Wastewater Element

Data, Inventory & Analysis

Approved August 12, 1991 • Amended June 8, 2009

SUPPORT DOCUMENT

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WASTEWATER ELEMENT SUPPORT DOCUMENT

1. INTRODUCTION

The purpose of this element is to project and plan for the capital facility needs of the three parts of the wastewater system: collection, treatment, and disposal. This is accomplished through a surplus/deficit analysis that determines the available capacity to the year 2030. From the surplus/deficit analysis, capital improvements are defined and costs for the improvements calculated. A budget analysis helps determine whether future expenditures will exceed revenues.

The outcome of this analysis determines areas with growth potential based upon the availability of sewer capacity. This will have direct impact on the future land use patterns of the City. The availability of wastewater service is one method which the City can use to control urban sprawl. This can be accomplished through infill projects that take advantage of available capacity in existing lines or projects adjacent to areas with existing service, minimizing the cost of system extensions.

The Wastewater Element analysis divides the City's service area into discrete sub-areas based upon main trunk lines and the treatment plants that service these lines. Existing available capacity is shown by sub-area. Future capacity and deficits are calculated for each sub-area based upon anticipated growth from the City's land use projections. Results from this analysis will assist the City in guiding development which will be in the public's best interest, yet allow flexibility in the area's growth.

2. REGULATORY AND PROGRAM ASSESSMENT

2.A. FEDERAL LEGISLATION

The Water Pollution Control Act (Clean Water Act) was instrumental in the 1970's for implementing several programs to assess the environmental impacts from wastewater treatment (Section 201), and point and non-point sources (Section 208). The law also established objectives for water pollution abatement (Section 101) and standards for water quality of effluent discharge for sewage treatment plants (Section 301). Of primary importance was the establishment of the National Pollutant Discharge Elimination System (NPDES) permit (Section 402) which requires permits for all surface water discharges of polluted or treated waters.

2.B. STATE LEGISLATION

The Florida Department of Environmental Protection (FDEP) is responsible for the regulation of the construction and monitoring of wastewater treatment plants. Collection facility construction is regulated under FDEP Rule 62-604, F.A.C. “Collection Systems and Transmission Facilities”. Treatment of Sewage is regulated under FDEP Rule 62-600, F.A.C., which outlines standards for operation of wastewater facilities and establishes minimum treatment and disinfection requirements. FDEP Rule 62-610, F.A.C, provides regulations and criteria for the disposal of effluent as reclaimed water. FDEP Rule 62-600.540 “Groundwater Disposal by Underground Injection” regulates the deep well injection of wastewater effluent. The Treatment and disposal of sludge is managed under FDEP Rule 62-640, F.A.C., “Domestic Wastewater Residuals”. The standards and requirements of Part II of Chapter 62-600, F.A.C., and Rules 62-600.500 and 62.600.530, F.A.C., shall be applicable to septic tank drainfield systems and other on-site waste treatment systems with subsurface disposal regulated by this chapter. The Orange County Health Department is in charge of enforcing these regulations.

2.C. LOCAL REGULATIONS

Orlando City Code Chapters 30 and 32 address requirements for the sewer system and for reclaimed water.

Chapter 30, “Regulation of Sewer Use and Rates” includes the following objectives:

- To prevent introduction of pollutants into the Publicly Owned Treatment Works which will interfere with its operation.
- To prevent the introduction of pollutants into the Publicly Owned Treatment Works which will pass through the Publicly Owned Treatment Works, inadequately treated, into receiving waters, or otherwise be incompatible with the Publicly Owned Treatment Works.
- To protect both the general public and Publicly Owned Treatment Works personnel who may be affected by wastewater and biosolids in the course of their employment.
- To promote reuse and recycling of wastewater and biosolids from the Publicly Owned Treatment Works.
- To provide for fees for the equitable distribution of the cost of operation, maintenance and improvement of the Publicly Owned Treatment Works.
- To enable the City to comply with conditions in its National Pollutant Discharge Elimination System and State Domestic Wastewater Facility permits; biosolid use and disposal requirements; and any other Federal or State laws to which the Publicly Owned Treatment Works are subject.

The Chapter applies to all users of the Publicly Owned Treatment Works. The Chapter authorizes the issuance of Industrial User Discharge Permits; provides for monitoring, compliance and enforcement activities; establishes administrative review procedures; requires user reporting; and provides for the setting of fees for the equitable distribution of costs resulting from the programs established.

Chapter 32, "Regulation of Reclaimed Water Use" was adopted by the City in 2002, to govern the distribution and use of reclaimed water within the City service area. The objectives of this Chapter include:

- To encourage the use of reclaimed water in lieu of potable water, groundwater or surface waters in suitable applications, such as irrigation;

- To protect both the public potable water supply and the public reclaimed water supply from possible contamination at the point of the user's service connection to these water systems due to backflow or back-siphonage;

- To establish the minimum requirements for users of the reclaimed water system and the various related programs to achieve compliance with all state and federal laws; and

- To protect the health and safety of the community and users of the potable water system by promoting proper use and operation of the reclaimed water system.

Key points of the ordinance include establishing standards for cross connection control and testing for protection of the potable water system; requiring reclaimed water, where it is available, to be used for irrigation in lieu of other water sources; requiring new developments within the reclaimed water service area to install reclaimed water mains at their expense as part of the infrastructure network; and providing a means for the City to establish rates and charges for reclaimed water use.

The ordinance and related reclaimed water system expansion programs are a key part of the Orlando Utilities Commission's strategy for meeting Orlando's future water needs.

The Sewer Service Policy was adopted by the City in 1982 and provides guidelines for the procurement of sewer capacity from the City in the form of requisite gallons per day of sewage capacity for new development, renovations, alterations, and in association with Concurrency Management applications.

The Policy also covers septic tanks and reuse. In accordance with the Policy, a septic tank system may only be utilized if sanitary sewer lines are over 100 feet from the property, or if evidence of a physical constraint to connect exists.

3. OVERVIEW OF CITY OF ORLANDO SERVICES AND PROGRAMS

3.A. WASTEWATER DIVISION SERVICES

The Wastewater Division is divided into two main areas of responsibility, Engineering and Maintenance Services and Process and Operation Services.

Engineering and Maintenance Services provides wastewater capital facilities planning, operation and maintenance to over 750 miles of sanitary sewers, in the wastewater collection system, and customer service related to sewer billing. The Environmental Control program regulates and monitors industrial discharges and oversees environmental studies, evaluations and remediation projects within the City limits.

Process and Operations Services manages, operates and maintains the Iron Bridge Regional Water Reclamation Facility (40 MGD), the Water Conserv I Water Reclamation Facility (7.5 MGD), the Water Conserv II Water Reclamation Facility (25 MGD), the Orlando Easterly Wetlands and over 200 lift stations located throughout the City.

3.B. WASTEWATER DIVISION PROGRAMS

The City of Orlando's Wastewater Division has instituted programs to improve and maintain the sewerage system. The System Evaluation and Maintenance Section of the Division identifies problems within the collection system. Inspection of sewer lines is accomplished by the use of closed circuit TV cameras. Cracks or broken lines can then be located and fixed. Illegal connections are detected through the TV inspection program as well as through smoke and dyed-water testing programs.

The Surcharge Program is responsible for the identification, monitoring, and sampling of industrial and commercial users of the sewer system which discharge high strength wastes. High strength wastes are classified as discharges that have greater than 300 mg/l of biochemical oxygen demands (BOD) or total suspended solids (TSS). High strength waste customers are surcharged for the extra demand they place upon the treatment system.

The Industrial Pretreatment Program monitors industrial and commercial users for discharges that contain hazardous wastes that may pass through, interfere with, or contaminate the wastewater treatment system. These industrial and commercial users are required to pre-treat their wastes as necessary to meet specified limits to discharge into the City system. There are several industries that require pretreatment, including manufacturing, commercial businesses, mining, agricultural production and processing and wastewater from cleanup of petroleum and chemical contaminated sites. Pretreatment is the removal, reduction, or alteration of pollutants in industrial wastewater prior to discharge or introduction into a domestic wastewater treatment facility.

The Oil and Grease Management Program has the objective of minimizing the introduction of fat-soluble wastes to the collection system. One of the remaining major point sources of pollution is overflows from the sanitary sewer system. In most cases, these overflows are preventable. In response to the mandate from the U.S. Environmental Protection Agency (EPA), the Florida Department of Environmental Protection (FDEP) initiated a statewide program to prevent sewer system overflows, which can contaminate stormwater systems, lakes and other surface waters, and pose public health problems. The primary cause of sewer system overflows is the discharge of excessive amounts of oils & greases to the wastewater system. Oil & grease creates clogs in the collection system and forms layers in lift stations which render the float system inoperable. The City’s Environmental Control section regulates over 1,000 businesses and over 100 private collection systems through the Oil and Grease Management program, which has resulted in a 75% reduction in sewer system overflows caused by the grease blockages.

4. EXISTING CITY CONDITIONS

4.A. WASTEWATER TREATMENT PLANTS AND SEPTIC TANK ANALYSIS

Sewer service can be provided through the use of regional systems, centralized package treatment plants, and individual septic tanks or drain fields. The City of Orlando is committed to the regional concept of wastewater treatment. Figures WW-3A through WW-3D show the sewered areas in and around Orlando as they exist in 2008. City and County sewer line maps were used to delineate sewered areas. Those developed areas without sewer lines are assumed to be on septic tanks.

Centralized sewer systems use a network of pipes to carry household and industrial wastewater to a centralized treatment plant. After treatment, wastewater becomes effluent and must be properly disposed of. In Orlando, treated wastewater is used for irrigation, surface water discharge, or groundwater discharge. Biosolids remaining after the treatment process become a second waste stream that may be disposed, or used as a soil amendment (fertilizer).

In 1995 the City and County entered into an agreement that delineated sewer service boundaries for both parties. Within their respective areas, the parties have the first right of service, but can transfer their right to the other entity if it is in a better position to provide service. By establishing service boundaries, the City and County are better able to plan for collection system expansion and determine treatment capacity requirements.

