

**SUMMARY OF RECOMMENDED CHANGES
2011 EVALUATION & APPRAISAL REPORT (EAR)**

Public Facilities Element – Sanitary Sewer Sub-Element

Goals, Objective and Policies: The entire Sub-Element will be revised to reflect the proper formatting for all Goals, Objectives and Policies, as defined below:

Goal: General statement defining what the plan will ultimately achieve, typically beginning with “TO” followed by a transitive verb, such as, TO PROTECT or TO ENSURE.

Objective: A more specific statement than the stated Goal; describing actions that will help achieve the goal(s), typically beginning with the active verb providing the general direction, such as, “Implement”, “Promote” or “Protect”. Objectives use the term “will” and allow Policies to specifically require an activity with “shall”.

Policies: Specific statements that provide directives on how to achieve the objectives and ultimately the Sub-Element’s goals, typically beginning with phrases like, “The County shall promote...”, “The County shall continue to...” or “The District shall expand...” or similar phrases. Policies use the terms “may” or “shall” to provide specific direction.

Goals, Objective and Policies: The entire Sub-Element should be revised to reflect Department name changes, designee changes, renumbering due to objective and/or policy additions and/or deletions, and grammatical changes.

To be renamed, including Sub-Element, Goal and throughout Objectives and Policies

Objective 1 – minor revisions to provide new departmental references; reformatting

Policy 1.1 – minor revision to be more inclusive of jurisdictions under the Plan.

Policy 1.3 -- consider revision to set new review and reporting requirements.

Policy 1.4 – may need an updated Ordinance cite.

Policy 1.5 – minor revision to be more inclusive of jurisdictions under the Plan.

Policy 1.7 – minor revision to provide updated Ordinance cite.

Objective 2 – reformatting.

Policy 2.1 – minor revisions to reconcile figures and be more inclusive of jurisdictions under the Plan; part of revision affecting multiple Elements to eliminate redundancy.

Policy 2.4 – minor revision to reference earlier Policy.

Objective 3 – reformatting.

Policy 3.1 -- revise/augment to introduce new Policy regarding private wastewater facilities.

Objective 4 – reformatting.

Policy 4.7 – minor revision to be more inclusive of jurisdictions under the Plan.

Objective 5 – consider modification to strengthen this Objective and its subsequent Policies, in demonstrating support for reducing VMT and GHG emissions; reformatting.

Policy 5.3 – minor revision to provide new agency reference; may need an updated/clearer Policy cite.

Sanitary Sewer Sub-Element – Attached Documents – Numerous changes, with direction to cross-check GMP locations where similar references to maps & figures are found.

**Assessment of the Successes & Shortcomings
and Recommendations
for the Public Facilities Element – Sanitary Sewer Sub-Element**

A. Introduction & Background:

The purpose of the Sanitary Sewer Sub-Element is defined within its single Goal, which reads as follows:

TO PROTECT THE HEALTH AND SAFETY OF THE PUBLIC BY ENSURING ACCESS TO ENVIRONMENTALLY SOUND, COST EFFECTIVE AND IMPLEMENTABLE SANITARY SEWER FACILITIES AND SERVICES.

The intent of the Sanitary Sewer Sub-Element is to assure the provision of efficient and economical services that would enable the citizens of Collier County to meet their needs for wastewater management while also assuring public health and safety in accordance with the criteria set forth in Rule 9J-5, F.A.C., and Chapter 163, Florida Statutes. The provision of public facilities and services for wastewater treatment is planned in correlation with future land use projections.

The annual update and amendment to the Capital Improvement Element, adopted January 28, 2008 included the initial step toward re-naming of this Sub-Element from the "Sanitary Sewer" Sub-Element to the "**Wastewater Treatment**" Sub-Element. The new name should be used in all titles, headings and text within this Sub-Element, and in all references to this Sub-Element found throughout the Growth Management Plan.

As currently formatted, this Sub-Element consists entirely of a single Goal, and its supporting Objectives and Policies. As part of the EAR-based amendments, Comprehensive Planning staff is recommending specific formatting changes for the Sub-Element. In addition, the Sub-Element contains a number of references to the County's Water & Sewer District. The District's official name is the "Collier County Water-Sewer District", and the Sub-Element text needs to reflect this.

B. Objectives Analysis:

OBJECTIVE 1:

The County will implement the following policies to make certain that public and private sector sanitary sewer service utilities provide, repair and/or replace sanitary sewer collection, treatment and disposal facilities to correct existing deficiencies in their respective service areas, as may be required to meet or exceed the Level of Service Standards established in this Plan. In addition, public sector sanitary sewer service utilities will be expanded as necessary to provide for future growth.

Objective Achievement Analysis:

This Objective concerns both private and public utilities. Collier County's private water and wastewater utilities are regulated through the Utility/Franchise Regulation Section of the Community Development & Environmental Services (CDES) Operations Department. This agency serves as staff for the Collier County Water and Wastewater Authority. The Utility/Franchise Regulation Section is

the County entity responsible for monitoring compliance with County regulations by private utilities. In addition to managing the operations of the Department and Section, the CDES Operations Director is also the Executive Director for the Water and Wastewater Authority.

In regulating the operations of the County's private utilities the Authority, which is appointed by the Board of County Commissioners, exercises considerable power. They may set rates, adjust franchise boundaries, set quality of service standards and intervene in disputes between utilities and customers.

The publicly owned (as opposed to privately-owned) wastewater collection system is operated by Collier County through the Collier County Water-Sewer District. The District is responsible for developing, operating and maintaining the County's public facilities related to wastewater treatment and collection.

Based on the above, this Objective is being achieved and *should be retained*, essentially as written. This Objective should be rephrased to improve its formatting as an "objective" and specific references to County Departments and Sections should reflect CDES' recent reorganization, including the **Operations and Regulatory Management Department [and Director]**, of the **Growth Management Division**.

Policy Relevance:

There are seven (7) policies within this Objective.

Policy 1.1:

Continue the development of the Collier County Water-Sewer District consistent with the Capital Improvements Element to provide for future growth.

This Policy calls for the continuing development of the County's Water-Sewer District. This Policy remains relevant and *should be rewritten not to be utility specific*, but to mention those jurisdictions, generally, that have a wastewater treatment or sewer district or service to develop consistent with the GMP.

Policy 1.3:

The Collier County Water and Wastewater Authority (Authority), established by County Ordinance Number 96-6, regulates the operations of private sector wastewater treatment utilities that provide sanitary sewer services to portions of unincorporated Collier County. All such private sector sanitary sewer service providers are required to meet the County's adopted wastewater treatment Level of Service (LOS). All private sector sanitary sewer service providers shall file an annual statement with the Authority that provides current operating information including, but not limited to: a statement of current policies and service criteria, the LOS maintained by the service provider and whether such level of service meets the County's LOS Standard for wastewater treatment. The annual report shall also document any necessary or projected facility expansion and/or replacement projects that are required to correct observed deficiencies.

This Policy requires, to the extent of County authority, private wastewater treatment utilities to report current operating information and proposed system expansions or modifications to the County, including a statement as to how the proposed activity is consistent with the County's Growth Management Plan. This Policy remains relevant and *should be retained as written*.

[Planning Commission (CCPC) Comment from August 27, 2010 EAR Workshop – Suggesting that meeting these requirements should come at no cost to the County. The CCPC also suggests considering a combination of 1-year reporting, and 5-year reviewing, requirements.]

Policy 1.4:

For any new structure in which plumbing fixtures are to be installed and which is proposed to be connected to a private sector sanitary sewer service utility, the developer is required to provide a letter of adequate capacity from that private utility to the Collier County Building Review and Permitting Department at the time of application for the first building permit, pursuant to Collier County Ordinance Number 80-112.

