447,055	70.7%
2020	135,922	115	15,631,030	22,000,000	6,368,970	71.1%
21	136,516	115	15,699,340	22,000,000	6,300,660	71.4%
22	137,111	115	15,767,765	22,000,000	6,232,235	71.7%
23	137,705	115	15,836,075	22,000,000	6,163,925	72.0%
24	138,304	115	15,904,960	22,000,000	6,095,040	72.3%
2025	138,895	115	15,972,925	22,000,000	6,027,075	72.6%

26	139,466	115	16,038,590	22,000,000	5,961,410	72.9%
27	140,038	115	16,104,370	22,000,000	5,895,630	73.2%
28	140,610	115	16,170,150	22,000,000	5,829,850	73.5%
29	141,182	115	16,235,930	22,000,000	5,764,070	73.8%
2030	141,752	115	16,301,480	22,000,000	5,698,520	74.1%

Prepared by: Comprehensive Planning Section, Manatee County Planning Department, Manatee County, Florida. March, 2002.