Figure WW-3 Part A

NW Urban Sewered Areas- 2008

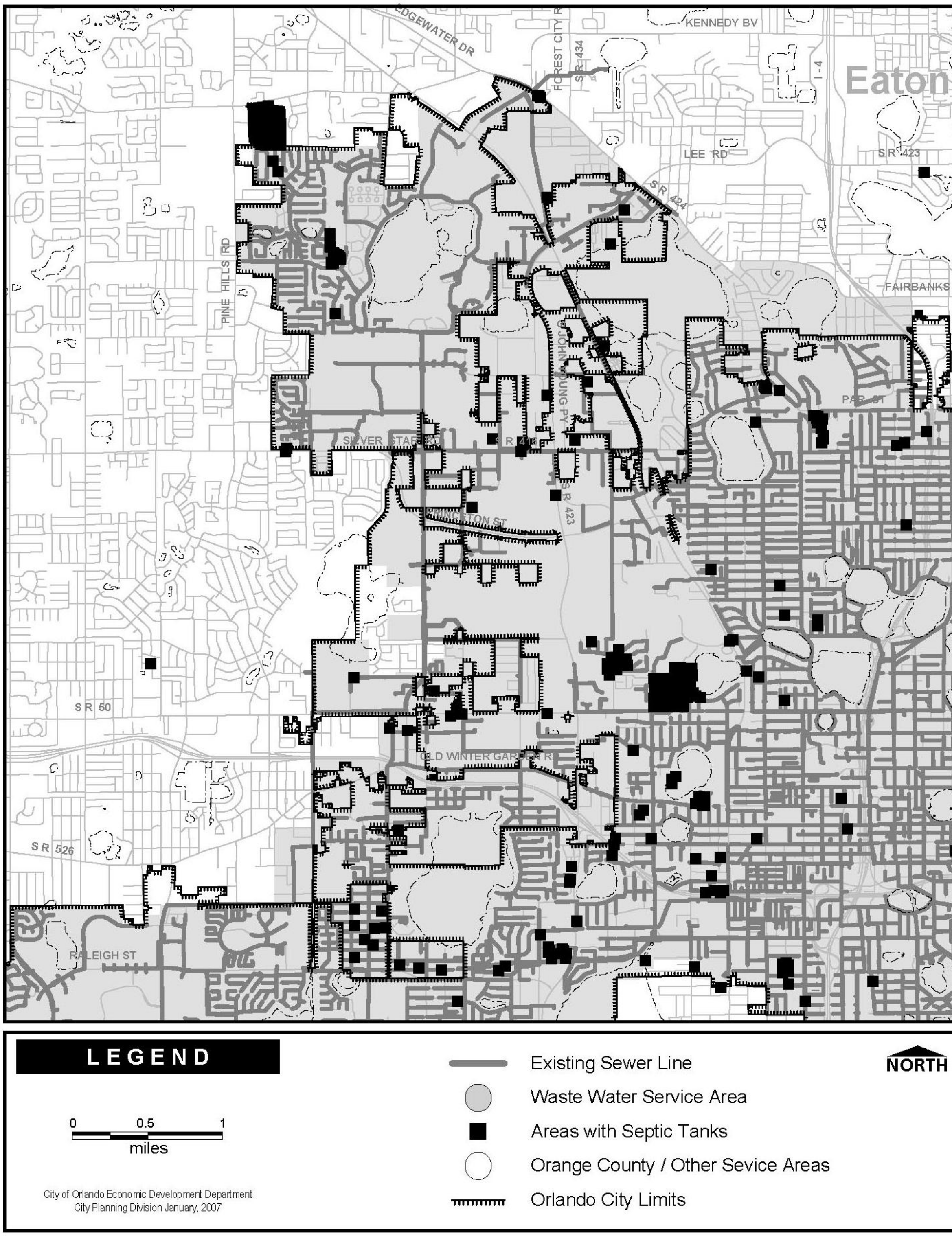


Figure WW-3 Part B

NE Urban Sewered Areas- 2008

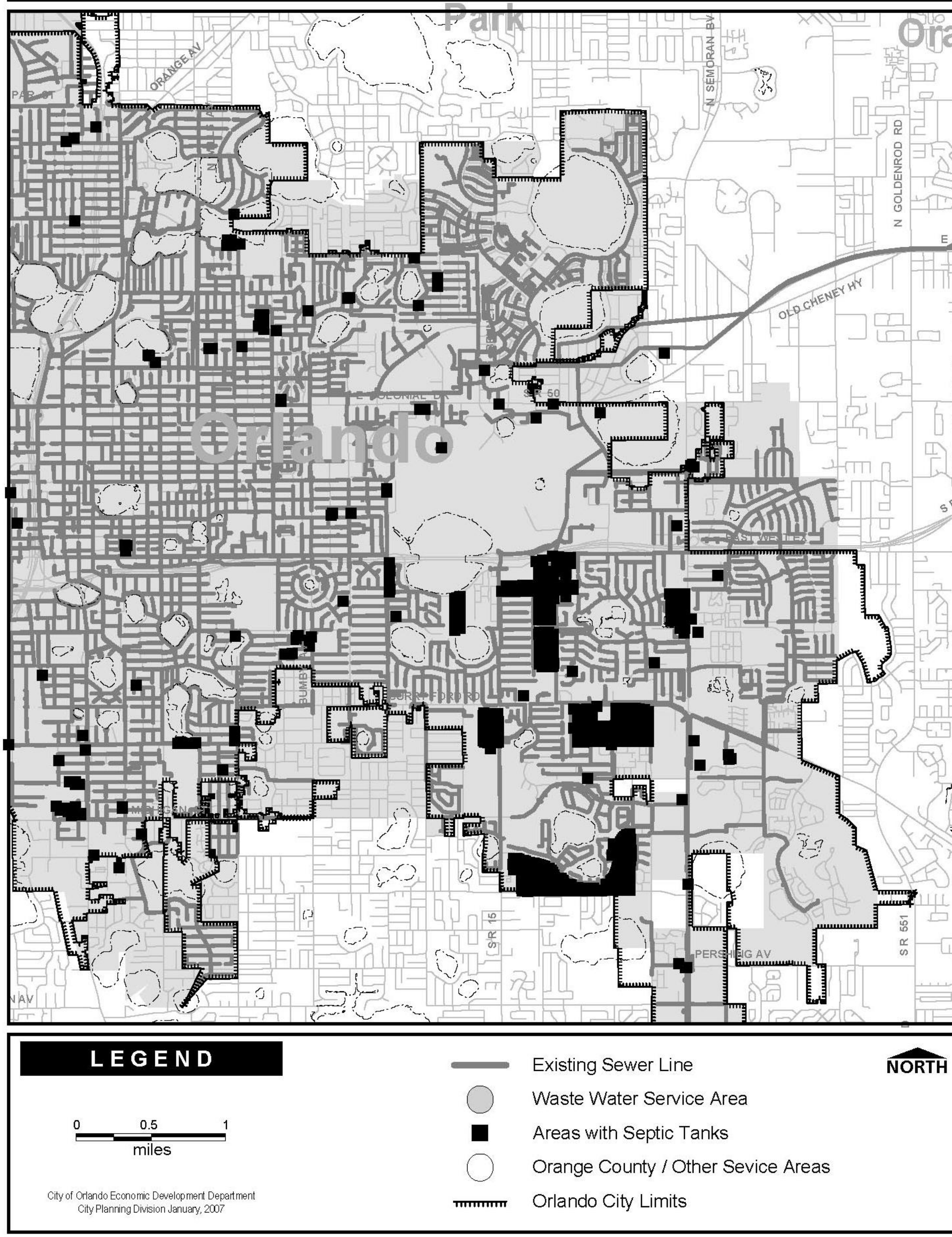


Figure WW-3 Part C

SW Urban Sewered Areas- 2008

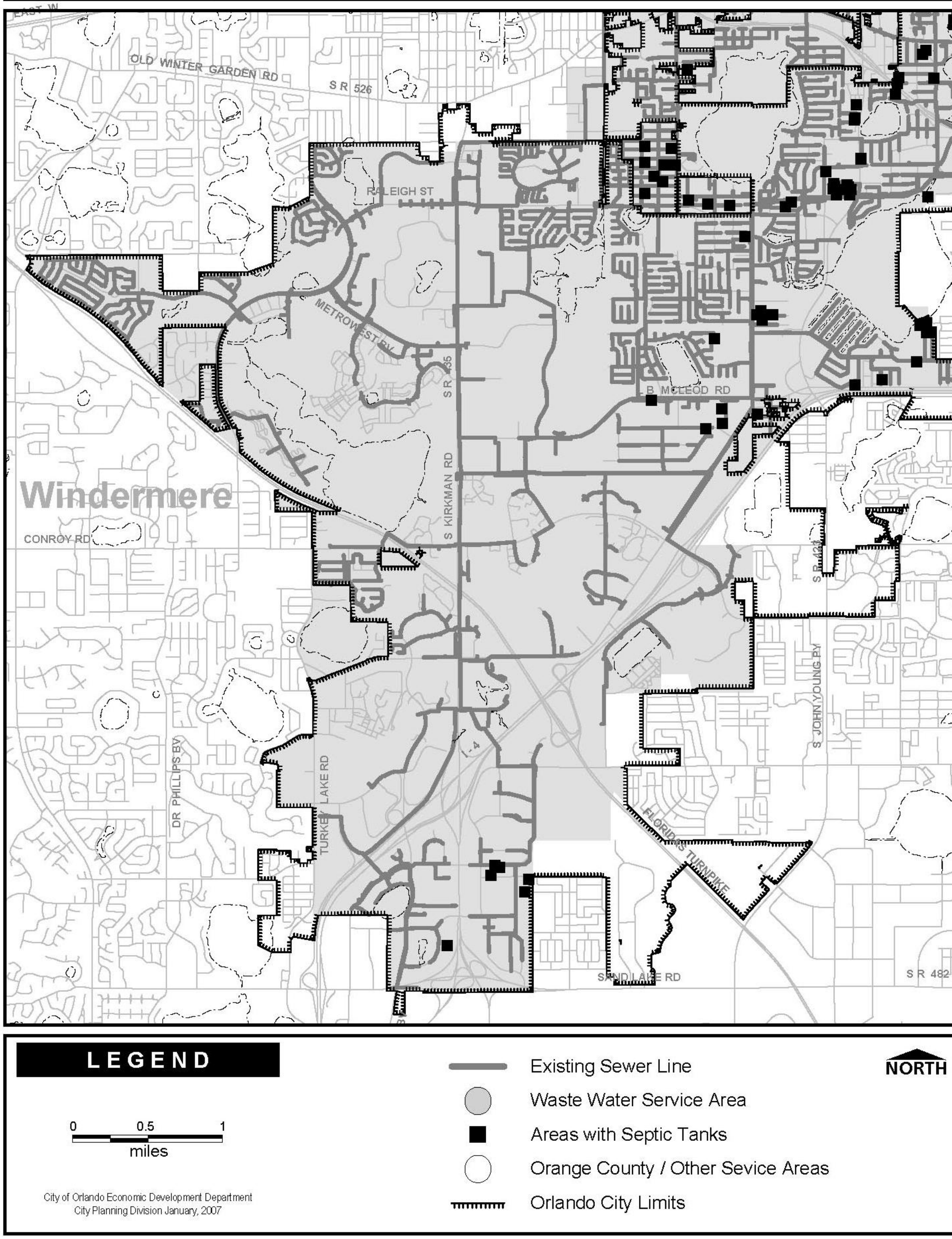
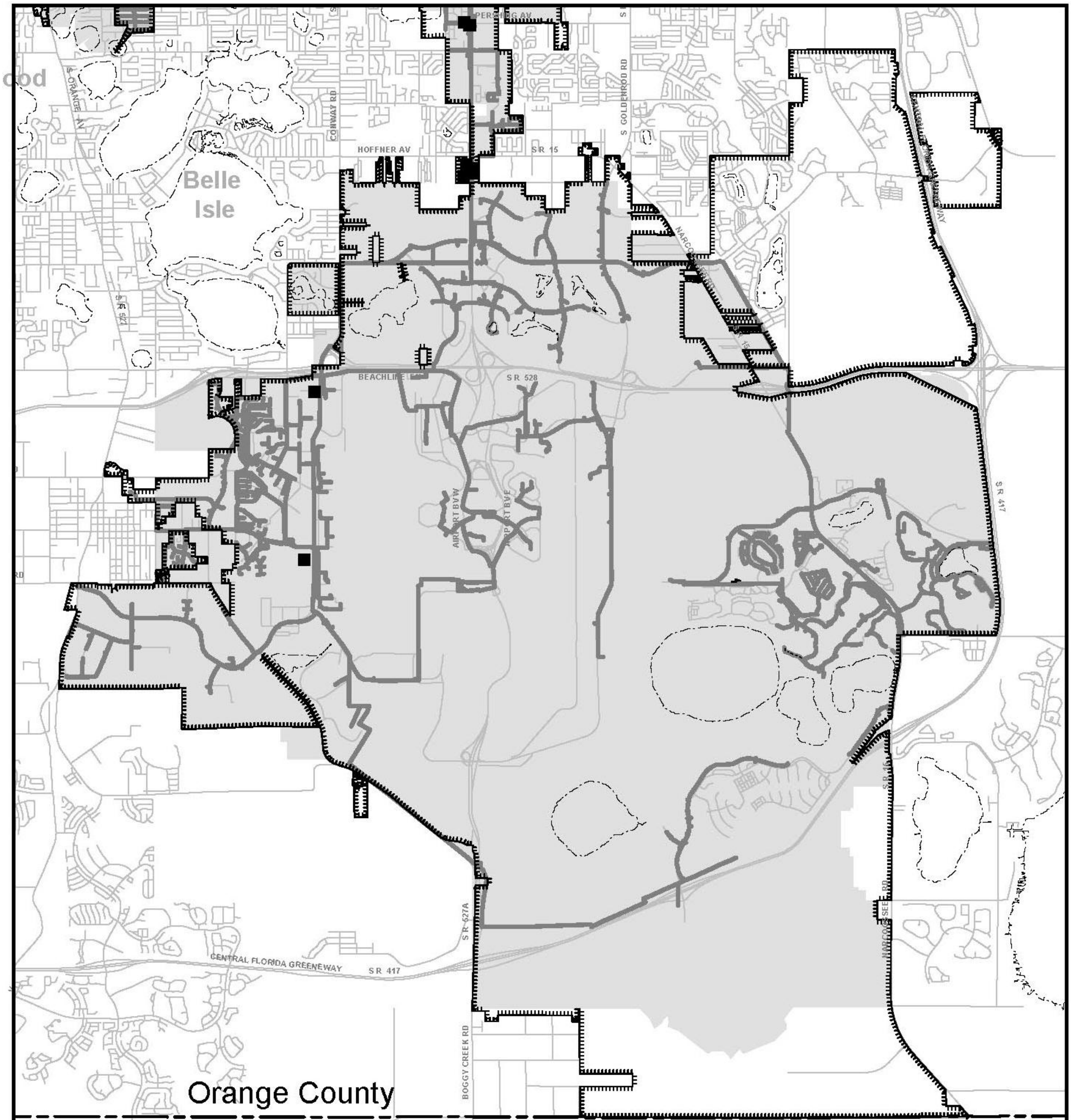


Figure WW-3 Part D — SE Urban Sewered Areas- 2008



LEGEND

- Existing Sewer Line
- Waste Water Service Area
- Areas with Septic Tanks
- Orange County / Other Sevice Areas
- Orlando City Limits

NORTH

0 0.5 1 miles

City of Orlando Economic Development Department
City Planning Division August, 2008

The geographic service areas for the major sewer providers, the City of Orlando, Orange County, and Winter Park, are shown on Figure WW-4. Septic tanks are extensively used outside the City limits in unincorporated areas of the County. There are very few areas within the actual City limits that contain septic tanks. The City rarely allows their use because of the ready availability of sewage collection systems. The locations of existing septic tanks are not known because the number of sites is so few. These sites are not posing any serious health or contamination problems because the number and impact is so negligible. This is primarily the result of owners not connecting when the sewer main was installed. Chapter 30 of the City Code now requires that all property owners within the City limits connect to City sewer lines when they are within 100 feet of the property line, in situations where an existing tank has failed or new development or redevelopment is proposed. To encourage connection to the sewer system, the City has adopted a septic tank abandonment credit program. The credit helps to offset system construction costs and impact fees, decreasing the financial burden of connecting. A similar program, although with higher fees, is available to property owners in Unincorporated Orange County who have access to City sewer lines.

Figure WW-5 shows the areas with suitable soils for septic tank use. This information was obtained from County soil surveys. The most suitable areas are to the west of Orlando in well drained sandy soils. These areas are also the prime aquifer recharge areas for the Floridian Aquifer providing the City with potable water. It is recognized that properly designed, constructed and maintained septic tank systems can be beneficial if a sanitary sewer system is not physically available. Therefore, a septic tank system may only be utilized if sanitary sewer lines are over 100 feet from the property.

4.B. INVENTORY OF CITY OF ORLANDO WASTEWATER FACILITIES

The City of Orlando has proven itself to be one of Central Florida's leading innovators in wastewater treatment and disposal. Figure WW-6 gives an overview of the City's entire wastewater treatment and disposal system. Shown in this figure are the City's treatment and disposal facilities. Great lengths have been taken to provide cost efficient and environmentally sound methods of treatment and disposal. Orlando uses a regional wastewater service concept, coordinating with several local governments to provide treatment and disposal. The following detailed review of the City's wastewater system is divided into three areas: collection, treatment, and disposal.

Collection

The collection system consists of gravity pipes, force mains and lift stations that transmit wastewater from individual generators to the treatment plant. The City has an estimated 730 miles of gravity lines, 165 miles of force mains, and 206 lift stations. The City is generally dependent upon lift stations to move the wastewater to the treatment plants because of Central Florida's flat terrain.

Figure WW-4 **Sewer Service Areas**

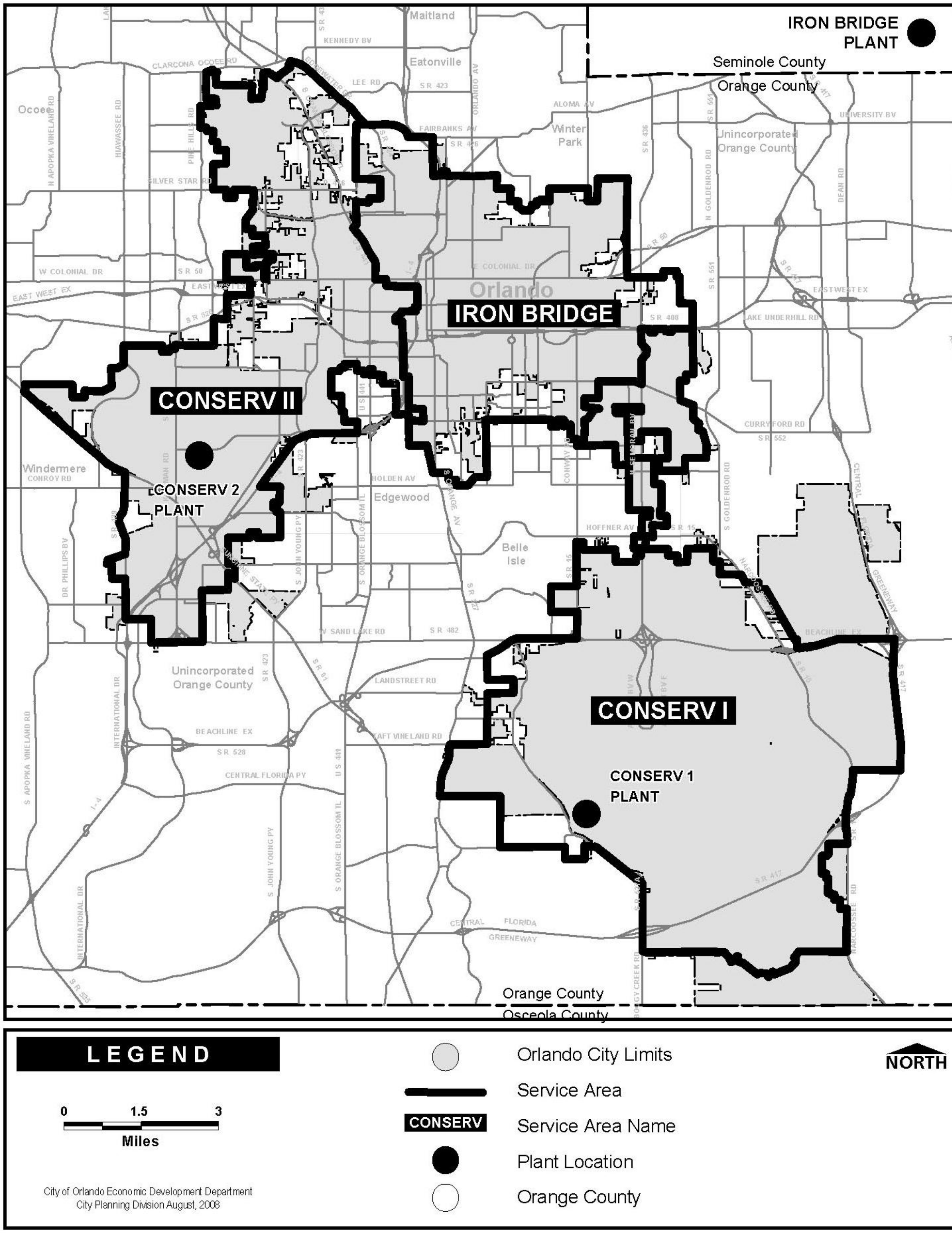
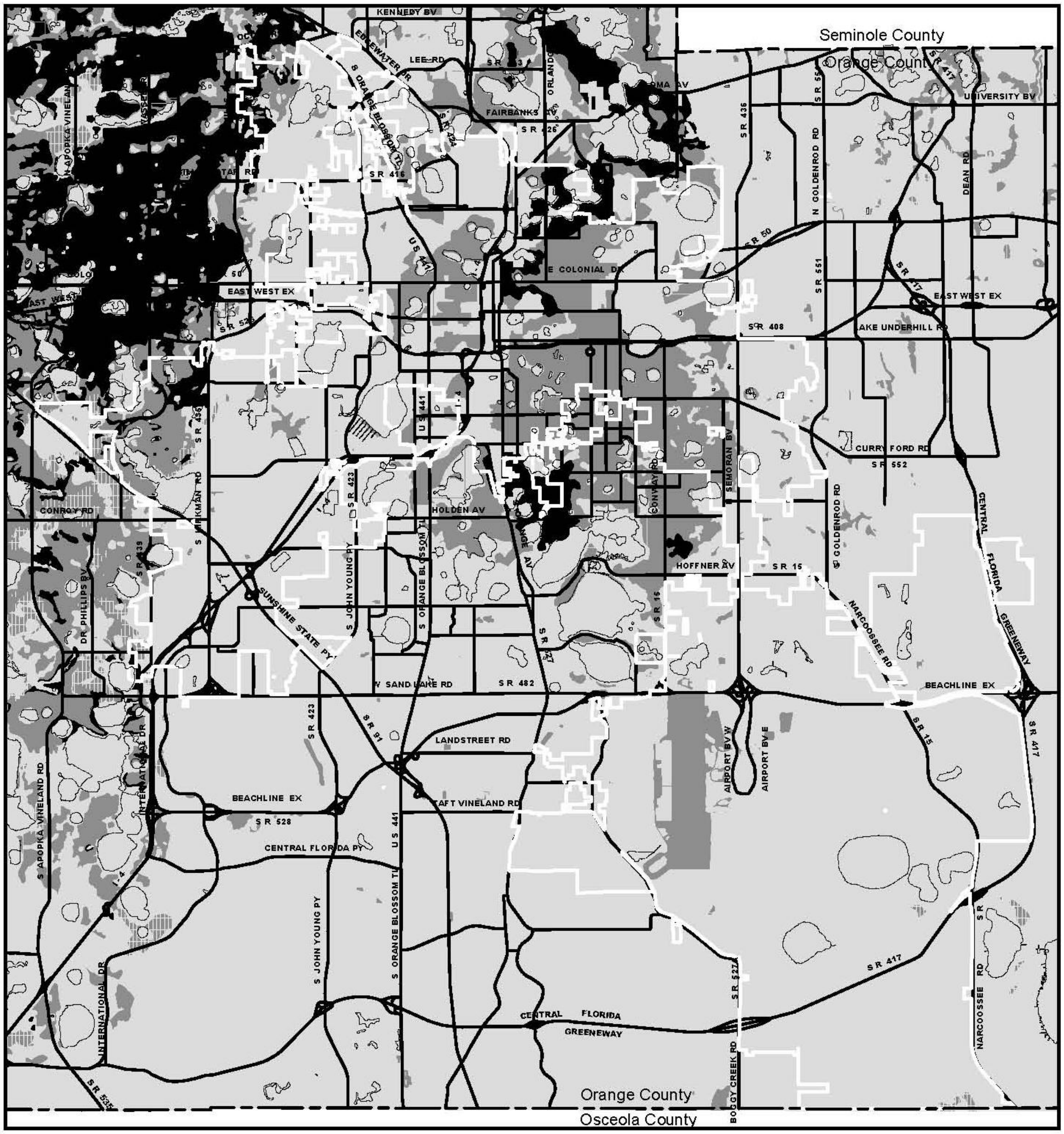