This Policy requires developers intending to connect to private wastewater treatment or sanitary sewer facilities to demonstrate such facilities will provide them with adequate capacity. *This Policy remains relevant and should be retained as written.*

Policy 1.5:

Collier County shall permit development of package sewage treatment plant systems in areas identified in Policy 1.2, on an interim basis until County service is available. The County shall allow individual septic systems within the County only when connection to an existing central system is not within 200 lineal feet of the closest property line. In portions of the County where septic systems are allowed, at such time as County or other central sewer service becomes available within 200 lineal feet of the property line, said septic systems will be required to connect to the appropriate central sanitary sewer system.

Within the Rural Lands Stewardship Overlay, consistent with Policy 1.2: septic systems are permitted within Hamlets; septic systems may or may not be permitted in Compact Rural Developments one hundred (100) acres or less in size depending upon the permitted uses in the Compact Rural Development; and, septic systems are not permitted in Towns, Villages, and those Compact Rural Developments greater than one hundred (100) acres in size. However, in Towns, Villages, and those Compact Rural Developments greater than one hundred (100) acres in size, septic systems are allowed to serve no more than 100 acres, on an interim basis only, until central service is available.

This Policy allows development of new or expanded wastewater treatment and sanitary sewer systems in certain portions of unincorporated Collier County on an interim basis. It also allows the use of individual septic systems in areas where County or other central wastewater treatment service is unavailable. *This Policy remains relevant but should be revised to replace “until County water service is available” with “until a centralized wastewater treatment system service is available”. This includes mapping changes and new map information derived from the private, or smaller, providers or districts.*

Policy 1.7:

Where Community Development Districts, or similar special districts are established to provide a tool for developers to finance infrastructure or other purposes, wholly or partially within the Collier County Water-Sewer District, sewer service shall be connected to the regional system, and all facilities shall be conveyed, when acceptable, to the Collier County Water-Sewer District for operation and ownership in accordance with Collier County Ordinance Number 01-57, adopted October 23, 2001, and District construction and operating policies.

This Policy requires Community Development Districts, or other special infrastructure districts, to connect to the County Utility System when they are located within the Collier County Water-Sewer District Service Area, and remains relevant. *An Ordinance cite is outdated and this Policy should be revised to replace “Ordinance Number 01-57, adopted October 23, 2001” with “Ordinance Number 04-31, adopted May 11, 2004”.*

OBJECTIVE 2:

No development order shall be issued by Collier County without sanitary sewer facility capacity that meets or exceeds the minimum Level of Service Standards established herein is available or will be available to serve the development under the guidelines established for concurrency in the Capital Improvement Element of this Plan.

Objective Achievement Analysis:

This Objective is the County’s concurrency provision for wastewater treatment capacity. The Collier County Water-Sewer District achieves concurrency of its stated LOS standard. The disclosure of this achievement is reported within the periodic updates of the County’s Wastewater Master Plan. This Objective is being achieved and *should be retained*, only if rewritten. This Objective should be reformatted to separate the portion that reads as an “objective” from the portion that reads as a “policy” into the individual “Objective 2” and Policy “2.0.1”.

Policy Relevance:

There are four (4) policies within this Objective.

Policy 2.1:

The following Level of Service (LOS) standards are hereby adopted and shall be used as the basis for determining the availability of facility capacity and the demand generated by a development:

FACILITY SERVICE AREA	LEVEL OF SERVICE STANDARD
Collier County Facilities	
North Sewer Service Area	145 gpcd
South Sewer Service Area	100 gpcd
Southeast Sewer Service Area	120 gpcd
Northeast Sewer Service Area	120 gpcd
Marco Island Sewer District	
Marco Shores	100 gpcd
City of Naples Facilities	
Unincorporated Service Area	145 gpcd
Everglades City Facilities	
Unincorporated Service Area	100 gpcd
Independent Districts	
Orangetree Utilities	100 gpcd

Immokalee Water and Sewer District 100 gpcd
Florida Governmental Utility Authority 100 gpcd

Private Sector Systems *

*** The standards hereby adopted are the sewage flow design standards in Chapter 64E-6008, Florida Administrative Code, unless otherwise approved by the Board of County Commissioners to address economic, social and construction method variations between individual systems.**

This Policy establishes Level of Service (LOS) standards for various Collier County wastewater treatment facilities, both public and private. *This Policy should be revised to update the Level of Service Standards, as the Collier County Facilities North Sewer Service Area LOSS is now 120 gpcd. The Policy should be revised to indicate the LOS standard for Ave Maria Water and Wastewater facilities, which are inside the County.*

The LOSS for wastewater treatment appearing in Policy 2.1 above is one of two locations within this GMP where these standards are shown. The other location is Policy 1.5, subsection "E" in the Capital Improvement Element. This dualism may be a simple matter of unnecessary redundancy, except that the two Policies are not the same. These differences should be reconciled and a single location selected for these LOSS to appear. If it is decided to show the LOSS in both locations, then the CIE could be formatted to provide the LOS Standards, while the Sub-Element entries could elaborate on the figures. This Policy will remain relevant in its reconciled format.

[Planning Commission (CCPC) Comment from August 27, 2010 EAR Workshop – Supporting staff suggestion to locate Level of Service Standards in the CIE, with this Sub-Element being revised to direct readers to the CIE for this information.]

Policy 2.4:

The County shall annually review historical sanitary sewer demand records and adjust the LOS standards, as referenced in Policy 2.1, if so indicated by said annual review.

This Policy remains relevant and requires an annual review of wastewater treatment demand records, with adjustment of the LOS Standards, as necessary, based upon the findings of the annual review. *This Policy should be revised to replace "County" with "Collier County Water and Wastewater Authority", and add a second sentence, such as, "The Collier County Water-Sewer District shall review historical sanitary sewer demand records during Collier County Wastewater Master Plan updates and adjust the LOS standards, as referenced in Policy 2.1, if needed." and retained as rewritten.*

OBJECTIVE 3:

The County will continue to ensure utilization of environmentally sound and economically beneficial methods for disposal of treated sludge and septage, and shall also ensure that such practices are followed by private utilities regulated by the County.

Objective Achievement Analysis:

This Objective ensures the County will employ appropriate sludge and septage disposal practices involving both public and private services. This Objective is being achieved and as such, it *should be retained*, essentially *as written*. This Objective should be rephrased to improve its formatting as an “objective”.

Policy Relevance:

Policy 3.1:

The County shall maintain sludge de-watering and stabilization facilities for use by County wastewater treatment operations to produce sludge de-watered and stabilized to a degree suitable for use as cover material for County landfills or to be used for any suitable manner that is permitted by law. The County shall ensure that private wastewater utilities regulated by the County follow such practices.

This Policy remains relevant and requires sludge de-watering and stabilization facilities to be included in all County wastewater treatment plants. The facilities are required to produce sludge de-watered and stabilized to a degree suitable to enable its use as cover material for County landfills or to be used for any suitable manner that is permitted by law. The stabilization facilities at the North County Water Reclamation Facility were abandoned in 1999 due to odor concerns. The County currently hauls biosolids to a sanitary landfill on an interim basis until biosolid stabilization facilities can be obtained to meet FAC Chapter 62-640 and USEPA 40 CFR Part 503. *This Policy should be retained as written.*

As part of the EAR-based amendments, the County proposes a new Policy requiring private sludge and septage to be treated prior to its disposal to a degree equivalent to that employed at the County facilities.

OBJECTIVE 4:

The County will continue to promote the use of treated wastewater effluent for irrigation purposes in order to provide an environmentally sound disposal method and to conserve potable water and groundwater supplies by developing and implementing an integrated, comprehensive strategy for the following Policies.

Objective Achievement Analysis:

This Objective is being achieved and commits the County to promoting the use of reclaimed water as an irrigation source for suitable properties. This language is similar to language contained in Objective 1.4 of the Potable Water Sub-Element (refer to the Potable Water Section of this Report). The County has an active reclaimed water irrigation program. Therefore staff recommends *retention of this Objective*, essentially *as written*. This Objective should be rephrased to improve its formatting as an “objective”.

Policy Relevance:

There are seven (7) policies within this Objective. The Objective and policies are similar to Objective 4 and its policies within the Potable Water Sub-Element (refer to the Potable Water Section of this Report).