Figure WW-5 Septic Tank Suitability



LEGEND

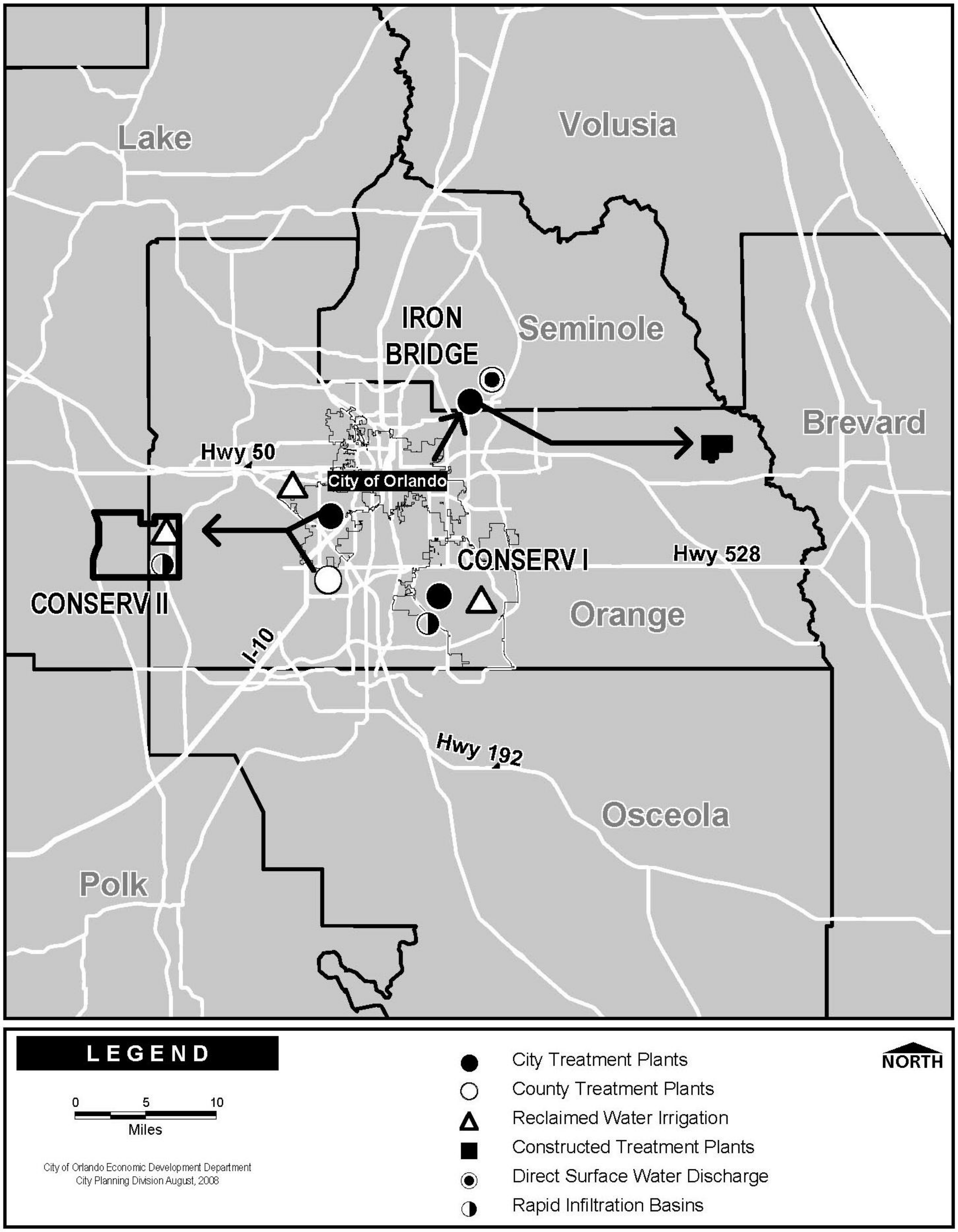
0 1.5 3
Miles

City of Orlando Economic Development Department
City Planning Division August, 2008

NORTH

- Poor Septic Suitability
- Moderate Septic Suitability
- Good Septic Suitability
- City of Orlando Jurisdiction

Figure WW-6 **Wastewater Treatment & Disposal System**



Only the major trunk lines and lift stations of the system have been selected for Level of Service (LOS) analysis in this Element because of their overall importance to the system. The trunk lines and lift stations selected are shown in Figures WW-7 and WW-8. Selection of the trunk lines and lift stations was based upon size of the pipe and service area of the lift stations and/or gravity line. The primary objective in selecting the major trunk system is to obtain complete coverage of the City with the minimum number of lines. Figure WW-9 shows the size, capacity, and average daily and peak flows projected for each line section in 2010.

Each trunk line or lift station services a particular area. For the purposes of this analysis, the 206 lift station and trunk line service areas are aggregated into larger sub-areas. Sub-areas are shown in Figures WW-10 through WW-12. The City is divided into 3 treatment areas and 31 sub-areas. Land use data for each sub-area and estimated average daily flows (ADF) are shown in Appendix A. The land use categories used in the Wastewater Element have been aggregated from the land use data in the Future Land Use Element (see Figure LU-7 of that Element).

A unique feature of the City's collection system is the interconnecting transmission lines between treatment plants. These lines give the City the ability to divert flow between the three treatment plants depending upon flow conditions at the individual plants. The City is better able to meet permit requirements because of these treatment plant interconnects. A capacity analysis for these interconnects is not included in this analysis because flow directions are not consistent.

Figure WW-7

Major Trunk Lines

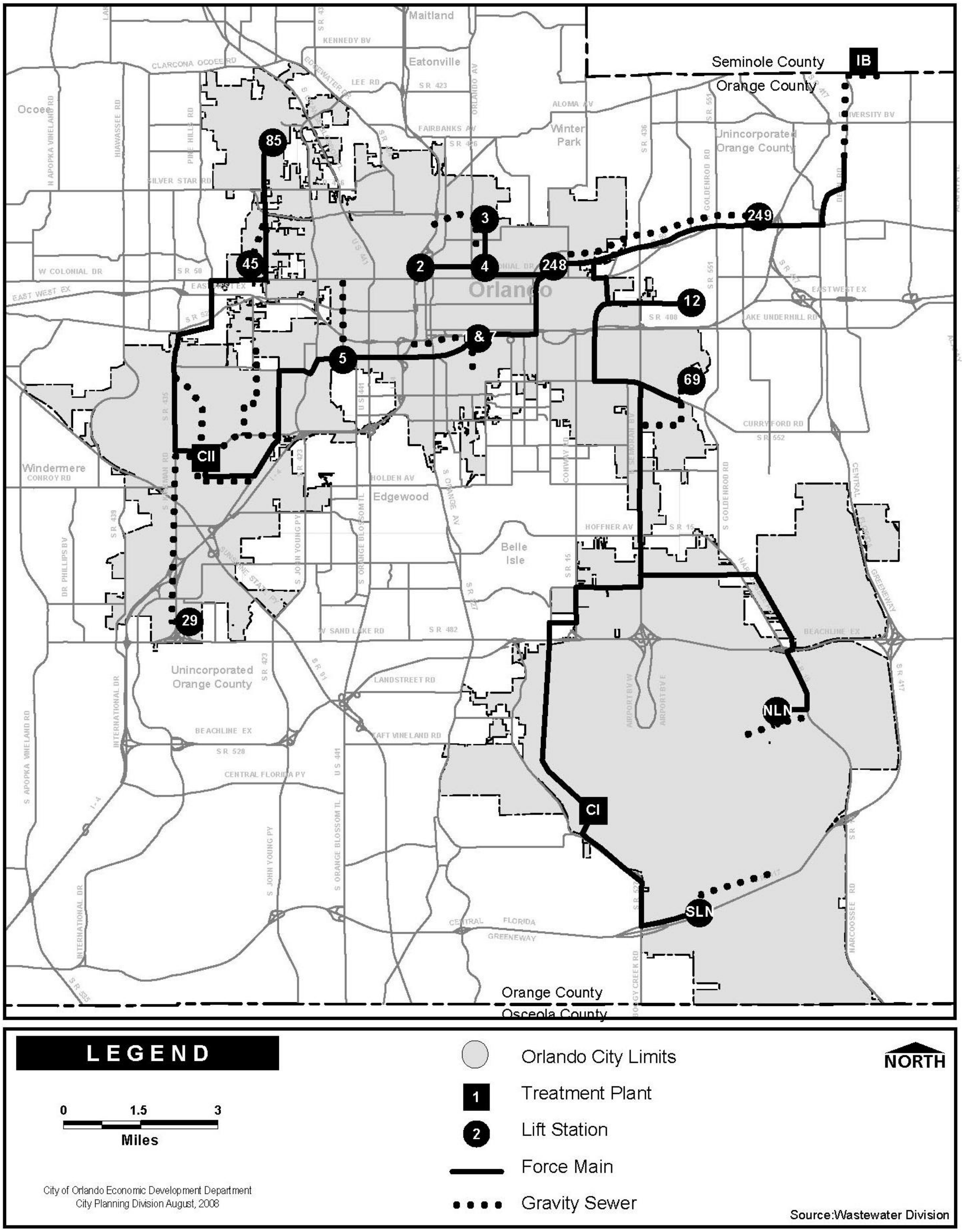


Figure WW-8 **Major Wastewater Collection Facilities**

NORTH

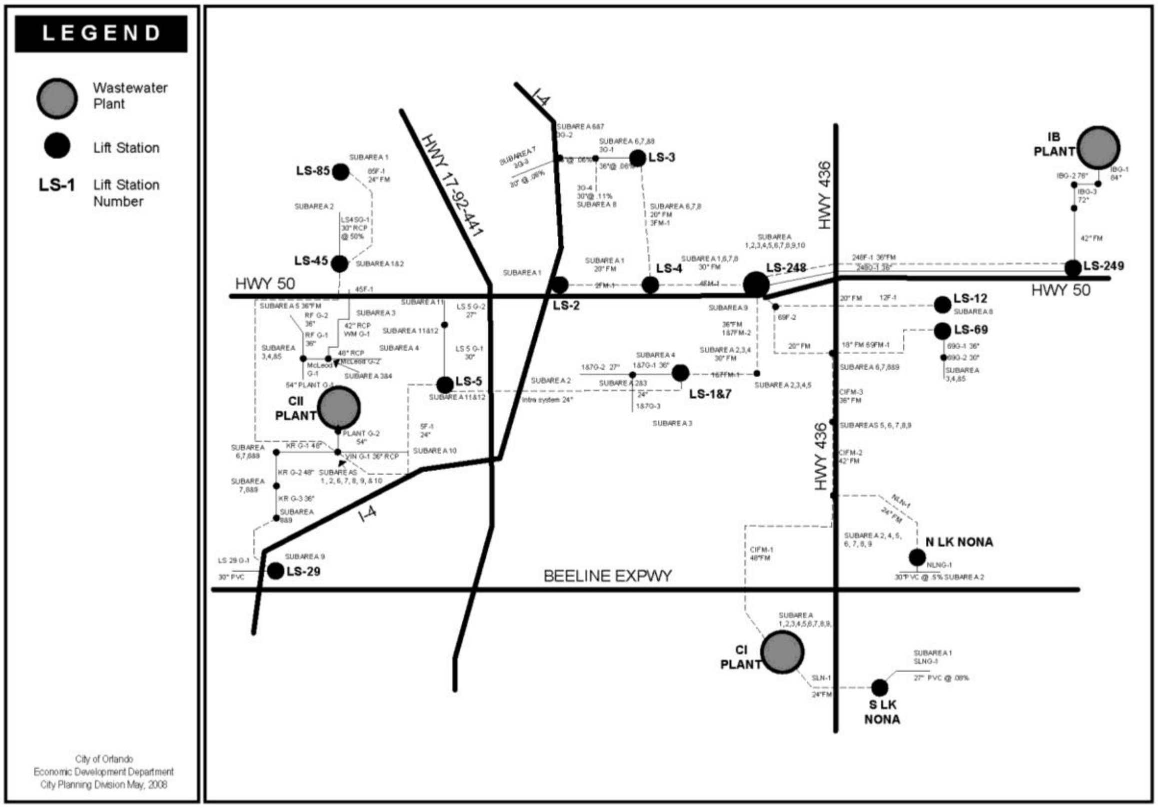


FIGURE WW-9: WASTEWATER TRUNK LINE AND LIFT STATIONS PROJECTED CAPACITIES – 2010

Plant/ Subarea	Node Point	Next Node Point	Section Type	Diameter (inches)	Average Slope	Capacity MGD	ADF MGD	Peak Flow MGD	S/D
Conserv I									
1	SLNG-1	LS	Gravity	27	0.08%	5.90	1.01	1.33	4.57
1	SLNLS		Lift Station			10.08	1.01	1.33	8.75
1	SLNF-1	Conserv I	Force Main	24		10.15	1.01	1.33	8.82
2	NLNG-1	LS	Gravity	30	0.50%	19.50	1.34	2.54	16.96
2	NLNLS		Lift Station	--		3.02	1.34	2.54	0.48
2	NLNF-1	CIF-2	Force Main	24		10.15	1.34	2.54	7.61
6	69G-2	69G-1	Gravity	30	0.13%	7.20	1.42	3.26	3.94
6,7	69G-1	LS 69	Gravity	36	0.07%	8.50	1.98	4.54	3.96
6,7	LS 69		Lift Station			8.78	1.98	4.54	4.24
6,7	69F-1	CIF-3	Force Main	18		5.71	1.98	4.54	1.17
8	LS 12		Lift Station			10.37	0.29	0.55	9.82
8	12F-1	69F-2	Force Main	20		7.05	0.29	0.55	6.50
8,9	69F-2	CIF-3	Force Main	20		7.05	1.18	2.25	4.80
6,7,8,9	CIF-3	CIF-2	Force Main	36		22.83	3.16	6.80	16.03
5,6,7,8,9	CIF-2	CIF-1	Force Main	42		31.07	3.78	8.05	23.02
2 thru 9	CIF-1	Conserv I	Lift Station	48		40.59	9.93	18.94	21.65
Conserv II									
1	LS 85		Lift Station			6.48	1.84	3.65	2.83
1	85F-1	LS 45	Force Main	24		10.15	1.84	3.65	6.50
2	45G-1	LS 45	Gravity	30	0.05%	4.50	3.75	7.61	(3.11)
1,2	LS 45		Lift Station			8.93	5.59	11.27	(2.34)
1,2	45F-1	CIIG-2	Force Main	36		22.83	5.59	11.27	11.56
3	WMG-1	MCLG-1	Gravity	36SL	0.10%	14.20	1.27	2.34	11.86
4	MCLG-2	MCLG-1	Gravity	48	0.04%	9.60	1.76	3.11	6.49
3,4	MCLG-1	CIIG-1	Gravity	42SL	0.02%	10.80	3.03	5.45	5.35
5	RFG-2	RFG-1	Gravity	36	0.05%	7.20	1.54	2.89	4.31
5	RFG-1	CIIG-1	Gravity	36SL	0.04%	9.00	1.54	2.89	6.11
3,4,5	CIIG-1	Conserv II	Gravity	48SL	0.25%	49.00	4.58	8.35	40.65
9	29G-1	LS 29	Gravity	30	0.10%	8.60	0.92	2.12	6.48
9	LS 29		Lift Station			6.05	0.92	2.12	3.93
9	29F-1	KRG-3	Force Main	14		3.40	0.92	2.12	1.28
8,9	KRG-3	KRG-2	Gravity	36	0.18%	8.50	3.30	7.46	1.04
7,8,9	KRG-2	KRG-1	Gravity	48	0.05%	15.50	4.15	9.26	6.24
6,7,8,9	KRG-1	CIIG-2	Gravity	48	0.09%	21.00	7.00	15.47	5.53
10	VING-1	CIIG-2	Gravity	36	0.04%	6.50	3.85	8.63	(2.13)
11	5G-2	5G-1	Gravity	27	0.16%	8.50	0.99	2.26	6.24
11,12	5G-1	LS 5	Gravity	30	0.10%	8.50	2.35	5.21	3.29
11,12	LS 5		Lift Station			5.76	2.35	5.21	0.55
11,12	5F-1	CIIG-2	Force Main	24		10.15	2.35	5.21	4.94
1 thru 10	CIIG-2	Conserv II	Gravity	48SL	0.08%	85.00	21.01	43.71	41.29
Iron Bridge									

Plant/ Subarea	Node Point	Next Node Point	Section Type	Diameter (inches)	Average Slope	Capacity MGD	ADF MGD	Peak Flow MGD	S/D
1	LS 2		Lift Station			5.47	1.70	3.74	1.73
1	2F-1	LS4	Force Main	20		7.05	1.70	3.74	3.31
7	3G-3	3G-2	Gravity	30	0.06%	6.80	1.15	1.89	4.91
6,7	3G-2	3G-1	Gravity	36	0.06%	11.00	2.16	3.89	7.11
8	3G-4	3G-1	Gravity	30	0.11%	6.60	0.59	0.98	5.62
6,7,8	3G-1	LS 3	Gravity	36	0.06%	11.00	2.76	4.87	6.13
6,7,8	LS 3		Lift Station			5.47	2.76	4.87	0.61
6,7,8	3F-1	LS 4	Force Main	20		7.05	2.76	4.87	2.18
1,6,7,8	LS 4		Lift Station			10.08	4.45	8.61	1.47
1,6,7,8	4F-1	LS 248	Force Main	30		15.85	4.45	8.61	7.24
2	1&7G-2	1&7G-1	Gravity	27		15.00	1.71	4.08	10.92
3	1&7G-3	1&7G-1	Gravity	30	0.68%	17.50	2.35	4.67	12.83
2,3	1&7G-1	LS 1&7	Gravity	36	2.86%	58.00	4.06	8.75	49.25
2,3,4	LS 1&7		Lift Station			16.42	4.92	10.60	5.82
2,3,4	LS 1&7F-	LS1&7F-1	Gravity	30		15.85	4.92	10.60	5.25
2,3,4,5	LS 1&7F-	LS 248	Gravity	36		22.83	5.73	12.30	10.53
1 thru 10	LS 248		Lift Station			44.21	11.88	24.34	19.86
1 thru 10	248G-1	LS 249	Gravity	36 SL*a		21.60	5.94	12.17	9.43
1 thru 10	248F-1	LS249	Force Main	36*a		22.83	5.94	12.17	10.66
1 thru 10	LS 249		Lift Station			28.80	11.88	24.34	4.46
1 thru 10	249F-1	IBG-3	Force Main	42		31.07	11.88	24.34	6.73
1 thru 10	IBG-3	IBG-2	Gravity	72	0.12%	76.00	11.88	24.34	51.66
1 thru 10, NE	IBG-2	IBG-1	Gravity	76	0.26%	108.00	11.88	24.34	83.66
1 thru 10, NE	IBG-1	Iron Bridge	Gravity	84	0.14%	105.00	11.88	24.34	80.66
Interconnect									
Cons I/IB	SE-7	NE-20	Force Main	24		--	--	--	--
IB/Cons	1 and 7a	5	Lift Station	--		16.40	-	*	16.4
IB/Cons	1 and 7a	5	Force Main	18		5.71	-	*	5.71
Cons	5	1 and 7a	Force Main	--		4.32	-	*	4.32
Cons	SW-15	50	Force Main	--		1.76	1.53	1.76	0

Source: City of Orlando Wastewater Division

Figure WW-10 Conserv I Sub-Areas

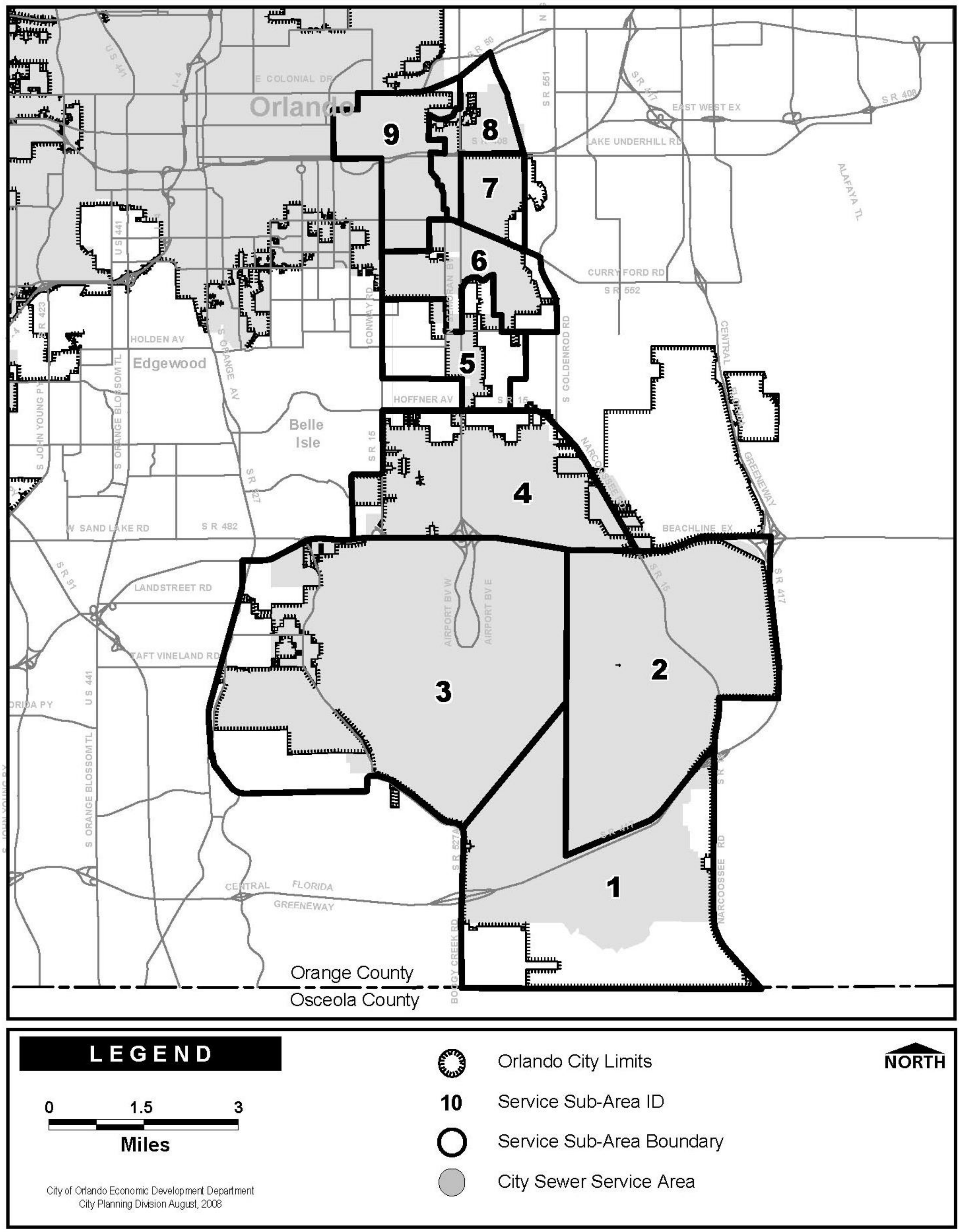


Figure WW-11 Conserv II Sub-Areas

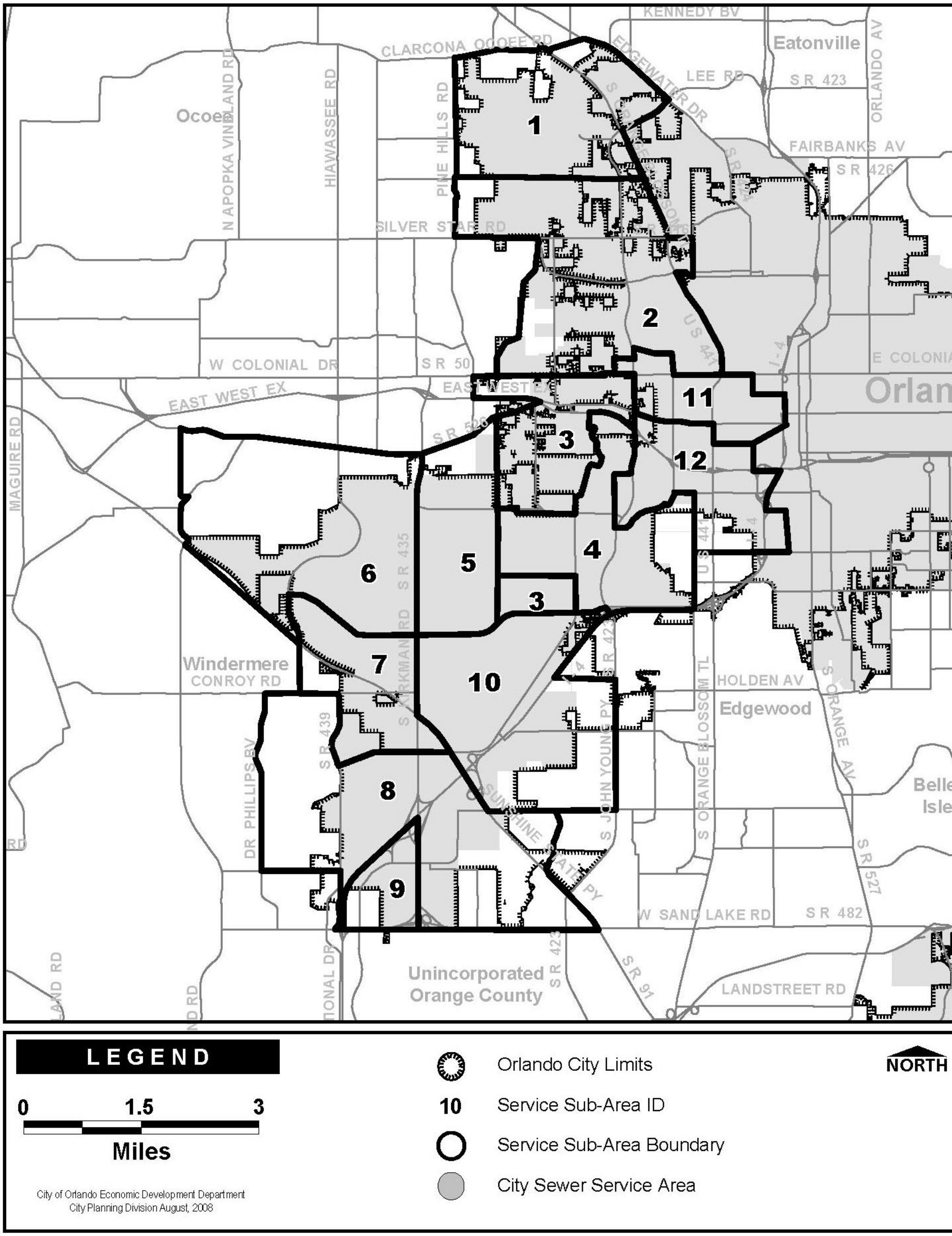
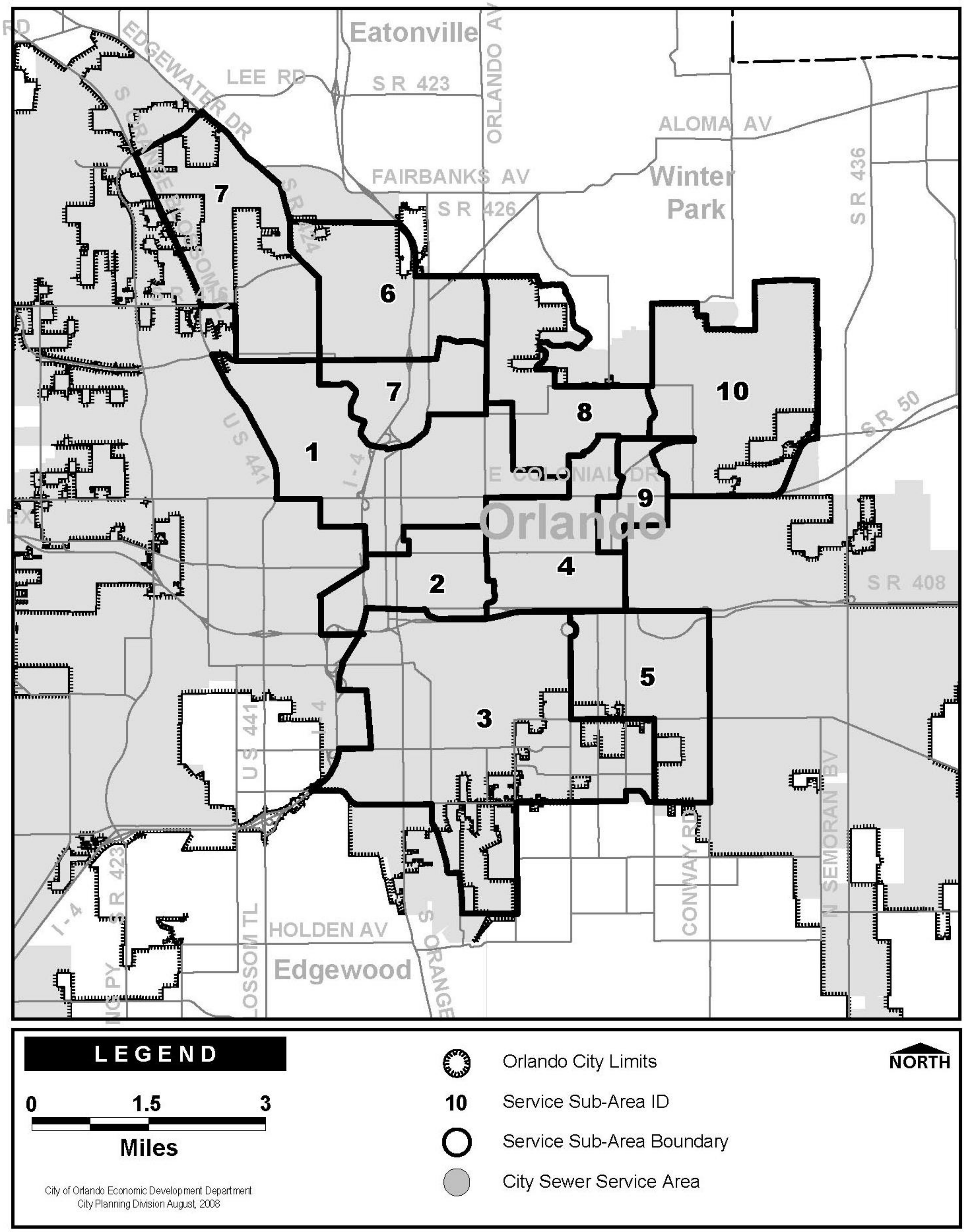


Figure WW-12 | **Iron Bridge Sub-Areas**



Environmental Impacts of the Collection System

Environmental impacts associated with the collection system are: infiltration and inflow (I/I), exfiltration, and illegal discharge of toxic substances.

Infiltration is the seepage of water into the sewer lines through cracks and breaks in the lines and appurtenances. This can occur during times of seasonal high groundwater or when the line is constructed in a high water table area. Inflow is the introduction of non-wastewater into the line through surface sources or connections. An example would be the water that leaks through the manhole covers when the roadways become flooded. These conditions reduce the available hydraulic capacity of the collection system and treatment plants, lowering the facility's ability to reduce the organic load of the sewage. I/I also introduces sand that reduces the pipes' capacity and promotes the collection of solids that may result in blockages.

During periods of drought, I/I is reversed and exfiltration can occur. Exfiltration is the outflow of wastewater from the sewer lines into the soil or water table. The untreated wastewater can contaminate surface waters and groundwaters through the normal process of soil infiltration. Rainfall can spread the contamination into lakes and streams and deeper into the groundwater. In older sections of Orlando, sewer and storm drainage pipes share common junction boxes. Leakage from broken or cracked sewer pipes can contaminate stormwater runoff entering surface waters. The City is responding to these problems by implementing several programs that inspect all sewer lines. Repairs are implemented by replacing or retrofitting the problem area.

Toxic substances may be discharged by industrial, commercial and other private users. The City regulates the amount and type of hazardous waste discharges that it will accept. However, illegal discharges occasionally occur. The introduction of heavy metals, pesticides and other hazardous wastes can disrupt the treatment process and contaminate the effluent and sludge. The Environmental Control Section is continuously inspecting the collection system for illegal connections and determining the location of illegal discharges. Recent wastewater treatment plant performance has not demonstrated any serious impacts from hazardous waste discharges.

Treatment

The City operates three treatment plants. The locations and service areas are shown in Figure WW-4. The three treatment plants have a combined capacity of 72.5 million gallons per day (MGD) in 2007. Figure WW-13 gives the capacity of each plant including average flows and planned future expansions.

FIGURE WW-13: ORLANDO WASTEWATER FLOWS BY PLANT WITH PLANNED EXPANSIONS – 2007

Treatment Plant	Capacity Status	Total Design Capacity (MGD)	Permitted Capacity (MGD)	Ave. Mo. Flow (MGD)	Total Surplus (MGD)	City Share of Capacity (MGD)	City Flow (MGD)	City Surplus (MGD)
Iron Bridge	Existing	40	40	18.451	21.549	20.662	6.199	14.463
Conserv I	Existing	7.5	7.5	4.815	2.685	7.5	4.815	2.685
Conserv II	Existing	25	25	14.336	10.664	24	13.408	10.592
TOTAL	Existing	72.5	72.5	37.602	34.898	52.162	24.422	27.74
Conserv II	Planned Expansion - 2015	5				5		
TOTAL	2015	77.5				57.162		

Source: 2007 Capacity Availability Report and Wastewater Division

The largest treatment plant is Iron Bridge. Several local governments joined with the City of Orlando in building this treatment plant. These include: Seminole County, Orange County, Winter Park, Casselberry and Maitland. This regional plant was upgraded to 40 MGD in 1987 using advanced wastewater treatment (AWT) to reduce nutrient levels in its effluent. Effluent disposal is through a constructed treatment wetlands system and surface water discharge. The wetlands are designed to handle at least 28 MGD of effluent with ultimate discharge into the St. John's River.

Water Conserv I was built in 1987 and has a design capacity of 7.5 MGD. The plant uses biological and chemical methods to treat wastewater. Percolation basins and irrigation are used to dispose of the effluent. Due to the high water table at the basin sites, the basins' efficiencies are reduced. Over half of this treatment plant's average daily flow (ADF) is being re-routed to the Iron Bridge treatment plant. Future plans call for this treatment plant to be decommissioned and the flow from the service area diverted to Iron Bridge to alleviate this problem. Iron Bridge may be expanded to accommodate the additional flow.

Water Conserv II has a design capacity of 25 MGD. The plant uses secondary treatment, tertiary filtration and disinfection methods to treat wastewater. Effluent is disposed through an innovative project in which the City works jointly with Orange County and private landowners. This project uses spray irrigation on citrus groves, residential landscaping and commercial nurseries as well as Rapid Infiltration Basins (RIB's) to dispose of effluent. AWT is not necessary because the nutrients contained in the effluent are beneficial to the citrus growers.

Figure WW-14 shows the historical flows for the City's three treatment plants. Comparing the average daily flow (ADF) to the plant capacity in the preceding figure shows that the City has sufficient existing treatment capacity (see Figure WW-13).