Policy 4.7:

The County shall seek to expand the availability of irrigation water from supplemental sources through connection of such sources to the County's reclaimed water system.

This Policy remains relevant and requires that dual water systems within Community Development Districts, other special districts, and Planned Unit Developments be connected to the Regional (County) system, at such time as the system is available for such connection. *This Policy should be deleted or rewritten to not be utility specific.*

OBJECTIVE 5:

The County will discourage urban sprawl and the proliferation of private sector sanitary sewer service suppliers in an effort to maximize the use of existing public facilities through the development order approval process by implementing the following policies.

Objective Achievement Analysis:

This Objective is being achieved and seeks to discourage urban sprawl through maximization of existing public wastewater treatment utilities. Further, the Objective states that this action will be achieved through the local development review process. The Public Utilities Engineering Department coordinates with the Zoning & Land Development Review Department in the review of development order applications to ensure that the requirements of this Objective are met. Therefore, this Objective *should be retained, essentially as written.* This Objective should be rephrased to improve its formatting as an "objective".

Consideration should be given to revisions that recognize the importance of reducing GHG emissions in furtherance of HB 697.

Policy Relevance:

There are three (3) policies within this Objective. The Objective and policies are similar to Objective 5 and its policies within the Potable Water Sub-Element (refer to the Potable Water Section of this Report).

Policy 5.3:

As provided for in the Rural Lands Stewardship Area Overlay, and in Policy 1.2, central sewer facilities are permitted in Towns, Villages, Hamlets, and Compact Rural Developments. Though not anticipated, it is possible that central sanitary sewer collection lines may extend through lands not designated as a Town, Village, Hamlet or Compact Rural Development; no properties designated other than as a Town, Village, Hamlet or Compact Rural Development are permitted to connect to these collection lines. Under criteria, properties may be eligible for central sanitary sewer service from Collier County Utilities, or a private sector utility or independent district, within the Receiving Areas identified in the Rural Transition Water and Sewer District, depicted on the Existing and Future Sewer Service Areas map (Figure SS-2) of the Sanitary Sewer Sub-element, subject to availability. Qualifying criteria shall be limited to the requirements and incentives established in the Future Land Use and Conservation and Coastal Management Elements of this Plan to obtain preservation standards established for environmentally sensitive lands in the Sending Areas of the Rural Fringe Mixed Use District. Criteria for central sanitary sewer service eligibility may include, but are not limited to, plans

for development which utilize creative planning techniques such as clustering, density blending, rural villages, and TDRs from identified environmentally sensitive areas. Criteria for eligibility may be amended and additional Sending and Receiving Lands may be designated in the future. Central Sanitary Sewer collection lines, within the Rural Transition Water and Sewer District, may extend through Sending Lands; however, no properties designated as Sending Lands may connect to the collection lines.

This Policy remains relevant and contains the conditions for connection of development within the RLSA and the Rural Fringe to a central sanitary sewer system. Specifically, the Policy states that “no properties designated other than as a Town, Village, Hamlet or Compact Rural Development” (within the RLSA) are permitted to connect to a central sanitary sewer system. The Policy also states conditions for connections within the Rural Transition Water & Sewer District (i.e., the County’s Rural Fringe Mixed Use District). *This Policy should be revised to replace “Collier County Utilities” in the third sentence with “Collier County Water-Sewer District”.*

CONSIDER INTRODUCING A NEW OBJECTIVE AND SUBSEQUENT POLICY OR POLICIES FOLLOWING FROM THE 2009 ADOPTION OF HB 697.

[Public Comment from March 15, 2010 EAR Public Meeting – Suggesting the County should study ideas to target GHG sources – beside transportation, to address a lack of energy efficient plans, to address the need to plan for sea level rise.]

[Planning Commission (CCPC) Comment from August 27, 2010 EAR Workshop – Suggesting that the amount of change introduced with Objectives and Policies following from the adoption of HB 697 may be misplaced and consideration for any such change may serve better if consolidated to address multiple Elements or Sub-Elements at another location , and should be removed from the/ as a proposed revision.]

C. Attached Documents Analysis:

Figure SS-1.1 Collier County Sewer District Boundaries

This map has the same title as Figure SS-1 and is wrong. This map, and references to it in Policies, should be deleted.

Figure SS-1.2 Existing and Future Sewer Service Areas

This map has the same title as Figure SS-2 and is wrong. This map, and references to it in Policies, should be deleted.

Figure SS-1 Collier County Sewer District Boundaries

This map is referenced in multiple Policies and is wrong. The references to this map should be changed to reference “Existing and Future Sewer Service Areas” since the District Boundaries are included.

Figure SS-2 Existing and Future Sewer Service Areas

This map is referenced in the same Policies as Figure SS-1 and should be updated to the 2008 Wastewater Master Plan Figure 1-1 (attached). Recommend similar maps be added for other Sewer Systems overseen by the Collier County Water and Wastewater Authority.

Figure SS-3 North Sewer Service Area

This map is not referenced in any Objective or Policy and should be deleted.

Figure SS-4 South Sewer Service Area

This map is not referenced in any Objective or Policy and should be deleted.

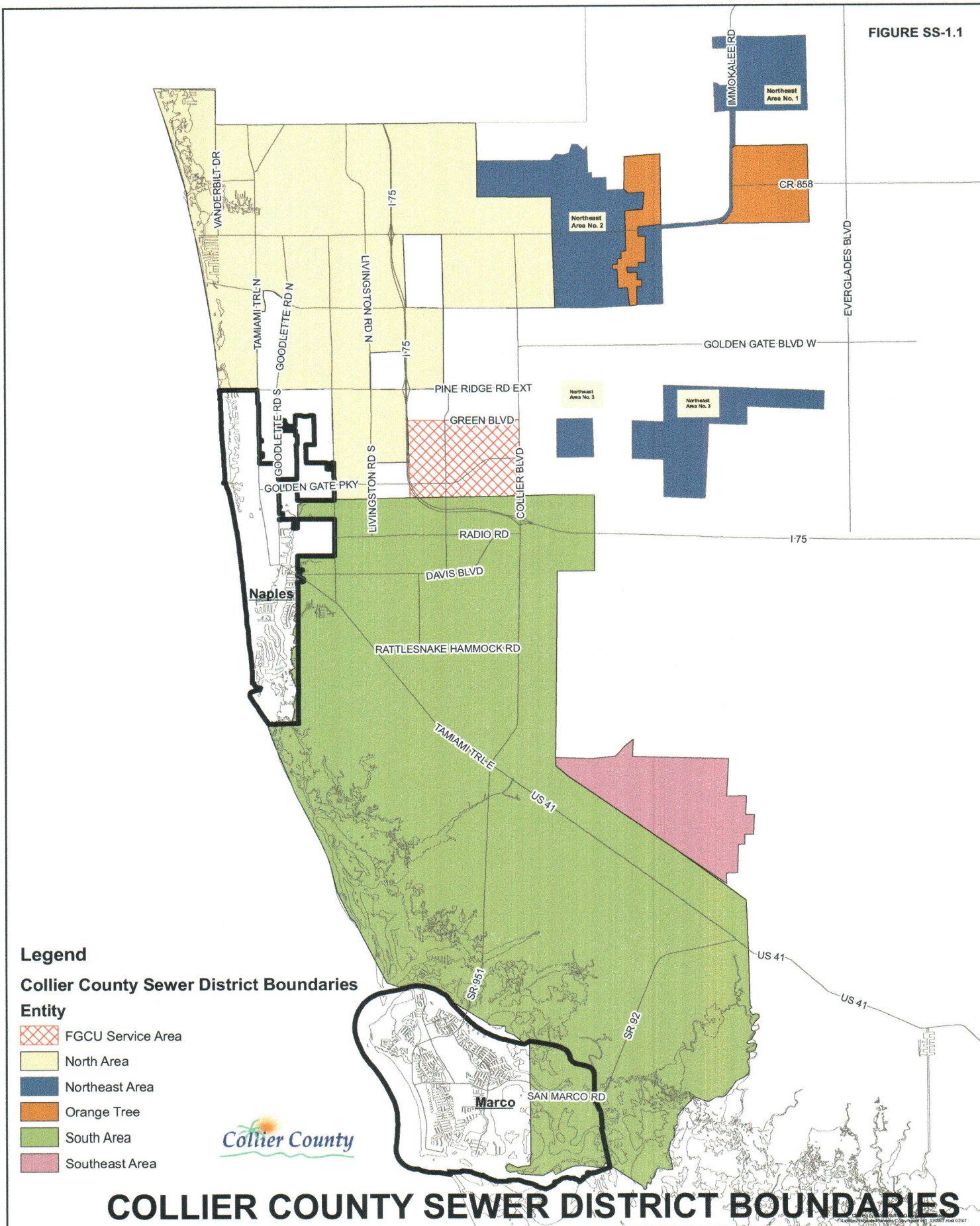
Table SS-14 Capital Improvement Projects FY 2003-2007

This table is not referenced in any Objective or Policy and is specific to the Collier County Water-Sewer District. For those reasons, this table should be deleted.