FIGURE WW-14: HISTORICAL AVERAGE DAILY FLOW BY PLANT: 2003 - 2007 (MGD)

Year	Iron Bridge	Conserv I	Conserv II	Total
2003	28.61	2.91	15.01	46.53
2004	28.77	3.70	15.01	47.48
2005	29.44	3.12	16.16	48.72
2006	19.96	4.12	15.34	39.42
2007	18.45	4.82	14.34	37.61

Source: Orlando Wastewater Division

The City treats wastewater from other local governments by interlocal agreement. Figure WW-15 gives the interjurisdictional flow for each treatment plant. The Iron Bridge treatment plant has approximately 50% of its capacity reserved for other jurisdictions. Water Conserv II currently has 11% of its capacity reserved for Orange County flow. Water Conserv I is strictly for use by the City. The amount of interjurisdictional flows to Iron Bridge and Conserv II is expected to decrease over time as Orange County diverts wastewater flows from Conserv II to its own treatment system.

FIGURE WW-15: INTERJURISDICTIONAL WASTEWATER FLOWS – 2007

County to City Flow Area		Reserved Flow (MGD)	Actual Flow (MGD)	% Used	Future Addition	Future Total (MGD)
Iron Bridge	SSNOCWTA [1]	19.338	12.252	63%	0	19.338
	Winter Park	5.962	4.386	74%	0	5.962
	Casselberry	3.395	2.012	59%	0	3.395
	Maitland	1.1	0.794	72%	0	1.1
	S. Seminole	8.506	5.06	59%	0	8.506
	N. Orange	0.375	0	0%	0	0.375
	City Flow	20.662	6.199	30%	0	20.662
Total Iron Bridge		**40**	**18.451**	**46%**	**0**	**40**
Conserv II	Non-City Flow	3.8	0.928	24%	0	1
	Asbury Park	1	0.308	31%	0	1
	Orange County	2.8	0.62	22%	0	0
	City Flow	21.2	13.408	63%	5	29
Total Conserv II		**25**	**14.336**	**57%**	**5**	**30**

[1] SSNOCWTA is the South Seminole North Orange County Wastewater Transmission Authority that includes the 5 governments plus Orlando

Source: 2007 Capacity Availability Report & Wastewater Division

Disposal

The disposal system must accommodate the two products of the wastewater treatment facility: reclaimed water and biosolids. The City's three wastewater treatment plants produce reclaimed water. The northeast municipal area and portions of Orange and Seminole counties are served by the Iron Bridge Water Reclamation Facility. The west service area is served by the Water Conserv II Water Reclamation Facility and the southeast portion of the City is served by the Water Conserv I Water Reclamation Facility. Reclaimed water is highly treated wastewater which can be used for a variety of uses. Each plant has different methods in their reuse of reclaimed water.

The City employs three methods to reuse reclaimed water: irrigation, groundwater recharge and surface water discharge;

Most common uses for reclaimed water in Orlando are irrigation of green space such as golf courses, apartment complexes, medians, schools and parks. The City is dedicated to conserving potable water by offsetting water usage with reuse, when appropriate.

Groundwater recharge consists of percolation basins and rapid infiltration basins (RIB's). For RIB's, the wastewater is applied to moderately or very permeable soils (such as sands and gravels) by flooding basins or by sprinkling. The wastewater is treated as it travels through the soil and the treated effluent drains via hydraulic pathways to groundwater or surface water. Percolation basins and RIB's are specially designed to accommodate water intake by the ground in small areas.

Direct surface water discharge has been a traditional method of dispersing treated wastewater. However, surface discharges have been reduced because of concerns over nitrogen and phosphorus loading into the rivers. The implementation of strict surface water quality standards and the lack of large rivers with great quantities of fast moving water have made this alternative practically infeasible for new discharges, particularly in Central Florida. To discharge to surface waters, it is necessary to demonstrate that the proposed discharge will not cause or contribute to a violation of the water quality standards. All discharge into Shingle Creek from Water Conserv II has been eliminated. Direct discharge into the Little Econlockhatchee River from Iron Bridge is permitted up to 28 MGD.

To assist in reducing nitrogen and phosphorus loading to the Little Econlockhatchee River, the City constructed the Orlando Easterly Wetlands. Wetland application is a concept rapidly gaining recognition as a viable alternative for effluent utilization. It represents an extension of the land treatment reuse/recycle concepts strongly encouraged by Congress and the Florida legislature. The United States Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP) are also encouraging the use of wetlands.

The Orlando Easterly Wetlands is an effort by the City of Orlando to reuse highly treated reclaimed water from the Iron Bridge Water Reclamation Facility for environmental enhancement. The project began in the mid-1980s when the City, faced with the need to increase its permitted treatment capacity, was unable to increase its wasteload allocation into sensitive area waterways due to the concerns with nitrogen and phosphorus levels in the river. Recognizing that aquatic ecosystems can be used to naturally remove nitrogen and phosphorus, the City created a large-scale wetland treatment system on an active cattle pasture that had been a wetland many years ago. Earthen berms were constructed throughout the site, and 2.1 million aquatic macrophytes were planted to create 17 cells that further "polish" the reclaimed water piped in from the Iron Bridge WRF and discharge it with no adverse impact into the environmentally sensitive St. Johns River system.

Figure WW-16 gives the production levels and methods for using reclaimed water for each treatment plant. The Water Conserv I and Water Conserv II facilities utilize a combination of these methods to accommodate treatment plant effluent flow. The majority of Water Conserv I's 7.5 MGD of capacity is derived through the use of irrigation. The Water Conserv II joint facilities are designed for 50 MGD with 25 MGD reserved for City use, primarily through the irrigation of citrus groves, residential irrigation, nurseries and the use of RIB's.

Effluent must meet strict water quality parameters as set forth in each treatment plant's operating permit. Figure WW-17 gives the permit criteria for each treatment plant. Each permit is different depending on the specific uses of the effluent. Iron Bridge's criteria are more stringent for Biochemical Oxygen Demand (BOD), phosphorous, and total nitrogen because of the surface water discharge and less strict for coliform because of the effluent being exposed to wildlife at the wetlands. Water Conserv II's criteria, on the other hand, are reversed. The criteria for nutrient levels are less stringent; however, the treatment plant has very strict criteria for coliform because of the concerns with the possible conveyance of pathogens during irrigation of the citrus groves.

FIGURE WW-16: RECLAIMED WATER AND BIOSOLIDS PRODUCTION BY PLANT AND DISPOSAL METHOD – 2008

	Reclaimed Water			Biosolids			
Treatment Plants	Design MGD	Flow MGD	Acres	Design Dry T/D	Supply Dry T/D	Current Acres	Projected Acres
Iron Bridge	48	18	--	32	21.6	7,890	11,680
Little Econ	28	7	--				
Wetlands	20	11	1200				
Conserv I	7.5	4.6	--	6	0	0	0
RIB	2.66	0.27	480				
Irrigation	4.84	4.33	100				
Conserv II	25	13	--	20	10.4	3,800	7,300
Irrigation	17	9.05	10,000				
RIB	8	3.95	2000				

Source: City of Orlando Wastewater Division

FIGURE WW-17: WATER QUALITY CRITERIA BY WASTEWATER TREATMENT PLANT

Criteria	Iron Bridge	Conserv I*	Conserv II*
BOD (ppm)	4.28	20	20
TSS (ppm)	17.2	10	<5
TN (ppm)	3.08	NA	NA
NO3 (ppm)	NA	10	10
TP (ppm)	.94	NA	NA
Cl2 (residual)	<0.021	0.5	>1.0
DO (ppm)	6.1-7.0	NA	NA
F. Coliform (#/100 ml)	200	200	0

*Numbers shown are for RIB discharge. Reclaimed water used for irrigation must meet 5 mg/l TSS and 1mg/l Cl2.

Source: City of Orlando Wastewater Division

Biosolids are the solid residues of wastewater after treatment. Figure WW-16 gives the disposal amounts for each treatment plant. Before they can be reused, the biosolids are stabilized according to federal guidelines and de-watered. Stabilization decreases the health risk associated with biosolids by stabilizing the putrescible materials and significantly reducing pathogens. The City of Orlando contracts with private haulers to take the biosolids to agricultural sites for use as a soil amendment. Soil amendments are additives that can improve permeability, drainage, nutrients or other soil characteristics.

Environmental Impacts of Treatment and Disposal

Wastewater effluent and biosolids have the potential to produce severe environmental impacts if inadequately treated. Impacts from effluent and biosolids can arise from the large BOD and nutrient loading, viral and bacterial contamination, and heavy metals and other toxic materials that may be contained within the waste. A specific area can only assimilate a certain amount of the organic load before it is overcome and the natural system fails. This carrying capacity is reduced when substances, such as heavy metals from industry, are a part of the waste stream and interfere with the normal biological activity of the natural system. To reduce the environmental impact, the natural system's ability to assimilate effluent and biosolids must be protected through careful treatment and disposal practices.

The City of Orlando has taken some very progressive and aggressive measures in reducing the City's wastewater impacts on the environment. These include flow reductions and the reuse of reclaimed water and biosolids. Flow reductions have been realized through the Sewer System Evaluation Survey (SSES) program that reduces inflow and infiltration into the collection system. The City also has an ongoing program of repair and replacement of sewer lines. This has the benefit of freeing available capacity and reducing the hydraulic loading to the plant from inflow and infiltration.

The City's Industrial Pretreatment Program is primarily responsible for controlling the introduction of hazardous waste into the system. The City must monitor for 23 inorganic substances plus BOD and oil and grease in the influent, effluent and biosolids. The Florida Department of Environmental Protection's Industrial Waste Program issues permits to facilities and activities that discharge to surface waters and ground waters of the state. However, industries that discharge to the City of Orlando wastewater treatment facilities are regulated under the City of Orlando Industrial Waste Pretreatment Program. All Industrial wastewater discharges must comply with all applicable local, state and federal laws, including the Clean Water Act (33 United States Code § 1251 et seq.) and the General Pretreatment Regulations (40 Code of Federal Regulations Part 403 and Chapter 62-625, F.A.C).

At present, the City has issued 35 industrial user permits. Industrial users are monitored for contaminants by the City through regular sampling to verify the industries' compliance with applicable City regulations.

Nutrient loading to the environment through effluent discharge is being reduced though the use of Advanced Wastewater Treatment (AWT) in two of the City's three plants. Water Conserv II does not use AWT because the nutrients contained within the effluent are used as fertilizer by irrigation customers. Direct discharge of high nutrient level effluent to water bodies results in the growth of undesirable aquatic plants that clog canals and rivers, and creates anoxic conditions that could kill wildlife and plants. As part of the Iron Bridge treatment system, the City has constructed a treatment wetlands that receives a portion of the treatment plant effluent. Vegetation within the wetlands removes nitrogen and phosphorus from the reclaimed water to levels that approach natural river concentrations. This helps to significantly reduce the nutrient loading into the St. Johns River.

The City has an ongoing program to promote the reuse of reclaimed water through irrigation of citrus groves, golf courses, and other areas. The City's reuse of reclaimed water is currently directed toward agricultural and recreational uses and is being expanded into residential and commercial areas. This has the dual benefit of reducing the amount of potable water used for irrigation and replenishing the aquifer.

Some municipalities dispose of biosolids at landfills, which adds to the environmental impact of that facility. Biosolids generated by the City of Orlando are applied on agricultural properties for use as fertilizer. The City continues to look for environmentally sound means for reusing biosolids.

5. EXISTING LEVEL OF SERVICE

Level of Service (LOS) is defined as the capacity per unit of demand for a public facility. The wastewater LOS is an indicator of the extent or degree of service provided by the wastewater facility. The LOS is generally expressed in terms of gallons per capita per day (g/c/d) or gallons per unit of land use per day.

At present, the City's Sewer Service Policy uses standards to reserve and allocate plant capacity. Figure WW-18 gives the standards used in the allocation process. The standards use fixture units (faucets, toilets, etc.) and permitted seating to project capacity. These units of measurement are not the common units used to estimate or project demand. For this reason, the sewer service standards are not used in the projection of demand for this Element. Instead, LOS is based upon land use. Using this kind of LOS standard, the City has the ability to plan for future growth based upon the anticipated land use. These LOS standards are used to project the wastewater flow in this Element.

To increase accuracy of these estimates, occupancy and infiltration/inflow rates can be added to the analysis. For this analysis, occupancy rates were estimated from local surveys by the Regional Planning Council and private economic consultants. Infiltration/inflow rates were assigned based upon first-hand knowledge of the age of the pipes and the amount of rehabilitation work in the sub-area. Figure WW-18 gives the LOS and occupancy rates for each land use. Figure WW-20 gives the infiltration/inflow rates for each sub-area to be used in conjunction with the LOS standards. Appendix A gives the estimated flow by land use and sub-area.

FIGURE WW-18: SEWER SERVICE POLICY ALLOCATION FACTORS

Land Use	Factor
Single Family	250 gpd/ dwelling unit
Multi-Family	190 gpd/ dwelling unit
Commercial*	22.5 gpd/ fixture unit
Restaurants	29.6 gpd/seat
Bar/Lounge	29.6 gpd/seat
Hotels/Rooming Houses	90 gpd/bed

*Commercial includes industrial, institutional, and other land uses.

Source: City of Orlando Sewer Service Policy

FIGURE WW-19: LAND USE LOS WITH OCCUPANCY RATES

Land Use	LOS	Occupancy	Adjusted LOS
Single Family	250g/du/d	98.5%	246.2 g/du/d
Multi-Family	190g/du/d	92%	174.8 g/du/d
Office	0.08 g/sqft/d	85%	0.068 g/sqft/d
Commercial	0.09 g/sqft/d	90%	0.081 g/sqft/d
Industrial	0.12 g/sqft/d	90%	0.108 g/sqft/d
Lodging	119g/rm/d	75%	89.25 g/rm/d
Hospital	0.08g/sqft/d	60%	0.048 g/sqft/d
Government	0.08 g/sqft/d	100%	0.08 g/sqft/d

Source: City of Orlando Wastewater Division

FIGURE WW-20: INFILTRATION/INFLOW RATES (G/AC) BY TREATMENT PLANT SUB-AREA

Iron Bridge	g/ac	Conserv I	g/ac	Conserv II	g/ac
1. Lift station 2	200	1. So. Lake Nona	100	1. LS 85	300
2. Downtown	200	2. No. Lake Nona	100	2. LS 45	275
3. Mills	275	3. Airport	150	3. Willie Mays	400
4. LS 1&7 north	225	4. So. 436	100	4. Bruton	400
5. LS 1&7 south	225	5. No. 436	100	5.Raleigh Frazier	400
6. LS 3G-2	350	6. LS 69G-2	100	6. No. Kirkman	150
7. LS 3G-3	350	7. LS 69G-1	100	7. So. Kirkman 1	150
8. LS 3G-4	350	8. LS 12	100	8. So. Kirkman 2	150
9. Colonial	200	9. Conway	150	9. LS 29	200
10. NTC	300			10. Vineland	200
				11. Tampa No.	200
				12. Tampa So.	200

Source: City of Orlando Wastewater Division

FIGURE WW-21: PROJECTED WASTEWATER FLOWS BY FACILITIES SUBAREA 2010-2030

	2010 Flow GPD	2015 Flow GPD	2020 Flow GPD	2025 Flow GPD	2030Flow GPD
CONSERV I					
S. Lake Nona	208,892	904,060	1,497,395	1,532,220	1,563,515
N. Lake Nona	801,957	1,312,296	1,639,361	1,739,938	1,822,122
Airport	1,244,108	1,579,178	1,762,194	1,879,167	1,979,966
S. 436	1,115,605	1,304,515	1,458,766	1,579,275	1,673,324
N. 436	421,533	424,819	428,539	431,302	432,517
LS69G-2	1,231,174	1,231,289	1,234,264	1,236,181	1,239,270
LS69G-1	478,332	479,977	480,915	482,560	483,252
LS 12	176,161	178,192	178,788	180,279	180,799
Conway	539,886	541,638	547,853	549,258	556,310
TOTAL	**6,217,649**	**7,955,963**	**9,228,073**	**12,210,453**	**9,931,074**

CONSERV II					
Lift Station 85	1,204,675	1,208,694	1,210,406	1,213,790	1,216,963
Lift Station 45	2,576,092	2,815,225	2,860,612	2,901,661	2,926,546
Willie Mays	711,961	718,187	719,883	723,032	725,152
Bruton	903,493	912,500	918,950	924,975	934,630
Raleigh-Frazier	899,662	911,506	917,640	921,611	924,149
N. Kirkman	2,242,099	2,453,143	2,481,907	2,507,856	2,524,400
S. Kirkman	632,068	656,325	661,777	663,892	664,949
S. Kirkman	1,974,216	2,376,482	2,717,547	2,981,518	3,316,458
LiftStation 29	799,330	1,031,157	1,136,907	1,136,907	1,136,907
Vineland	3,190,604	3,672,296	3,941,735	3,989,722	4,044,185
Tampa N.	842,651	854,896	973,651	1,038,884	1,121,571
Tampa S.	1,064,685	1,050,894	1,074,009	1,103,739	1,110,873
TOTAL	**17,041,536**	**18,661,304**	**19,615,024**	**20,107,586**	**20,646,783**

IRON BRIDGE					
Lift Station 2	1,364,565	1,564,206	1,681,827	1,829,643	1,943,853
Downtown	1,578,479	1,762,333	1,869,174	1,869,174	1,908,941
Mills	1,546,381	1,786,827	1,841,096	1,853,307	1,915,798
LS 1&7 North	661,038	660,514	665,199	671,195	674,346
LS 1&7 South	589,299	589,688	589,864	589,985	590,107
LS3G-2	656,809	757,994	820,953	900,139	932,766
LS3G-3	490,663	584,036	585,848	591,286	603,203
LS3G-4	258,928	259,293	259,878	260,000	260,817
Colonial	324,361	341,287	343,939	345,922	347,413
NTC	839,672	841,509	842,033	842,586	843,944
TOTAL	**8,310,194**	**9,147,688**	**9,499,812**	**9,753,237**	**10,021,188**

5.A NEEDS ASSESSMENT

The purpose of a Needs analysis is to determine the capital improvement projects needed to maintain the LOS, and the costs of those projects to the year 2030 at five year intervals. This assessment is divided into two parts: a capacity analysis, and a budget analysis. The capacity analysis is also divided into two sections: projections of the average daily flows (ADF), peak flows and sludge; and the determination of the surplus or deficit of capacity within the system. The budget analysis projects the expenditures to operate and maintain the system, the cost of capital improvements, and projects the revenue that will be received from existing and projected growth and other revenue sources. Finally, a surplus/deficit analysis ascertains the economic feasibility of the proposed capital improvements.