Look for the “Attached Document Analysis” items above to appear in the Capital Improvement Element as cross references, and revise or delete in manners similarly with above instructions

The annual update and amendment to the Capital Improvement Element, adopted January 28, 2008 included the initial step toward re-naming of this Sub-Element from the "Sanitary Sewer" Sub-Element to the **“Wastewater Treatment”** Sub-Element. The new name should be reflected in all figures and tables within this Sub-Element, changing these designations from “SS” to “WT” or “WW” and in all references to these documents found throughout the Growth Management Plan.

FIGURE SS-1.1



COLLIER COUNTY SEWER DISTRICT BOUNDARIES

FIGURE SS-2.1

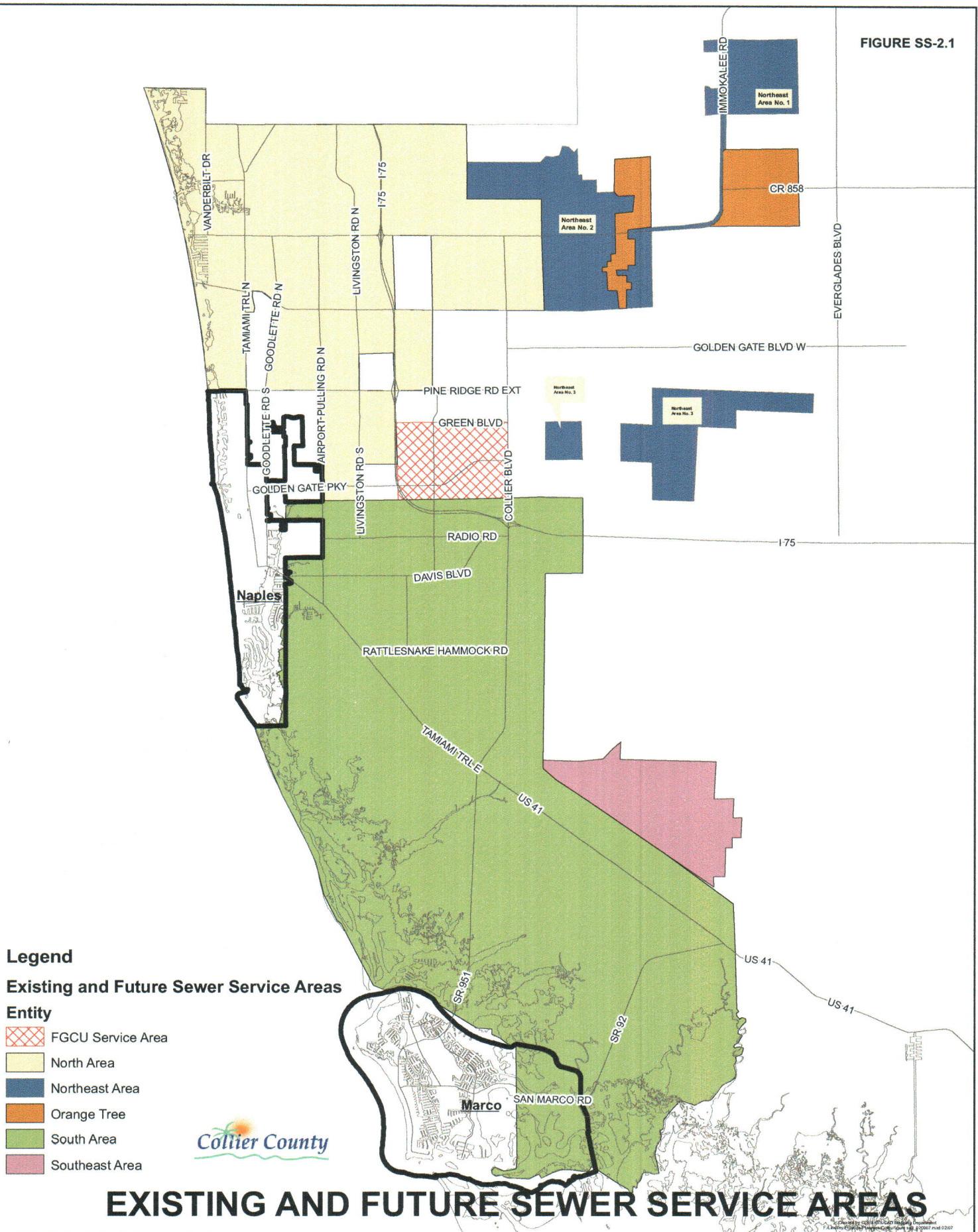
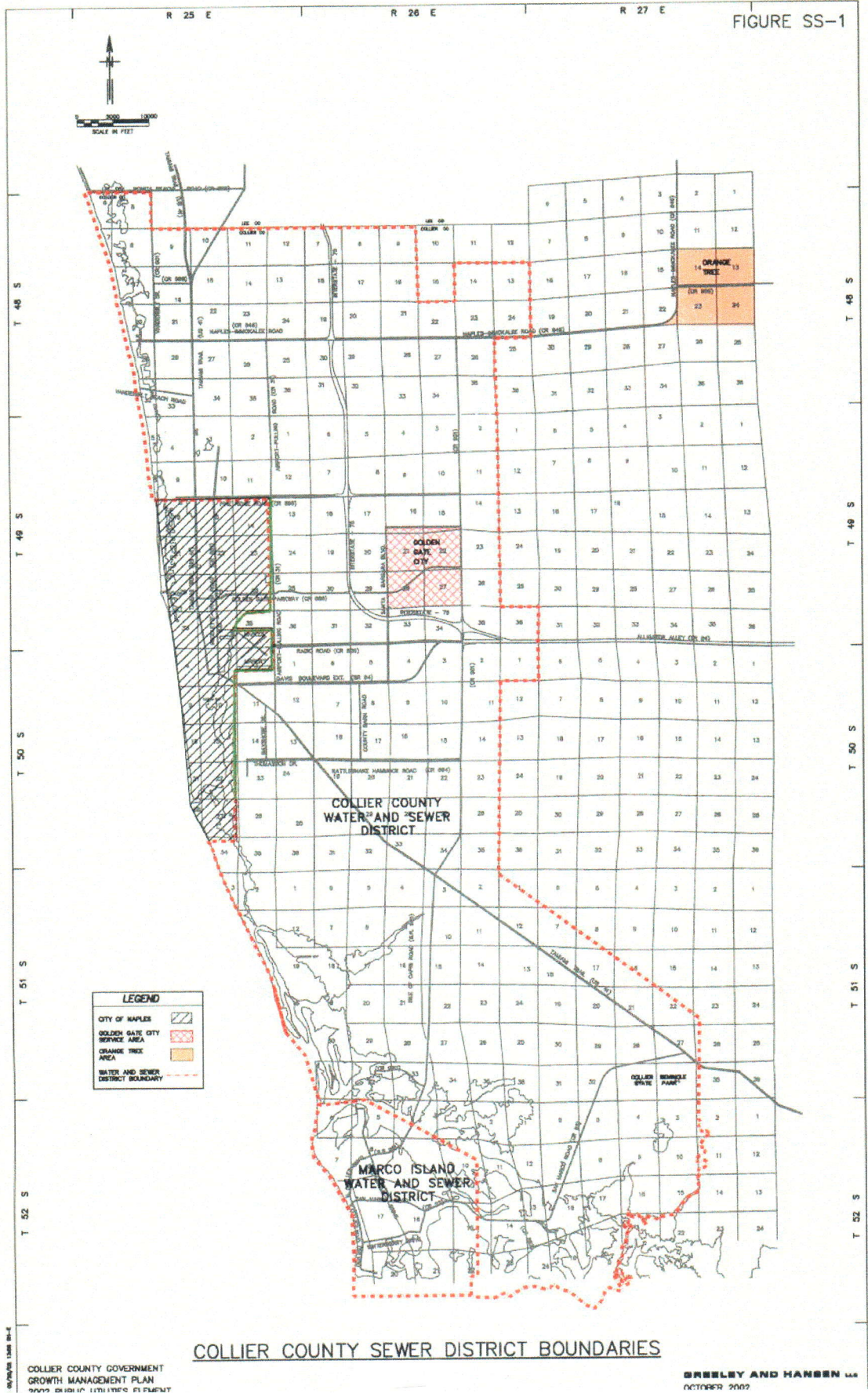
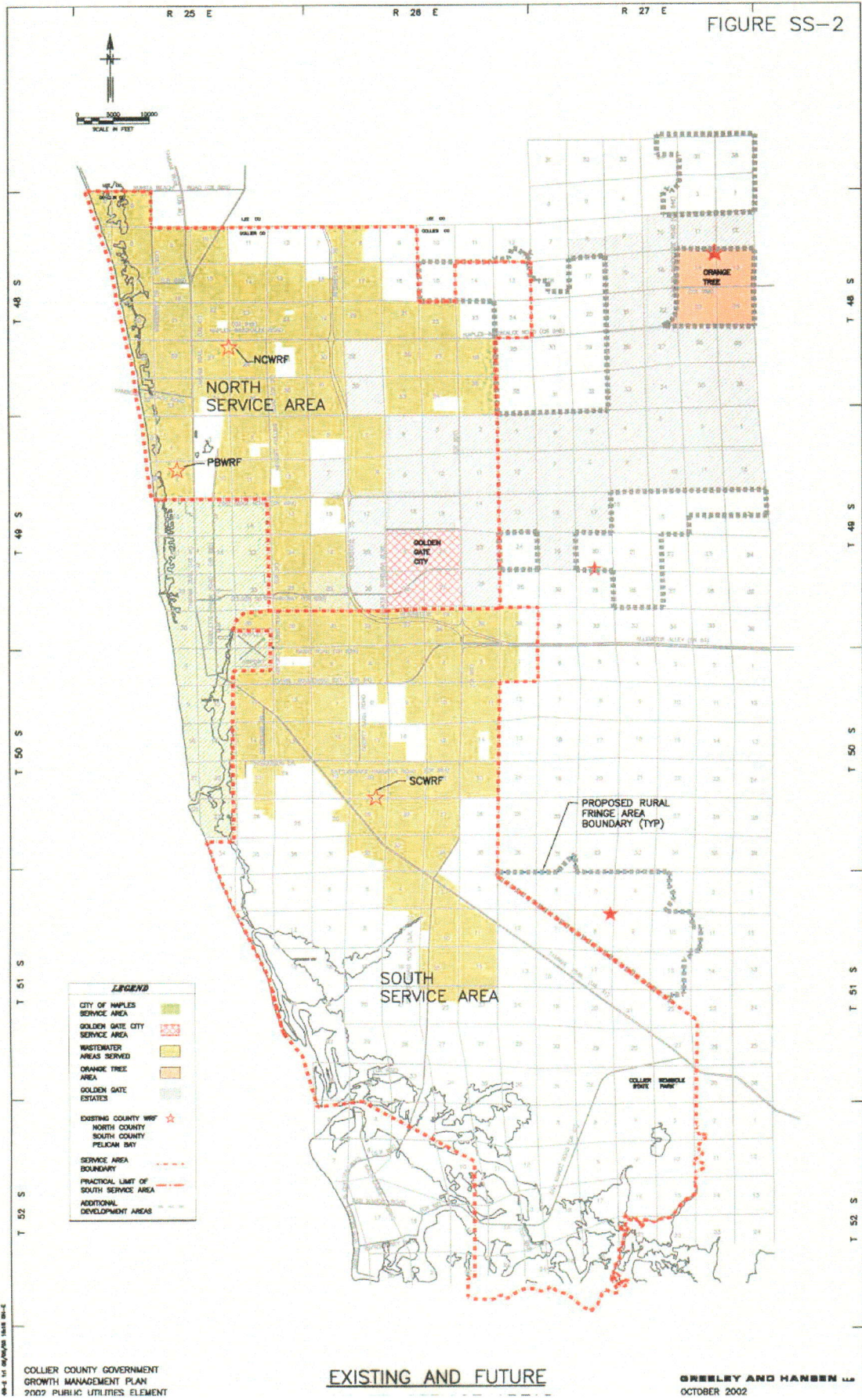