5.B CAPACITY ANALYSIS

The sub-areas and service standards for this Capacity Analysis are the same as those in the Existing Conditions Section above (refer to Figures WW-13 and WW-19 through WW-21):

- The ADF plus inflow and infiltration are used to assess the treatment plant capacities;
- Peak flows plus inflow and infiltration are used to assess the collection pipe and pumping station capacities.
- The gravity sewer capacities are calculated at 75% full, which is a standard engineering practice.
- Lift station capacities are calculated with largest pump out of service;
- Force main capacities have been calculated flowing full at a speed of 5 feet per second.

These capacities have already been provided in Figure WW-9. Peak flows are calculated by multiplying the ADF by the Peak/ADF ratio. Peak flow ratios were obtained by comparing standard engineering values with actual observed peaks at the three treatment plants. Infiltration/inflow rates are assumed to be the same throughout the projection period.

ADF and peak flow projections are calculated by sub-area at five year intervals. Appendix A gives the projected flows based on land use data by traffic zone for each sub-area of the collection system. Figure WW-21 gives the projected cumulative ADF's by subarea for each treatment plant to 2030. Only Orlando’s flow is shown in this figure as interjurisdictional flows are limited to the amounts set forth in the service agreements. Figure WW-22 shows the ADF, inflow and infiltration, and peak flow rates by subarea for each treatment plant to 2030.

FIGURE WW-22: INFLOW & INFILTRATION, ADF, AND PEAK FLOW RATES BY SUBAREA - 2008-2030

	2010			2015		
	I/I	ADF (Base+I/I)	Peak Flow (Base*pf+I/I)	I/I	ADF (Base+I/I)	Peak Flow (Base*pf+I/I)
CONSERV I						
S. Lake Nona	804,480	1,013,372	1,326,711	804,480	1,708,540	3,064,630
N. Lake Nona	536,960	1,338,917	2,541,854	536,960	1,849,256	3,817,699
Airport	1,976,640	3,220,748	5,086,909	1,976,640	3,555,818	5,924,586
S. 436	474,880	1,590,485	3,263,893	474,880	1,779,395	3,736,167
N. 436	195,200	616,733	1,249,034	195,200	620,019	1,257,246
LS69G-2	184,960	1,416,134	3,262,894	184,960	1,416,249	3,263,182
LS69G-1	85,120	563,452	1,280,949	85,120	565,097	1,285,062
LS 12	111,360	287,521	551,763	111,360	289,552	556,840
Conway	352,320	892,206	1,702,035	352,320	893,958	1,706,416
TOTAL	**4,721,920**	**10,939,569**	**20,266,041**	**4,721,920**	**12,677,883**	**24,611,827**

CONSERV II						
Lift Station 85	639,360	1,844,035	3,651,048	639,360	1,848,054	3,661,094
Lift Station 45	1,173,920	3,750,012	7,614,150	1,173,920	3,989,145	8,211,983
Willie Mays	560,640	1,272,601	2,340,542	560,640	1,278,827	2,356,107
Bruton	855,040	1,758,533	3,113,774	855,040	1,767,540	3,136,290
Raleigh-Frazier	645,120	1,544,782	2,894,275	645,120	1,556,626	2,923,885
N. Kirkman	604,800	2,846,899	6,210,048	604,800	3,057,943	6,737,658
S. Kirkman	220,800	852,868	1,800,970	220,800	877,125	1,861,612
S. Kirkman	402,240	2,376,456	5,337,779	402,240	2,778,722	6,343,446
Lift Station 29	120,320	919,650	2,118,645	120,320	1,151,477	2,698,211
Vineland	655,360	3,845,964	8,631,870	655,360	4,327,656	9,836,099
Tampa N.	152,320	994,971	2,258,947	152,320	1,007,216	2,289,560
Tampa S.	293,120	1,357,805	2,954,832	293,120	1,344,014	2,920,354
TOTAL	**6,323,040**	**23,364,576**	**48,926,880**	**6,323,040**	**24,984,344**	**52,976,299**

IRON BRIDGE						
Lift Station 2	332,800	1,697,365	3,744,211	332,800	1,897,006	4,243,315
Downtown	130,560	1,709,039	4,076,758	130,560	1,892,893	4,536,392
Mills	802,560	2,348,941	4,668,511	802,560	2,589,387	5,269,628
LS 1&7 North	197,280	858,318	1,849,874	197,280	857,794	1,848,565
LS 1&7 South	229,392	818,691	1,702,638	229,392	819,080	1,703,612
LS3G-2	353,920	1,010,729	1,995,942	353,920	1,111,914	2,248,906
LS3G-3	663,040	1,153,703	1,889,697	663,040	1,247,076	2,123,131
LS3G-4	333,760	592,688	981,080	333,760	593,053	981,993
Colonial	55,040	379,401	865,943	55,040	396,327	908,258
NTC	470,400	1,310,072	2,569,581	470,400	1,311,909	2,574,171
TOTAL	**3,568,752**	**11,878,946**	**24,344,236**	**3,568,752**	**12,716,440**	**26,437,971**

FIGURE WW-22 (CONTINUED): INFLOW & INFILTRATION, ADF, AND PEAK FLOWS RATES BY SUBAREA - 2008-2030

	2020			2025		
	I/I	ADF (Base+I/I)	Peak Flow (Base*pf+I/I)	I/I	ADF (Base+I/I)	Peak Flow (Base*pf+I/I)
CONSERV I						
S. Lake Nona	804,480	2,301,875	4,547,968	804,480	2,336,700	4,635,029
N. Lake Nona	536,960	2,176,321	4,635,362	536,960	2,276,898	4,886,804
Airport	1,976,640	3,738,834	6,382,125	1,976,640	3,855,807	6,674,558
S. 436	474,880	1,933,646	4,121,795	474,880	2,054,155	4,423,068
N. 436	195,200	623,739	1,266,546	195,200	626,502	1,273,455
LS69G-2	184,960	1,419,224	3,270,619	184,960	1,421,141	3,275,412
LS69G-1	85,120	566,035	1,287,406	85,120	567,680	1,291,519
LS 12	111,360	290,148	558,330	111,360	291,639	562,058
Conway	352,320	900,173	1,721,952	352,320	901,578	1,725,465
TOTAL	**4,721,920**	**13,949,993**	**27,792,103**	**4,721,920**	**14,332,099**	**28,747,368**
CONSERV II						
Lift Station 85	639,360	1,849,766	3,665,376	639,360	1,853,150	3,673,836
Lift Station 45	1,173,920	4,034,532	8,325,450	1,173,920	4,075,581	8,428,071
Willie Mays	560,640	1,280,523	2,360,348	560,640	1,283,672	2,368,221
Bruton	855,040	1,773,990	3,152,415	855,040	1,780,015	3,167,477
Raleigh-Frazier	645,120	1,562,760	2,939,219	645,120	1,566,731	2,949,148
N. Kirkman	604,800	3,086,707	6,809,568	604,800	3,112,656	6,874,440
S. Kirkman	220,800	882,577	1,875,242	220,800	884,692	1,880,529
S. Kirkman	402,240	3,119,787	7,196,107	402,240	3,383,758	7,856,034
Lift Station 29	120,320	1,257,227	2,962,586	120,320	1,257,227	2,962,586
Vineland	655,360	4,597,095	10,509,697	655,360	4,645,082	10,629,665
Tampa N.	152,320	1,125,971	2,586,447	152,320	1,191,204	2,749,530
Tampa S.	293,120	1,367,129	2,978,143	293,120	1,396,859	3,052,468
TOTAL	**6,323,040**	**25,938,064**	**55,360,599**	**6,323,040**	**26,430,626**	**56,592,005**
IRON BRIDGE						
Lift Station 2	332,800	2,014,627	4,537,368	332,800	2,162,443	4,906,907
Downtown	130,560	1,999,734	4,803,495	130,560	1,999,734	4,803,495
Mills	802,560	2,643,656	5,405,300	802,560	2,655,867	5,435,827
LS 1&7 North	197,280	862,479	1,860,278	197,280	868,475	1,875,268
LS 1&7 South	229,392	819,256	1,704,051	229,392	819,377	1,704,355
LS3G-2	353,920	1,174,873	2,406,304	353,920	1,254,059	2,604,269
LS3G-3	663,040	1,248,888	2,127,660	663,040	1,254,326	2,141,256
LS3G-4	333,760	593,638	983,455	333,760	593,760	983,759
Colonial	55,040	398,979	914,888	55,040	400,962	919,844
NTC	470,400	1,312,433	2,575,483	470,400	1,312,986	2,576,864
TOTAL	**3,568,752**	**13,068,564**	**27,318,282**	**3,568,752**	**13,321,989**	**27,951,844**

FIGURE WW-22 (CONTINUED): INFLOW & INFILTRATION, ADF, AND PEAK FLOWS RATES BY SUBAREA - 2008-2030

	2030		
	I/I	ADF (Base+I/I)	Peak Flow (Base*pf+I/I)
CONSERV I			
S. Lake Nona	804,480	2,367,995	4,713,268
N. Lake Nona	536,960	2,359,082	5,092,266
Airport	1,976,640	3,956,606	6,926,554
S. 436	474,880	2,148,204	4,658,190
N. 436	195,200	627,717	1,276,492
LS69G-2	184,960	1,424,230	3,283,134
LS69G-1	85,120	568,372	1,293,249
LS 12	111,360	292,159	563,357
Conway	352,320	908,630	1,743,095
TOTAL	**4,721,920**	**14,652,994**	**29,549,606**

CONSERV II			
Lift Station 85	639,360	1,856,323	3,681,767
Lift Station 45	1,173,920	4,100,466	8,490,284
Willie Mays	560,640	1,285,792	2,373,520
Bruton	855,040	1,789,670	3,191,616
Raleigh-Frazier	645,120	1,569,269	2,955,493
N. Kirkman	604,800	3,129,200	6,915,800
S. Kirkman	220,800	885,749	1,883,173
S. Kirkman	402,240	3,718,698	8,693,385
Lift Station 29	120,320	1,257,227	2,962,586
Vineland	655,360	4,699,545	10,765,824
Tampa N.	152,320	1,273,891	2,956,248
Tampa S.	293,120	1,403,993	3,070,301
TOTAL	**6,323,040**	**26,969,823**	**57,939,998**

IRON BRIDGE			
Lift Station 2	332,800	2,276,653	5,192,433
Downtown	130,560	2,039,501	4,902,913
Mills	802,560	2,718,358	5,592,055
LS 1&7 North	197,280	871,626	1,883,144
LS 1&7 South	229,392	819,499	1,704,659
LS3G-2	353,920	1,286,686	2,685,835
LS3G-3	663,040	1,266,243	2,171,048
LS3G-4	333,760	594,577	985,802
Colonial	55,040	402,453	923,573
NTC	470,400	1,314,344	2,580,260
TOTAL	**3,568,752**	**13,589,940**	**28,621,722**

Figure WW-23 shows the projected sludge production by treatment plant. Sludge production is assumed to be 0.8 tons of dry solids per MGD of treatment plant flow. Effluent projections are equal to the ADF projections. The collection system surplus/deficit calculations for the study period are shown in Figure WW-24. Several pipes show possible deficits occurring throughout the planning period.

FIGURE WW-23: SLUDGE PRODUCTION BY PLANT 2010-2030 (DRY TONS)

Plant	2010	2015	2020	2025	2030
Iron Bridge	13.9	14.4	14.6	14.8	15.0
Water Conserv I	0	0	0	0	0
Water Conserv II	14.4	18.8	18.8	19	19.2
City Total	28.3	33.2	33.4	33.8	34.2

Source: City of Orlando Wastewater Division

In the Water Conserv I service area, the North Lake Nona Lift Station (LS 138) shows a deficit of capacity in 2015, 2020, 2025 and 2030 of 0.79 MGD, 1.61 MGD, 1.86 MGD, and 2.07 MGD, respectively. Actual observation of the lift station operational conditions does not support the presence of a deficit at this time. If a deficit occurs, the lift station pumps will be upgraded to accommodate the additional flows.

In the Water Conserv II service area, Lift Station 5 shows a deficit of capacity in 2025 and 2030 of 0.04 MGD and 0.27 MGD respectively. Actual observation of the lift station operational conditions does not support the presence of a deficit at this time and this station will be observed to determine if upgrades of the pumps are required in the future.

In the Water Conserv II service area, Lift Station 45 shows a deficit of capacity in 2015, 2020, 2025 and 2030 of 2.95 MGD, 3.06 MGD, 3.17 MGD and 3.24 MGD respectively. Actual observation of the lift station operational conditions does not support the presence of a deficit at this time. If a deficit occurs the lift station pumps will be upgraded to accommodate the additional flows.

In the Water Conserv II service area, the sub-area of Mercy Drive's 30-inch sanitary sewer shows a deficit of capacity in 2015, 2020, 2025 and 2030 of 3.71 MGD, 3.83 MGD, 3.93 MGD and 3.99 MGD respectively. Actual observation of the sanitary sewer system does not support the presence of a deficit at this time. At this time Infiltration/Inflow testing and repair are being performed in this area. If this area surcharges, aggressive testing and repair of the system will be undertaken. As part of this same construction project, the gravity sewer will be cleaned and slip-lined with a polyethylene liner. This may increase the carrying capacity of the line by decreasing the roughness of the pipe surface.

FIGURE WW-24: WASTE WATER TRUNK LINE AND LIFT STATIONS SURPLUS/DEFICITS - 2015-2030

Plant/ Subarea	Node Point	Next Node Point	2015		2020		2025		2030	
			Peak	S/D	Peak	S/D	Peak	S/D	Peak	S/D
Conserv I										
1	SLNG-1	LS	3.06	2.84	4.55	1.35	4.64	1.26	4.71	1.19
1	SLNLS		3.06	7.02	4.55	5.53	4.64	5.44	4.71	5.37
1	SLNF-1	Conserv I	3.06	7.09	4.55	5.60	4.64	5.51	4.71	5.44
2	NLNG-1	LS	3.82	15.68	4.64	14.86	4.89	14.61	5.09	14.41
2	NLNLS		3.82	(0.79)	4.64	(1.61)	4.89	(1.86)	5.09	(2.07)
2	NLNF-1	CIF-2	3.82	6.33	4.64	5.51	4.89	5.26	5.09	5.06
6	69G-2	69G-1	3.26	3.94	3.27	3.93	3.28	3.92	3.28	3.92
6,7	69G-1	LS 69	4.55	3.95	4.56	3.94	4.57	3.93	4.58	3.92
6,7	LS 69		4.55	4.24	4.56	4.23	4.57	4.22	4.58	4.21
6,7	69F-1	CIF-3	4.55	1.16	4.56	1.15	4.57	1.14	4.58	1.13
8	LS 12		0.56	9.81	0.56	9.81	0.56	9.81	0.56	9.80
8	12F-1	69F-2	0.56	6.49	0.56	6.49	0.56	6.49	0.56	6.49
8,9	69F-2	CIF-3	2.26	4.79	2.28	4.77	2.29	4.76	2.31	4.74
6,7,8,9	CIF-3	CIF-2	6.81	16.02	6.84	15.99	6.85	15.98	6.88	15.95
5,6,7,8,9	CIF-2	CIF-1	8.07	23.00	8.10	22.97	8.13	22.94	8.16	22.91
2 thru 9	CIF-1	Conserv I	21.55	19.04	23.24	17.35	24.11	16.48	24.84	15.75
Conserv II										
1	LS 85		3.66	2.82	3.67	2.81	3.67	2.81	3.68	2.80
1	85F-1	LS 45	3.66	6.49	3.67	6.48	3.67	6.48	3.68	6.47
2	45G-1	LS 45	8.21	(3.71)	8.33	(3.83)	8.43	(3.93)	8.49	(3.99)
1,2	LS 45		11.87	(2.95)	11.99	(3.06)	12.10	(3.17)	12.17	(3.24)
1,2	45F-1	CIIG-2	11.87	10.96	11.99	10.84	12.10	10.73	12.17	10.66
3	WMG-1	MCLG-1	2.36	11.84	2.36	11.84	2.37	11.83	2.37	11.83
4	MCLG-2	MCLG-1	3.14	6.46	3.15	6.45	3.17	6.43	3.19	6.41
3,4	MCLG-1	CIIG-1	5.49	5.31	5.51	5.29	5.54	5.26	5.57	5.23
5	RFG-2	RFG-1	2.92	4.28	2.94	4.26	2.95	4.25	2.96	4.24
5	RFG-1	CIIG-1	2.92	6.08	2.94	6.06	2.95	6.05	2.96	6.04
3,4,5	CIIG-1	Conserv	8.42	40.58	8.45	40.55	8.48	40.52	8.52	40.48
9	29G-1	LS 29	2.70	5.90	2.96	5.64	2.96	5.64	2.96	5.64
9	LS 29		2.70	3.35	2.96	3.09	2.96	3.09	2.96	3.09
9	29F-1	KRG-3	2.70	0.70	2.96	0.44	2.96	0.44	2.96	0.44
8,9	KRG-3	KRG-2	9.04	(0.54)	10.16	(1.66)	10.82	(2.32)	11.66	(3.16)
7,8,9	KRG-2	KRG-1	10.90	4.60	12.03	3.47	12.70	2.80	13.54	1.96
6,7,8,9	KRG-1	CIIG-2	17.64	3.36	18.84	2.16	19.57	1.43	20.45	0.55
10	VING-1	CIIG-2	9.84	(3.34)	10.51	(4.01)	10.63	(4.13)	10.77	(4.27)
11	5G-2	5G-1	2.29	6.21	2.59	5.91	2.75	5.75	2.96	5.54
11,12	5G-1	LS 5	5.21	3.29	5.56	2.94	5.80	2.70	6.03	2.47
11,12	LS 5		5.21	0.55	5.56	0.20	5.80	(0.04)	6.03	(0.27)
11,12	5F-1	CIIG-2	5.21	4.94	5.56	4.59	5.80	4.35	6.03	4.12