FIGURE SS-1



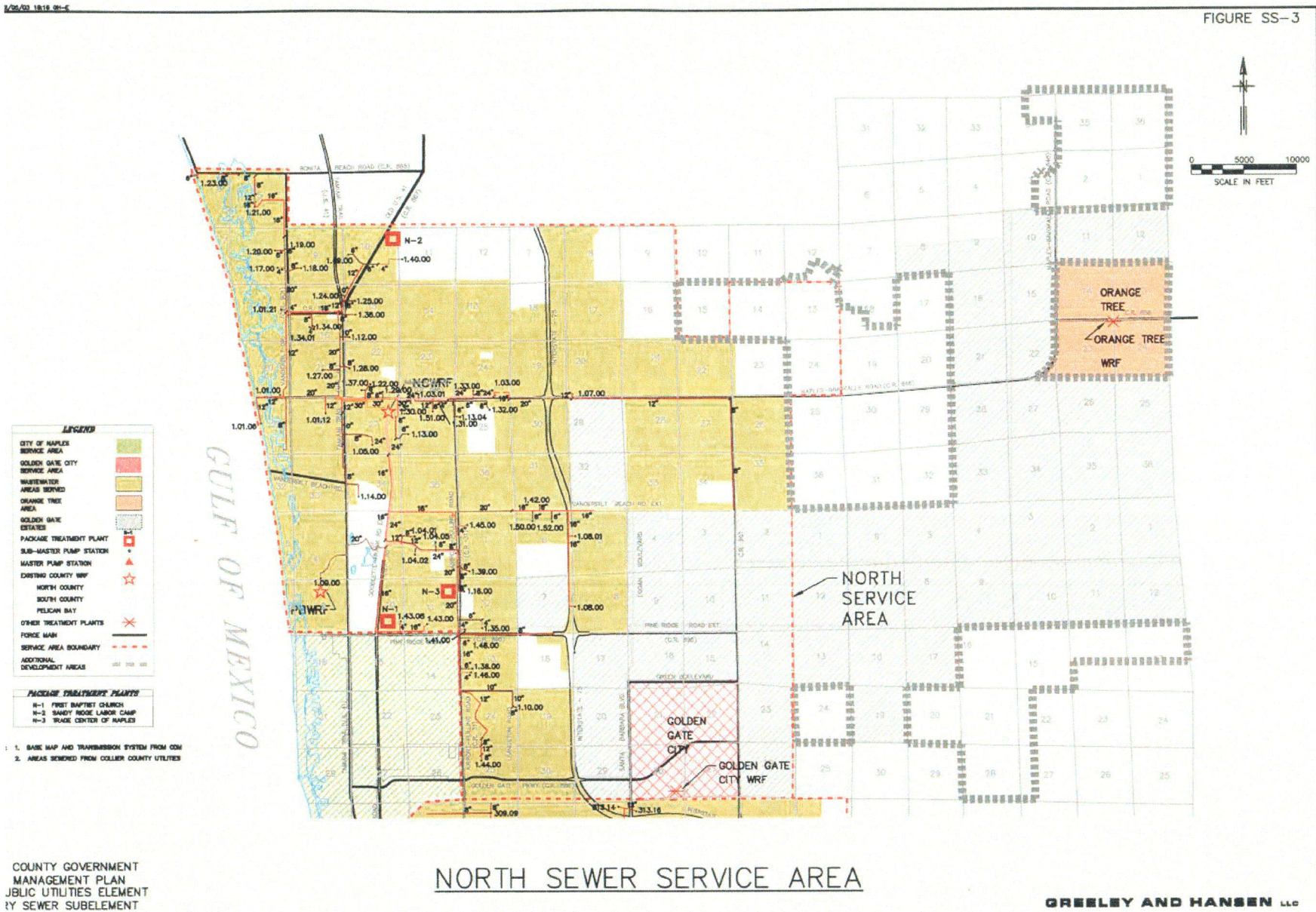
COLLIER COUNTY GOVERNMENT
GROWTH MANAGEMENT PLAN
2002 PUBLIC UTILITIES ELEMENT

BREELY AND HANSEN, LLC
OCTOBER 2002



1/26/03 1818 01-C

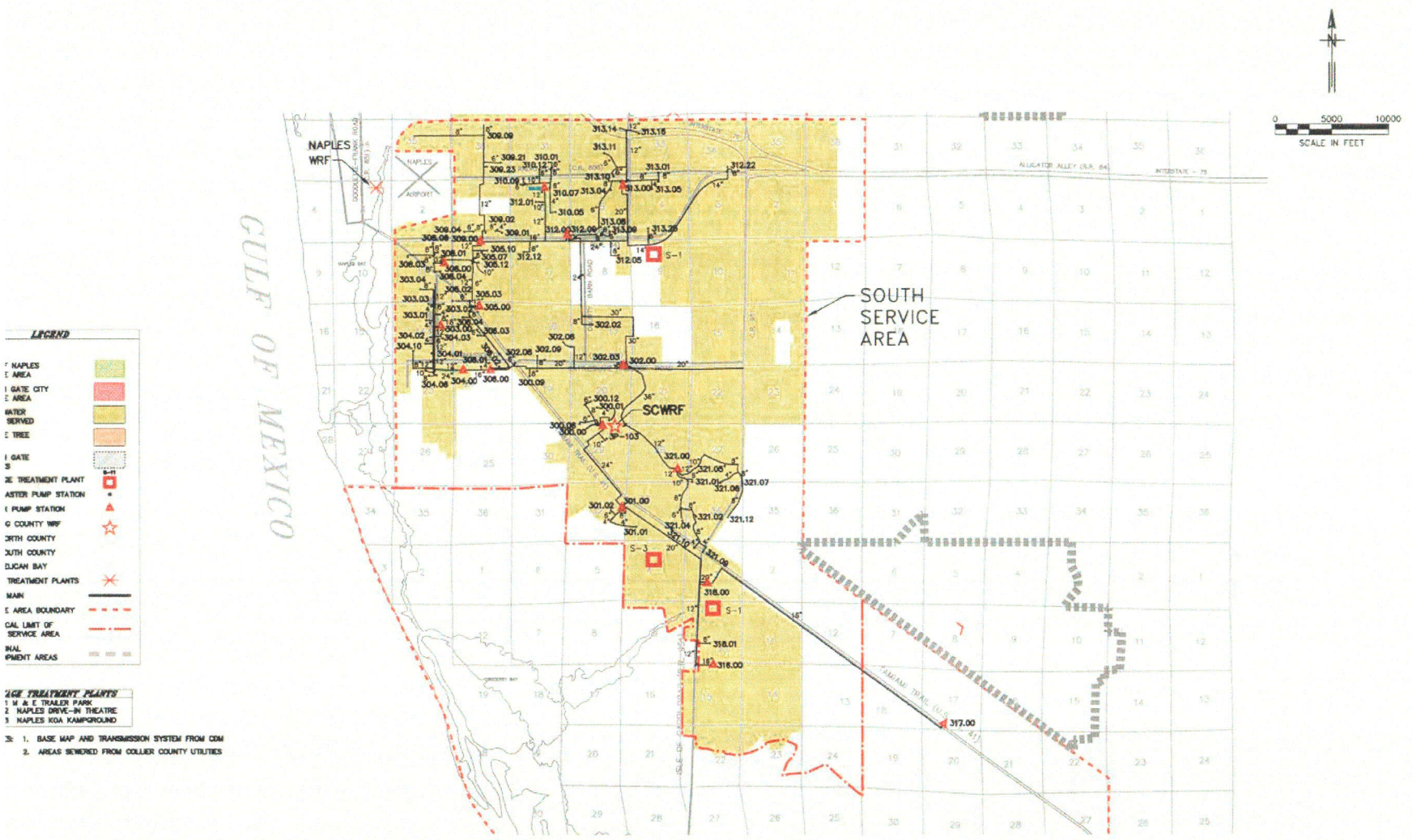
FIGURE SS-3



NORTH SEWER SERVICE AREA

GREELY AND HANSEN LLC

FIGURE SS-4



R COUNTY GOVERNMENT
 H MANAGEMENT PLAN
 PUBLIC UTILITIES ELEMENT

SOUTH SEWER SERVICE AREA

GREELEY AND HANSEN LLP

TABLE SS-14

**CAPITAL IMPROVEMENT PROJECTS FY 2003 - 2007
PROJECT DESCRIPTIONS
WASTEWATER AND RECLAIMED WATER**

Greeley and Hansen LLC
October 2002

Fund/Type (A)	Project No.	Project Name	Description
		WASTEWATER PROJECTS	
		Exiting Wastewater 413 (Growth Related) Projects	
413/GD	73031	NCWRF 5 MGD Expansion	Completion of expansion of the existing NCWRF from 8.5 to 13.5 MGD. Add 2 new clarifiers, one new aeration basin, one new effluent filter, a new chlorine contact bldg. & tank, a new blower bldg. Disinfection facility, sludge dewatering expansion, sludge thickener, odor control, RDP retirement & sludge pumping station.
413/GD	73066	Wastewater Master Plan Updates	Annual Update of wastewater master plan.
413/GD	73074	Livingston Road FM PRR to VBR	FM from Pine Ridge Road to Vanderbilt Road
413/GD	73078	North/South Sewer Interconnections	West Interconnect between north and south sewer systems.
413/GD	73077	NCWRF Flow Equalization	Flow Equalization Tanks at NCWRF.
413/GD	73079	Master Pumping Station-Immokalee Road/ CR 951	New Master Pumping Station at Immokalee Road/951
413/GD	73085	VBR 16" FM - C.R. 951 to Logan Blvd.	Study, design and construction of new 16" force main from C.R. 951 to Logan Blvd.
413/GD	73086	C.R. 951 16" FM - Immokalee Rd. to VBR	Study, design and construction of new 16" force main from Immokalee Rd. to Vanderbilt Beach Road.
413/GD	73088	Land Acquisition for Biosolids Facility	Prepare study of long-term biosolids alternatives, determine location for biosolids processing facility, purchase property, and implement plan.
413/GD	73131	Immokalee Road East 16" Force Main	Study, Design and construction of a 16-inch force main from proposed master pumping station near Immokalee Road and CR951 to proposed Orange Tree WRF. This force main to be constructed with Immokalee Road widening scheduled to start in FY03.
413/GD	73132	East Sewer Interconnect	Study, design and construction of Santa Barbara Blvd. force main from Master Pump Station 313.00 to Vanderbilt Beach Rd.
413/GD	73150	East Sewer Interconnect Booster Station	Design and construction of booster pumping station for Santa Barbara Blvd./Logna Blvd. force main.
413/GD	73151	Master Pump Station-Vanderbilt Beach Rd. & Logan Blvd.	Design and construction of new Master Pump Station for East Sewer Interconnect.
413/GD	73152	Master Pump Station-Vanderbilt Beach Rd. & Livingston Rd.	New Master Pumping Station
413/GD	73153	Master Pump Station - Immokalee Rd. East Area "B"	MPS to Serve Northeast Service Area.
413/GD	73154	SCWRF Injection Wells	Design and install second deep injection well at the SCWRF to provide additional capacity.
413/GD	73155	New NEWRF - Acquire Site	Purchase 147 ac site at Orange Tree for site of WRF and WTP.
413/GD	73156	New Northeast Water Reclamation Facility	Study, design and construction of a new 2.0 mgd WRF by 2008, an expansion to 4.0 mgd by 2010, and an expansion to 6.0 mgd by 2018 (expandable to 12 mgd) on the Orange Tree property to replace the existing Orange Tree plant and serve potential new customers in Northeast Service Area.
413/GD	73157	New SEWRF - Land Acquisition Study	Study of possible sites for location of up to 10.5 mgd (mmdf) WRF in Southeast Service Area.
413/GD	73158	Upsize Lakewood FM to 16"	Study, design and construction of a new 16-inch force main from Master Pumping Station 3.05 to Master Pump Station 3.09 (upgrading existing 12" force main).
413/GD	73166	Pumping Station Upgrades	Upgrades to existing lift stations and pumping stations as needed to keep pace with growth.
413/GD	73167	Growth Management Plan Update	Update Sanitary Sewer Subelement to Growth Management Plan
413/GD	73190	VBR 16" FM - Islandwalk Reimbursement	
413/GD	73195	MPS 3.14 (Naples Heritage)	New Master Pumping Station
413/GD	73925	MPS 1.04	New Master Pumping Station Orange Blossom at Goodlette-Frank
413/GD	73945	Pumping Station Improvements	Improvements to existing lift stations and pumping stations as needed to keep pace with growth. Specific lift stations identified for upgrades based on system hydraulic model in current update to master plan.
413/GD	73948	NCWRF Deep Injection Well	Design and install two deep injection wells and new DIW pumping station.
413/GD	73949	SCWRF Expansion 2001	Expansion of SCWRF to 18 mgd MMDF.
413/GD	73950	NCWRF 30.6 MMADF Expansion (Phase 1 = 24.1 mgdMMDF)	Study, design and construction of a two-phased expansion of the plant. The initial phase will be a 5.0-mgd AADF (6.5-mgd MMDF) expansion of the WRF. The second phase will also be 5.0 mgd AADF (6.5 mgd MMDF). The first phase expansion will result in a capacity of 24.1 mgd MMDF and will be on-line by 2005. The second phase expansion will result in a capacity of 30.6 mgd MMDF and will be on-line by 2010.
		New Wastewater 413 Projects	
413/GD	WW7	Land Acquisition Study for East Central WRF	Study of possible sites for location of up to 12.1 mgd (mmdf) WRF in East Central Service Area.
413/GD	WW8	East Central WRF Land Acquisition	Purchase 50 ac site at in East Central area for site of WRF.
413/GD	WW10	Southeast WRF Land Acquisition	Purchase 50 ac site at in East Central area for site of WRF.
413/GD	WW12	East Central WRF	Study, design and construction of a new 4.0 mgd WRF by 2006 and an expansion to 8.0 mgd by 2014 (expandable to 12 mgd) in Area C to serve potential new customers.
413/GD	WW13	Southeast WRF	Study, design and construction of a new 3.0 mgd WRF by 2012 and an expansion to 5.0 mgd by 2019 (expandable to 10.5 mgd) in Area D to serve potential new customers. [Defer until after 2010.]

TABLE SS-14

Fund/Type (A)	Project No.	Project Name	Description
413/GD	WW15	Service to Golden Gate City	If the County acquires the Golden Gate City utility, costs will be incurred to decommission the plant and direct flows to a County facility.
413/GD	WW19	Replace Ex. 4" Force Main with 6"	Study, design and construction of a new 6-inch force main from Master Pumping Station 145.00 to Airport-Pulling Road (upgrading existing 4" force main).
413/GD	2002-1	Livingston Road FM Upsize- Regional Park to I.R.	Study, design and construction of upsized existing 12-inch force main to 20-inch force main from Regional Park to I.R.
413/GD	2002-2	VBR FM - Logan Blvd. To Goodlette	Study, design and construction of a new 18- and 24-inch force main from Logan Blvd. To Goodlette-Frank Road.
413/GD	2002-3	Goodlette Rd FM - VBR to NCWRF	Study, design and construction of a new 30-inch force main from Vanderbilt Beach Road to NCWRF
		Existing Wastewater 414 (Renewal/Replacement) Projects	
414/R,R&E	70027	Clean Water Act Risk Mgt Study	Clean Water Act Risk Management Study for Wastewater.
414/R,R&E	70078	Spl. Assessment Software	Software
414/R,R&E	73028	Goodlette Rd FM Relocation	Goodlette-Frank Road Four Lining Improvements (Jct. Pine Ridge Road to Jct. Vanderbilt Beach Road) Relocate 12,500 LF of 16" FM and 4,400 LF of 24" FM as part of road widening project 60134
414/R,R&E	73032	Sewer System Mapping	Creating a set of system maps for the water and wastewater departments to be utilized for location of all facilities. The maps will be utilized in emergency situations and as a reference for local engineers requesting information on our wastewater system. Additionally, the maps will be utilized by the PWED Section in planning for future expansion of our system to keep up with anticipated growth.
414/R,R&E	73045	FDOT Joint Prjts	Contingency fund for the relocation of sewer mains from various FDOT projects.
414/R,R&E	73054	Cnty Barn Sewer Line Relocate	Rattlesnake Hammock Rd. to Davis Blvd., Relocate sewer mains for road widening project. Road project currently scheduled for FY 2006.
414/R,R&E	73060	Port Au Prince Sewer	Replace sus-standard wastewater collection system serving 4 streets off of Port-au-Prince Road pending identification of a funding source.