Plant/ Subarea	Node Point	Next Node Point	2015		2020		2025		2030	
			Peak	S/D	Peak	S/D	Peak	S/D	Peak	S/D
1 thru 10	CIIG-2	Conserv	47.77	37.23	49.80	35.20	50.79	34.21	51.91	33.09
Iron Bridge										
1	LS 2		4.24	1.23	4.54	0.93	4.91	0.57	5.19	0.28
1	2F-1	LS4	4.24	2.81	4.54	2.51	4.91	2.14	5.19	1.86
7	3G-3	3G-2	2.12	4.68	2.13	4.67	2.14	4.66	2.17	4.63
6,7	3G-2	3G-1	4.37	6.63	4.53	6.47	4.75	6.25	4.86	6.14
8	3G-4	3G-1	0.98	5.62	0.98	5.62	0.98	5.62	0.99	5.61
6,7,8	3G-1	LS 3	5.35	5.65	5.52	5.48	5.73	5.27	5.84	5.16
6,7,8	LS 3		5.35	0.12	5.52	(0.05)	5.73	(0.26)	5.84	(0.37)
6,7,8	3F-1	LS 4	5.35	1.70	5.52	1.53	5.73	1.32	5.84	1.21
1,6,7,8	LS 4		9.60	0.48	10.05	0.03	10.64	(0.56)	11.04	(0.96)
1,6,7,8	4F-1	LS 248	9.60	6.25	10.05	5.80	10.64	5.21	11.04	4.81
2	1&7G-2	1&7G-1	4.54	10.46	4.80	10.20	4.80	10.20	4.90	10.10
3	1&7G-3	1&7G-1	5.27	12.23	5.41	12.09	5.44	12.06	5.59	11.91
2,3	1&7G-1	LS 1&7	9.81	48.19	10.21	47.79	10.24	47.76	10.49	47.51
2,3,4	LS 1&7		11.65	4.76	12.07	4.35	12.11	4.30	12.38	4.04
2,3,4	LS &7F-	LS1&7F-1	11.65	4.20	12.07	3.78	12.11	3.74	12.38	3.47
2,3,4,5	LS &7F-	LS 248	13.36	9.47	13.77	9.06	13.82	9.01	14.08	8.75
1 thru 10	LS 248		26.44	17.77	27.32	16.89	27.95	16.26	28.62	15.59
1 thru 10	248G-1	LS 249	26.44	(4.84)	27.32	(5.72)	27.95	(6.35)	28.62	(7.02)
1 thru 10	248F-1	LS249	26.44	(3.61)	27.32	(4.49)	27.95	(5.12)	28.62	(5.79)
1 thru 10	LS 249		26.44	2.36	27.32	1.48	27.95	0.85	28.62	0.18
1 thru 10	249F-1	IBG-3	26.44	4.63	27.32	3.75	27.95	3.12	28.62	2.45
1 thru 10	IBG-3	IBG-2	26.44	49.56	27.32	48.68	27.95	48.05	28.62	47.38
1 thru 10, NE	IBG-2	IBG-1	26.44	81.56	27.32	80.68	27.95	80.05	28.62	79.38
1 thru 10, NE	IBG-1	Iron Bridge	26.44	78.56	27.32	77.68	27.95	77.05	28.62	76.38
Interconnect										
Cons I/IB	SE-7	NE-20	--	--	--	--	--	--	--	--
IB/Cons II	1 and	5	*	16.4	*	16.4	*	16.4	*	16.4
IB/Cons II	1 and	5	*	5.71	*	5.71	*	5.71	*	5.71
Cons II/IB	5	1 and 7a	*	4.32	*	4.32	*	4.32	*	4.32
Cons II/IB	SW-15	50	1.76	0	1.76	0	1.76	0	1.76	0

Source: City of Orlando Wastewater Division

In the Water Conserv II service area, the sub-area of South Kirkman Road's 36-inch sanitary sewer shows a deficit of capacity in 2015, 2020, 2025 and 2030 of 0.54 MGD, 1.66 MGD, 2.32 MGD and 3.16 MGD respectively. Actual observation of the sanitary sewer system does not support the presence of a deficit at this time. At this time Infiltration/Inflow testing and repair are being performed in this area. If this area surcharges, aggressive testing and repair of the system will be under taken. As part of this same construction project, the gravity sewer will be cleaned and slip-lined with a polyethylene liner. This may increase the carrying capacity of the line by decreasing the roughness of the pipe surface.

In the Water Conserv II service area, the sub-area directly south east of the facility's 36-inch sanitary sewer shows a deficit of capacity in 2010, 2015, 2020, 2025 and 2030 of 2.13 MGD, 3.34 MGD, 4.01 MGD, 4.13 MGD and 4.27 MGD respectively. Actual observation of the sanitary sewer system does not support the presence of a deficit at this time. At this time Infiltration/Inflow testing and repair are being performed in this area. If this area surcharges, aggressive testing and repair of the system will be under taken. As part of this same construction project, the gravity sewer will be cleaned and slip-lined with a polyethylene liner. This may increase the carrying capacity of the line by decreasing the roughness of the pipe surface.

In the Iron Bridge service area, Lift Stations 3 and 4 show deficits of capacity. However, Lift Station 4 is modeled with contributions from Lift Station 2 and 3 sub-areas, and it serves as a re-pump station that is typically bypassed. As such, this lift station's deficit is viewed as inconsequential. The deficit of capacity for Lift Station 3 in 2020, 2025 and 2030 is 0.05 MGD, 0.26 MGD and 0.37 MGD respectively. Actual observation of the lift station operational conditions does not support the presence of a deficit at this time. If a deficit occurs the lift station pumps will be upgraded to accommodate the additional flows.

In the Iron Bridge service area, the 36-inch slip lined sanitary gravity line from Lift Station 248 to Lift Station 249 shows a deficit of capacity in 2015, 2020, 2025 and 2030 of 4.84 MGD, 5.72 MGD, 6.35 MGD and 7.02 MGD respectively. Actual observation of the sanitary sewer system does not support the presence of a deficit at this time. At this time Infiltration/Inflow testing and repair are being performed in this area. If this area surcharges, aggressive testing and repair of the system will be under taken. Project Renew will remove over 9.00 MGD of wastewater flow from this system and dramatically reduce the flow going to the Iron Bridge facility. Flow could also be permitted to go to Lift Station 249 by both the 36-inch sanitary gravity line and 36-inch force main at the same time, thus eliminating any deficit at this location.

In the Iron Bridge service area, the 36-inch force main from Lift Station 248 to Lift Station 249 shows a deficit of capacity in 2015, 2020, 2025 and 2030 of 3.61 MGD, 4.49 MGD, 5.12 MGD and 5.79 MGD respectively. Actual observation of the lift station operational conditions does not support the presence of a deficit at this time. If a deficit occurs the lift station pumps will be upgraded to accommodate the additional flows. Project Renew will remove over 9.00 MGD of wastewater flow from this system and dramatically reduce the flow going to the Iron Bridge facility. Flow could also be permitted to go to Lift Station 249 by both the 36-inch sanitary gravity line and 36-inch force main at the same time, thus eliminating any deficit at this location.

The surplus/deficit analysis projections for the plants' treatment and effluent disposal capacities are shown in Figures WW-25 and WW-26. A surplus condition exists in the Iron Bridge treatment plant capacity through the year 2030 because of the 12 MGD expansion that was completed in 1987. Iron Bridge also shows a substantial surplus in effluent disposal capacity because of the planned re-rating of the treatment wetlands from 20 to 40 MGD. Water Conserv II shows a surplus in capacity until 2015. A minor deficit is shown at that time and throughout the planning period thereafter, however because of the margin of error in the flow projections and inflow and infiltration values, these deficits are not considered significant. Water Conserv I, on the other hand, shows deficit of capacity in 2010, 2015, 2020, 2025 and 2030 of 3.44 MGD, 5.18 MGD, 6.45 MGD, 6.83 MGD and 7.15 MGD. Overall, the City shows a shortfall in capacity of 3.05 MGD in the year 2030. Re-routing of sewage from Water Conserv I to the available surplus in Iron Bridge will alleviate anticipated deficits. Re-routing of sewage flow already occurs between the plants. Figure WW-26 shows the modeled 2005 effluent deficit for Conserv I, but, as shown in Figure WW-14 the amount of actual flow into the plant (3.12 MGD) was lower than the maximum amount of effluent disposal (7.5 MGD) because of flow diversion. Additionally, the City plans to upgrade the treatment capacity at Water Conserv II which will further address the projected deficits and ensure that the City meets level of service standards throughout the planning period.

FIGURE WW-25: PROJECTED TREATMENT PLANT SURPLUS/DEFICITS (MGD): 2010-2030

Plants	Capacity	City	2010	S/D	2015	S/D	2020	S/D	2025	S/D	2030	S/D
Iron Bridge	40	20.66	11.88	8.78	12.72	7.94	13.07	7.59	13.32	7.34	13.59	7.07
Conserv I	7.5	7.5	10.94	(3.44)	12.68	(5.18)	13.95	(6.45)	14.33	(6.83)	14.65	(7.15)
Conserv II	25	24.0	23.36	0.64	24.98	(0.98)	25.94	(1.94)	26.43	(2.43)	26.97	(2.97)
Total	**72.5**	**52.16**	**45.48**	**5.98**	**50.38**	**1.78**	**52.96**	**(0.80)**	**54.08**	**(1.92)**	**55.21**	**(3.05)**

Source: City of Orlando Wastewater Division

FIGURE WW-26: PROJECTED EFFLUENT SURPLUS/DEFICITS (MGD): 2005-2020

Plants	Capacity	City	2005	S/D	2010	S/D	2015	S/D	2020	S/D
Iron Bridge	60	40.6	16.6	24.0	17.4	23.2	17.9	22.7	18.3	22.36
Conserv I	7.5	7.5	12.7	(5.2)	14.4	(6.9)	16.2	(8.7)	17.6	(10.1)
Conserv II	25.0	24.0	22.1	1.9	23.5	0.5	24.4	(0.4)	25.1	(1.1)
Total	**92.5**	**72.1**	**51.4**	**20.7**	**55.3**	**16.8**	**58.5**	**13.6**	**61.0**	**11.16**

Source: City of Orlando Wastewater Division

Effluent disposal capacity is not always equal to the plant's treatment capacity. Iron Bridge has excess effluent disposal capacity well beyond its treatment capacity, even to the year 2020. This is a factor to consider in deciding where to build additional capacity in the future to alleviate deficits in the Water Conserv I plant. It should be recognized that the 20 MGD available for surface discharge into the Little Econ River might be reduced through the permitting process in the future. This will, however, be offset by capacity increases realized through the planned expansion of the reclaimed water irrigation program into a regional system.

Water Conserv II's effluent disposal capacity will be nearly depleted by the year 2020. The City and Orange County have purchased several thousand acres of land in the Water Conserv II service area to preserve that capacity in the face of growing development pressures. The City is also exploring the implementation of a regional reclaimed water irrigation system in the area to further solidify future disposal levels. The regional system has the capability of tapping into areas previously unavailable to the City for disposal capacity and will help bolster the region's water supply. Water Conserv I's disposal deficit is of more immediate concern. The City has completed the process of examining disposal alternatives to handle existing and future needs for the Water Conserv I service area. Staff concluded that the most cost-effective option is to decommission the Water Conserv I treatment plant and redirect wastewater flow to Iron Bridge, which will be expanded as the need arises. The projects associated with the flow diversion program include construction of a 36-inch force main parallel to a portion of the existing Water Conserv I conveyance system, a series of lift station improvements, expanding the Iron Bridge treatment plant, and expanding the wetlands pumping station. The east-side regional reclaimed water system can also be considered a key element of this program. Estimated costs for these projects are given in the capital improvements section of this element.

There are no anticipated deficits in sludge disposal. The sludge will continue to be hauled to agricultural sites for land application. This is environmentally sound because there is no additional load to the County landfill.

6. BUDGET ANALYSIS

Expenditures and revenues must be projected to determine the financial feasibility of the selected LOS. Expenditures include operations and maintenance (O+M), sewer debt service, replacement and repair (R+R), and capital facilities. Revenues include customer service charges, sewer benefit fees (impact fees), wholesale contracts, interest on investments, and bond issues.

6.A CAPITAL IMPROVEMENT PROJECTS

Figure WW-27 gives the capital improvement projects based upon existing and projected deficits in the wastewater facility's collection, treatment, and disposal systems. Costs were estimated in 2008 dollars.

FIGURE WW-27: WASTEWATER 2007-2012 CAPITAL IMPROVEMENT PROGRAM

Project	CIP Project #	Funding Source	Project Priority	2007-2012 Funding	Projected Operating Cost Impact
Eastern Regional Reclaimed Water	01-351--001	Sewer Capacity Charge & Other Funds	Future Need/ Planned Expansion	$7,456,148	____
Lake Fairview Area Sewers	98-344-003	Sewer Capacity Charge	Existing Deficiency	$5,750,000	
Narcoossee Road Sewers	01-344-002	Sewer Capacity Charge	Future Need/ Planned Expansion	$5,000,000	____ ____
Water Conserv I Diversion	99-351-002	Sewer Capacity Charge	Future Need/ Planned Expansion	$2,700,000	____
Water Conserv II Master Pump Station	99-352-002	Service Charges	Repair/ Replacement	$711,447	____
Total CIP				**$21,617,595**	

Source: City of Orlando Wastewater Division

6.B. REVENUE SOURCES

There are two primary revenue sources for the City: a Customer Service Charge, and a Sewer Benefit Fee. Customer service charges consist of a monthly commodity and capacity charge. The sewer benefit fee consists of a sewage collection system charge, a water pollution control charge, and a connection charge. These charges are as follows:

<u>Residential and Commercial Service Charge - 2008</u>

Single Family
Capacity charge: $12.16
Commodity charge: $2.86 per 1000 gallons (14k gallons cap)

Multiple Family Unit (Flat Rate)
One bedroom or efficiency: $24.17 per unit
Two or more bedrooms: $29.32 per unit

Commercial (Includes Commercial, Industrial and Master Metered multi-family living units)
Capacity charge: Twelve month moving average of water usage/7000 gallons x $12.16, plus $2.86 x each thousand gallons of water usage on current bill.

Minimum $12.16 capacity charge.

<u>Sewer Benefit Fee – 2008</u>
Single Family
$10.15 x 250 gallons per day (GPD)=$2,537.50 per dwelling unit

Tandem/Garage Apartment/Duplex
$10.15 x 190 GPD=$1,928.50 per dwelling unit
Sewer Lateral Construction: $2,950 per lateral constructed

Multi-Family
$10.15 x 190 GPD=$1,928.50

Commercial
$10.15 x 15.0 GPD per fixture unit.

Sewer Lateral Construction: Based on construction cost as determined by the Wastewater Division

Sewer Connection Fee: $50 per connection, on site connection, replacement, or stub out

There are several sources of additional revenues. Wholesale contracts are revenues from the sale of capacity to other jurisdictions. Interest on investments is from the interest earned from the revenues above the monthly operating and debt service.

Figure WW-28 gives the projected expenditures and revenues for the entire wastewater system.

6.C. PERFORMANCE ASSESSMENT

The performance of a wastewater system is best judged by its anonymity to the public. All parts must be functioning in order to achieve this status. The collection system must be able to handle the flow with minimum surcharging. Lines must be in good order to minimize I/I and exfiltration. Capacity problems aside, the performance of a collection system can be assessed by the age of its pipes and lift stations. For planning purposes, the average life of a trunk line is 40 - 50 years; 50 years for a lift station; and 15 years for the pumps. The actual life expectancy can be much longer depending on the level of maintenance practiced. Figure WW-29 gives the age and life expectancy of the components of Orlando's collection system. An examination of these figures shows that the main trunk lines and lift stations are by and large in mid-life and in good shape. However, within 10 to 20 years several components of the wastewater collection system may need replacement. The condition of these facilities will be monitored closely to determine whether replacement will be necessary or if rehabilitation will suffice.