414/R,R&E	73065	CCDOT Utility Relocates	Relocation of utilities as may be needed given accelerated County road construction schedules.
414/R,R&E	73071	Energy Efficiency Enhancements	Study and implement electrical upgrades to improve energy efficiency at the treatment plants and larger pumping stations.
414/R,R&E	73072	Public Utilities Operations Center	Relocate sewer collection crews and equipment depot to a larger facility to accommodate growth. Proceeds from the sale of the existing facility at 6027 Shirley Street will be realized and will help offset the cost to relocate to a larger facility.
414/R,R&E	73078	Henderson Creek Sewer Improvements	To provide sewer service connections to properties (M&E and B&I) South of Henderson Creek Rd.
414/R,R&E	73082	Pump/Lift Stations Rehab	Design and bid pumping station rehabilitation for wastewater collections department.
414/R,R&E	73083	Sewer Line Rehab	Design and bid trenchless sewer rehabilitation for wastewater collections department.
414/R,R&E	73127	Sludge Stabilization Management	Sludge Management Improvements
414/R,R&E	73160	Rookery Bay FM and PS Improvements	Improvements to Rookery Bay wastewater transmission system.
414/R,R&E	73161	Take Package Plants Off-Line (4)	This project will allow the County to take over service to wastewater customers in the County now served by package treatment plants.
414/R,R&E	73162	City Permanent Inter-connect	Forcemain inter-connect with City of Naples
414/R,R&E	73163	BSU Inter-connect	Forcemain inter-connect with Bonita Springs Utilities
414/R,R&E	73164	South County I&I Analysis	Provide sewer system I&I analysis and field investigation as recommended in the South Collier County Regional WRF Design Report (June 2001). Goal is to reduce wet weather flows to the SCWRF.
414/R,R&E	73165	Asset Management Assistance	Provide assistance in management of the County's utility assets.
414/R,R&E	73168	Odor/Corrosion control	Multi-year program to investigate and implement odor and corrosion control improvements throughout the wastewater collection system.
414/R,R&E	73301	VBR - Airport Rd. to CR951 eff relocate	Relocate existing force main for road construction.
414/R,R&E	73302	CR951 - GGB to immok. Rd. relocate	Relocate existing force main for road construction.
414/R,R&E	73306	RattleSH Rd. - Polly to CR951 relocate	Relocate existing force main for road construction.
414/R,R&E	73916	South Cnty Reg WWTP	Work includes replacement of Parkson screen, Flyght BFP Feed pumps, instrumentation for motor operated valves.
414/R,R&E	73922	Telemetry	Add telemetry to 530 of 650 remote lift stations and 13 master lift stations over five years starting FY02.
414/R,R&E	73943	30" Immokalee Road FM	Clean existing 30" FM and install permanent pigging station.
414/R,R&E	73944	Billing System	The purpose of this project is the updating of the billing system software currently utilized by the Dept. of Revenue for Water and WW accounts. The current software does not have report writing or generation capabilities. Additionally, the software is outdated for the number of customers that Collier County has and will continue to gain.
414/R,R&E	73949	SCWRF Expansion 2001	Expansion of SCWRF to 16 mgd..
414/R,R&E	73950	NCWRF Expand to 30.6 mgd MMDF	Expansion of NCWRF to 30.6 mgd MMDF (Phase 1 = 24.1 mgd MMDF).
414/R,R&E	TBD	2003 FDOT Joint Projects	Contingency fund for the relocation of sewer mains from various FDOT projects.
414/R,R&E	TBD	Sewer Line Rehab	Design and bid trenchless sewer rehabilitation for wastewater collections department.
414/R,R&E	TBD	Pump/Lift Station Rehab	Prepare manhole and lift station rehabilitation annual contract bid documents.
414/R,R&E	TBD	Odor/Corrosion Control	Multi-year program to investigate and implement odor and corrosion control improvements throughout the wastewater collection system.
414/R,R&E	TBD	CCDOT Utility Relocates	Relocation of utilities as may be needed given accelerated County road construction schedules.
		New Wastewater 414 Projects	
414/R,R&E	WW14	Decommissioning of Pelican Bay WRF	Study, design and decommissioning of Pelican Bay WRF.
414/R,R&E	2002-4	NCWRF Oxidation Ditch Improvements	Study, Design and Construction of Improvements to NCWRF Oxidation Ditch

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Fund/Type (A)	Project No.	Project Name	Description
		RECLAIMED WATER PROJECTS	
		Existing Reclaimed Water 413 Projects	
413/GD	74020	Back Pressure Sustaining Valves	Install back pressure sustaining valves at all reclaimed water meter assemblies to create pressure on demand system.
413/GD	74021	Golden Gate Canal Supplemental Water System	Study, design and construction of system to extract surface water for meeting peak irrigation demands.
413/GD	74029	Effluent Management Master Plan Update	Update effluent management portion of countywide wastewater master plan.
413/GD	74030	ASR Reclaimed Water Wells	Design, permit and construct one ASR test well initially, then construct up to seven ASR wells for the purpose of injecting surplus reclaimed water during off peaks and retrieving same during peak demand times for sales to reuse customers. Also includes monitor wells piping pumps and telemetry.
413/GD	74034	Vanderbilt Bch Reclaim WM 20"	Construct 20" reclaimed water main along Vanderbilt Beach Road from Airport Road to Village Walk Circle to increase flows to the N/S interconnect, the injection wells and customers east of I-75.
413/GD	74035	Radio Rd/Santa Barbara Blvd. 16" Reclaimed WM	Construct 16" reclaimed water main along Radio Road and Santa Barbara Blvd. From Foxfire to Countryside to increase flows to N/S interconnect. A possible alternate route is along the FPL easement between Davis Blvd. & Radio Rd.
413/GD	74036	Radio Rd 20" Rcl WM	Construct 20" reclaimed water main along Radio Road from Briarwood to Foxfire as part of N/S interconnect.
413/GD	74076	Reclaimed Water Booster Pump Station - North	New Booster Pumping Station.
413/GD	74077	NCWRF 24" Reclaimed Water Main-NCWRF to Vanderbilt Beach Rd	New Reclaimed Water Transmission Main.
413/GD	74078	NCWRF 24" Reclaimed Water Main-Along Livingston Rd, VBR	New Reclaimed Water Transmission Main.
413/GD	74125	Supplemental Irrigation Water	Study, design and construction of supplemental water facilities for reclaimed water system.
413/GD	TBD	2002 Growth Management Plan Update	Update growth management plan subelement every five years.
413/GD	74037	Miscellaneous Effluent Improvements	Miscellaneous Effluent Improvements
		New Reclaimed Water 413 Projects	
413/GD	RW1	Reclaimed Water Booster PS - North SA	Study, design, and construction of booster ps recommended in Water Resource Planning Report, August 2001.
413/GD	RW2	Interconnect to South SA - 20" Reclaimed WM	Study, design, and construction of reclaimed water line recommended in Water Resource Planning Report, August 2001.
413/GD	RW3	Interconnect to North SA - 20" Reclaimed WM	Study, design, and construction of reclaimed water line recommended in Water Resource Planning Report, August 2001.
		Existing Reclaimed Water 414 Projects	
414/R,R&E	74015	Misc. Effluent Improvements	Allowance for annual improvements to the reclaimed water transmission system.
414/R,R&E	74019	Cnty Barn Rd Eff Line Relocate	Rattlesnake Hammock Rd. to Davis Blvd., Relocate reclaimed water mains for road widening project. Road project currently scheduled for FY06.
414/R,R&E	74021	Golden Gate Canal Supplemental Water System	Initiation of plan to obtain supplemental irrigation water from the canal.
414/R,R&E	74023	Pelican Bay Irrg Fire	Conversion of Pelican Bay fire protection system from reclaimed water to potable water.
414/R,R&E	74028	Goodlette Rd Reclaim WM - Relocate	Goodlette-Frank Road Four Laning Improvements (Jct. Pine Ridge Road to Jct. Vanderbilt Beach Road) Relocate 4,400 LF of 20" effluent main as part of road widening project 60134.
414/R,R&E	74030	Reclaimed Water ASR	Study, design and construction of new reclaimed water ASR wells.
414/R,R&E	74031	Rehab SCWRF Reclaimed Wtr Stg Tank	Repairs to reclaimed water storage tank includes repairs to wall cracks, construction joints and expansion joints.
414/R,R&E	74033	Reclaimed Water Telemetry	Add telemetry to 31 reclaimed water user sites and 7 raw water well sites. There are 19 sites in North Service Area, 7 raw water wells, and 12 sites in the South Service area.
414/R,R&E	74039	Pelican Bay Wells	Add two new wells with vault, electrical instrumentation and controls.
414/R,R&E	74047	Reclaimed Water Automatic Read Meters	Add automatic read meters to existing system to enhance operation.
414/R,R&E	74075	Eagle Lakes Reclaimed Water Pump Station	Upgrades to reclaimed Water PS
414/R,R&E	74125	Supplemental Irrigation Water	Funds are to identify sources and implement a supplemental water supply to augment reclaimed water used for irrigation. Includes Immokalee Rd Wellfield and Reclaimed Water Line.
414/R,R&E	74300	Immok. Rd. - US41 to I75 eff relocate	Reclaimed water pipeline relocation for new road construction.
414/R,R&E	74301	VBR - Airport Rd. to CR951 eff relocate	Reclaimed water pipeline relocation for new road construction.
414/R,R&E	74302	CR951 - GGB to immok. Rd. relocate	Reclaimed water pipeline relocation for new road construction.
414/R,R&E	74303	GGP - Airport to SBB eff relocate	Reclaimed water pipeline relocation for new road construction.
414/R,R&E	74307	Misc. Effluent Improvements	Misc. Effluent Improvements
414/R,R&E	74308	Pelican Bay Reclaimed Water PS Cranes	Add Cranes at Pelican Bay Reclaimed PS