FIGURE WW-28: PROJECTED REVENUES AND EXPENDITURES FOR WASTEWATER
Fiscal Year in Thousands of Dollars

	FY2008	FY2009	FY2010	FY2011
Operating Revenues				
Commodity Charges	$30,565	$30,200	$30,955	$31,729
Retained Earning	$3,763	$6,700	$8,130	$9,673
Contract Customers (Fees)	$5,960	$5,700	$5,700	$5,700
High Strength Surcharges	$900	$900	$900	$900
Other Fees	$2,799	$2,212	$2,250	$2,275
Total Operating Expenses	$43,987	$45,712	$47,935	$50,277
Operating Expenses				
Salaries & Benefits	$15,651	$15,158	$15,916	$16,712
Supplies & Contract Services	$19,392	$21,353	$22,634	$23,992
Administrative, Dividend and R&R	$8,944	$9,201	$9,385	$9,573
Total O & M	$43,987	$45,712	$47,935	$50,277
Non-Operating Revenues (Interest Earnings)				
Operations	$600	$600	$600	$600
Capital	$300	$300	$300	$300
Impact Fees	$700	$700	$700	$700
Total Non-Operating Revenues	$1,600	$1,600	$1,600	$1,600

Source: BV Management Consulting

Replacement of a large portion of the wastewater collection system, if necessary, will be very capital intensive. The City has focused on ways to improve the cost and time efficiency associated with making point repairs to the collection system. The Wastewater Division has implemented a system for performing internal lateral repairs using resin impregnated materials. City crews will be able to double their productivity in repairing damaged or leaking lateral services.

The City's three treatment plants are constantly being upgraded and repaired as individual components need repair and replacement (R+R). New technology is the biggest factor in the retirement or reconstruction of the treatment plants. However, the ultimate test for any treatment plant's performance is its ability to maintain water quality criteria. FDEP and USEPA are responsible for monitoring each plant for attaining permit criteria. At present, all plants are in compliance with their discharge permits.

FIGURE WW-29: PERFORMANCE EVALUATION OF THE WASTEWATER COLLECTION SYSTEM

Plant/ Subarea	Node Point	Next Node Point	Age/ Life Line	Age/Life Lift Station	Age/Life Pumps
Conserv I					
1	SLNG-1	LS	1/50		
1	SLNLS			1/50	1/15
1	SLNF-1	Conserv I	1/50		
2	NLNG-1	LS	1/50		
2	NLNLS			1/50	1/15
2	NLNF-1	CIF-2	1/50		
6	69G-2	69G-1	26/50		
6,7	69G-1	LS 69	26/50		
6,7	LS 69			12/50	12/15
6,7	69F-1	CIF-3	12/50		
8	LF 12			12/50	12/15
8	12F-1	69F-2	12/50		
8,9	69F-2	CIF-3	26/50		
6,7,8,9	CIF-3	CIF-2	12/50		
5,6,7,8,9	CIF-2	CIF-1	12/50		
2 thru 9	CIF-1	Conserv I	12/50		
Conserv II					
1	LS 85			13/50	13/15
1	85F-1	LS 45	13/50		
2	45G-1	LS 45	1/50		
1,2	LS 45			10/50	10/15
1,2	45F-1	CIIG-2	10/50		
3	WMG-1	MCLG-1	2/50		
4	MCLG-2	MCLG-1	40/50		
3,4	MCLG-1	CIIG-1	6/50		
5	RFG-2	RFG-1	6/50		
5	RFG-1	CIIG-1	6/50		
3,4,5	CIIG-1	Conserv II	6/50		
9	29G-1	LS 29	1/50		
9	LS 29			1/50	1/15
9	29F-1	KRG-3	26/50		
8,9	KRG-3	KRG-2	31/50		
7,8,9	KRG-2	KRG-1	31/50		
6,7,8,9	KRG-1	CIIG-2	31/50		
10	VING-1	CIIG-2	30/50		
11	5G-2	5G-1	10/50		
11,12	5G-1	LS 5	10/50		
11,12	LS 5			14/50	14/15
11,12	5F-1	CIIG-2	14/50		
1 thru 10	CIIG-2	Conserv II	6/50		
Iron Bridge					
1	LS 2			49/50	4/15
1	2F-1	LS4	49/50		
7	3G-3	3G-2	10/50		

Plant/ Subarea	Node Point	Next Node Point	Age/ Life Line	Age/Life Lift Station	Age/Life Pumps
6,7	3G-2	3G-1	10/50		
8	3G-4	3G-1	49/50		
6,7,8	3G-1	LS 3	10/50		
6,7,8	LS 3			49/50	4/15
6,7,8	3F-1	LS 4	49/50		
1,6,7,8	LS 4			49/50	25/15
1,6,7,8	4F-1	LS 248	49/50		
2	1&7G-2	1&7G-1	12/50		
3	1&7G-3	1&7G-1	50/50		
2,3	1&7G-1	LS 1&7			
2,3,4	LS 1&7			14/50	14/15
2,3,4	LS 1&7F-2	LS1&7F-1	41/50		
2,3,4,5	LS 1&7F-1	LS 248	41/50		
1 thru 10	LS 248			1/50	1/15
1 thru 10	248G-1	LS 249	12/50		
1 thru 10	248F-1	LS249	1/50		
1 thru 10	LS 249			19/50	6/15
1 thru 10	249F-1	IBG-3	19/50		
1 thru 10	IBG-3	IBG-2	19/50		
1 thru 10, NE	IBG-2	IBG-1	1/50		
1 thru 10, NE	IBG-1	Iron Bridge	12/50		
Interconnect					
Cons I/IB	SE-7	NE-20			
IB/Cons II	1 and 7a	5			
IB/Cons II	1 and 7a	5			
Cons II/IB	5	1 and 7a			
Cons II/IB	SW-15	50			

Source: City of Orlando Wastewater Division

7. PROBLEMS AND OPPORTUNITIES

Problem: The physical deterioration of the collection system is of concern. Broken and leaking pipes lower the level of service (LOS) and cause environmental impacts.

Opportunity: Since the aging of pipes and lift stations is a continuous process, the City should continue to monitor the condition of the collection system and implement projects as necessary to maintain the desired LOS. A special charge to fund the projected costs of the replacements should be considered if it appears that current funding programs will be inadequate.

Problem: Excess Infiltration/Inflow is reducing the available capacity throughout the wastewater system. In addition, contamination can occur from polluted stormwater runoff and other sources.

Opportunity: The monitoring and corrective actions through existing programs should be continued and expanded where possible. The potential increase in existing capacity and the cost to fix the collection system should be examined and compared to the cost of building additional capacity.

Problem: The provision of services in an efficient manner to unincorporated properties being annexed into the City, due to the irregular shape of the City's jurisdiction.

Opportunity: The City aims to square off City boundaries through the annexation process which improves the efficiency of services.

Problem: Servicing the major growth projected within the Southeast area of the City throughout the planning period.

Opportunity: The City is proceeding with three major projects: the re-rating and expansion of treatment capacity at the Iron Bridge facility, the development of collection system improvements to allow for the conveyance of future flow to Iron Bridge, and the implementation of a regional reclaimed water system in east Orlando to return reclaimed water from Iron Bridge to the southeast expansion areas as well as other communities. Together, these projects will enable the City to meet its wastewater and reclaimed water capacity needs beyond the year 2025.

Problem: Discharges from industrial and commercial users could reduce the efficiency of the treatment plants and contaminate effluent and sludge.

Opportunity: Monitoring of influent for hazardous wastes and corrective actions should continue through existing programs. In addition, information on the location and type of toxic and hazardous substances should be consolidated with other City departments to prepare a comprehensive emergency response plan.

Problem: The budget analyses indicate that proposed expenditures may exceed revenues in the short term.

Opportunity: Wastewater revenues and expenditures should be reviewed annually to identify alternative funding sources and evaluate the schedule for implementing improvements and new construction.

Problem: Septic tanks still utilized in residential neighborhoods and areas annexed into the City which cause a possible threat to health and safety associated with exposure to drainfield effluent.

Opportunity: The City will continue to undertake projects in existing residential neighborhoods which consist of retrofitting sanitary sewer collection and transmission facilities that are currently served by septic tanks. Each residential lot will be served by an individual lateral installed to the property line. The City has two subsidy programs in place to offset a portion of the construction cost and impact fees, thus, minimizing the financial burden of connection to the homeowner. The collection system projects will eliminate the use of septic tanks.

The City also offers a program where residents in adjacent unincorporated counties can apply to connect to the City's sewer service, when available, in order to abandon septic tanks. Although the properties may not be contiguous to the City limits, or desirable by the City to be annexed at the requested time of connection to the City's sewer service, connection is permitted subject to the property owners agreeing to annex into the City limits, when the City deems it necessary.

8. FUTURE OUTLOOK

The City is working closely with OUC to implement a residential reclaimed water program in new developments. Because of concerns with limited availability of groundwater supplies, OUC will be required to maximize the use of alternative water sources to decrease the demand on the aquifer as part of its Consumptive Use Permit.

From a regional perspective, the City has secured funding from the St. Johns River Water Management District (SJRWMD) for implementation of the Eastern Regional Reclaimed Water Distribution project which will provide interconnection between the Iron Bridge reclaimed water network and other systems in need of additional reclaimed water supplies.

The City is continuing its efforts to annex adjoining, unincorporated areas to square off City boundaries and, thus, improve the efficiency of services. The Wastewater Division anticipates the need to secure engineering services for additional sewer system extension design work.

The City will continue to evaluate new means of performing system repairs in an effort to enhance productivity and staff continues to contact owners of private wastewater collection systems and lift stations to educate them on the maintenance of those facilities to prevent sewer system overflows.

Efforts will continue to evaluate methods to modify the Water Conserv II treatment plant dewatering process in an effort to increase cake solids from 12% to 18%. If successful, the estimated savings are $75,000 annually, recurring after a 1 to 2 year payback period.

Wastewater Division staff will continue to work with its consultants on the Iron Bridge Re-rate Improvements to seek modification of traditional operating protocols, thus allowing for incremental increases in treatment capacity without construction of expanded facilities.

The City will also pursue alternative methods and options for biosolids treatment and beneficial use. The most favorable alternative treatment method that is being developed involves a process of supercritical water oxidation.

The City has contracted with a consulting firm that will assess the Division’s facilities and infrastructure to identify opportunities to implement energy conservation and operational savings through facility improvements.

APPENDIX A: PROJECTED WASTEWATER FLOWS BY PLANT, SUBAREA AND TRAFFIC ANALYSIS ZONE (TAZ)

Water Conserv I
2008

2008 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. South Lake Nona																		
	477	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	495	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	505	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal			0		0		0		0		0		0		0		0	0
2. North Lake Nona																		
	412	0	0	0	0	0	0	1,508	209	0	0	203,599	16,904	0	0	0	0	17,112
	504	1,282	147,555	603	64,824	48,610	2,541	78,511	10,864	18	1,245	1,914	159	0	0	115,269	7,089	234,277
	528	150	17,265	348	37,411	0	0	0	0	0	0	0	0	0	0	0	0	54,675
	529	1,127	129,715	310	33,326	19,744	1,032	20,560	2,845	0	0	0	0	0	0	0	0	166,917
Subtotal			294,534		135,560		3,573		13,918		1,245		17,063		0		7,089	472,982
3. Airport																		
	414	359	41,320	1	108	92,638	4,843	111,192	15,386	0	0	475,488	39,477	0	0	64,612	3,974	105,107
	415	98	11,280	0	0	87,741	4,587	10,541	1,459	0	0	1,176,607	97,688	0	0	0	0	115,013
	416	330	37,982	0	0	11,935	624	0	0	0	0	1,517,195	125,965	0	0	0	0	164,571
	494	0	0	0	0	0	0	8,231	1,139	446	30,858	0	0	0	0	4,446,950	273,487	305,484
	496	299	34,414	0	0	71,667	3,746	8,420	1,165	0	0	352,116	29,234	0	0	0	0	68,560
	497	0	0	0	0	72,904	3,811	16,089	2,226	0	0	710,849	59,018	0	0	247,000	15,191	80,246
	498	0	0	0	0	20,459	1,069	0	0	0	0	2,260,738	187,698	0	0	0	0	188,767
	499	0	0	0	0	28,633	1,497	7,930	1,097	0	0	667,722	55,438	0	0	0	0	58,032
	523	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	524	0	0	0	0	27,096	1,416	56,393	7,803	0	0	175,125	14,540	0	0	0	0	23,760
	525	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	526	0	0	0	0	51,500	2,692	160	22	0	0	113,526	9,425	0	0	0	0	12,140
	527	0	0	0	0	41,353	2,162	21,093	2,919	0	0	0	0	0	0	0	0	5,080
Subtotal			124,996		108		26,447		33,217		30,858		618,484		0		292,652	1,126,760
4. South 436																		
	399	0	0	0	0	778,810	40,712	110,282	15,260	1,978	136,853	484,355	40,214	0	0	0	0	233,039
	400	0	0	2,660	285,955	20,820	1,088	150,426	20,815	0	0	52,800	4,384	0	0	0	0	312,243
	474	0	0	0	0	21,840	1,142	109,519	15,155	0	0	170,213	14,132	0	0	0	0	30,428
	500	0	0	0	0	159,488	8,337	0	0	0	0	404,715	33,601	0	0	0	0	41,939
	501	0	0	327	35,153	161,588	8,447	25,465	3,524	0	0	80,000	6,642	0	0	57,584	3,541	57,307
	850	0	0	336	36,121	303,707	15,876	6,300	872	0	0	0	0	0	0	23,175	1,425	54,294
	851	228	26,242	0	0	0	0	15,572	2,155	0	0	0	0	0	0	0	0	28,397
	925	0	0	0	0	193,734	10,127	112,198	15,525	1,064	73,616	0	0	0	0	9,300	572	99,840
Subtotal			26,242		357,229		85,730		73,306		210,468		98,973		0		5,539	857,487
5. North 436																		

2008 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
	402	208	23,940	1,414	152,008	179,419	9,379	159,631	22,089	0	0	99,482	8,259	0	0	80,160	4,930	220,605
	475	0	0	538	57,836	128,592	6,722	6,422	889	0	0	58,143	4,827	0	0	0	0	70,274
	847	0	0	531	57,084	0	0	0	0	0	0	0	0	0	0	0	0	57,084
	848	0	0	417	44,828	0	0	192,066	26,577	0	0	0	0	0	0	0	0	71,405
Subtotal			23,940		311,756		16,101		49,555		0		13,087	0	0		4,930	419,369
6. LS69G-2																		
	403	0	0	1,390	149,428	14,804	774	2,520	349	0	0	0	0	0	0	0	0	150,550
	404	3	345	1,036	111,372	13,934	728	146,999	20,341	0	0	45,290	3,760	0	0	0	0	136,547
	405	696	80,108	1,476	158,673	4,844	253	33,728	4,667	0	0	0	0	0	0	55,000	3,383	247,083
	844	238	27,393	526	56,546	26,643	1,393	345,270	47,777	0	0	0	0	0	0	0	0	133,109
	845	1,071	123,269	1,492	160,393	3,457	181	169,707	23,483	0	0	0	0	0	0	0	0	307,326
	846	2	230	1,581	169,961	36,121	1,888	533,893	73,877	0	0	0	0	0	0	0	0	245,957
Subtotal			231,345		806,373		5,217		170,494		0		3,760		0		3,383	1,220,572
7. LS69G-1																		
	407	0	0	726	78,046	0	0	0	0	0	0	0	0	0	0	0	0	78,046
	408	181	20,833	483	51,923	1,888	99	58,226	8,057	0	0	70,200	5,828	0	0	130,000	7,995	94,735
	409	696	80,108	752	80,842	30,499	1,594	149,984	20,754	0	0	0	0	0	0	0	0	183,298
	476	392	45,118	565	60,739	13,600	711	85,166	11,785	0	0	0	0	0	0	47,062	2,894	121,247
Subtotal			146,058		271,550		2,404		40,596		0		5,828		0		10,889	477,326
8. LS12																		
	350	88	10,129	32	3,440	0	0	16,226	2,245	0	0	0	0	0	0	157,988	9,716	25,530
	351	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	769	235	27,048	0	0	9,434	493	99,827	13,814	0	0	0	0	0	0	59,724	3,673	45,028
	833	574	66,066	197	21,178	68,978	3,606	22,206	3,073	0	0	0	0	0	0	118,308	7,276	101,198
Subtotal			103,242		24,618		4,099		19,132		0		0		0		20,665	171,756
9. Conway(69fm-2)																		
	767	1	115	0	0	165,487	8,651	302,881	41,911	0	0	618,031	51,312	0	0	2,400	148	102,137
	768	0	0	0	0	36,623	1,914	174,718	24,177	0	0	76,299	6,335	0	0	0	0	32,426
	834	753	86,668	558	59,986	59,312	3,101	10,207	1,412	0	0	7,614	632	47,865	4,416	18,520	1,139	157,354
	835	590	67,907	270	29,026	13,413	701	53,806	7,445	0	0	2,600	216	0	0	69,230	4,258	109,553
	843	480	55,247	466	50,096	35,370	1,849	161,207	22,307	0	0	2,400	199	0	0	10,609	652	130,350
Subtotal			209,937		139,108		16,216		97,253		0		58,694		4,416		6,197	531,820
Water Conserv I Total			1,160,295		2,046,301		159,788		497,469		242,571		815,888		4,416		351,343	5,278,071

2008 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
Water Conserv II 2008																		
2008 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. Lift Station 85																		
	642	0	0	0	0	169,092	13,510	178,225	37,695	0	0	313,804	39,822	0	0	0	0	91,027
	652	186	32,721	585	96,123	58,958	4,711	14,685	3,106	0	0	0	0	0	0	32,892	3,092	139,752
	653	20	3,518	1,440	236,609	410,499	32,799	90,262	19,090	0	0	186,685	23,690	44,009	6,205	0	0	321,913
	654	1,107	194,745	2,276	373,974	24,547	1,961	315,345	66,695	0	0	0	0	0	0	99,949	9,395	646,771
Subtotal			230,984		706,706		52,981		126,586		0		63,512		6,205		12,487	1,199,462
2. Lift Station 45																		
	649	0	0	0	0	78,531	6,275	33,612	7,109	0	0	960,397	121,874	0	0	0	0	135,258
	650	1	176	0	0	94,874	7,580	24,882	5,263	0	0	2,105,574	267,197	0	0	0	0	280,216
	651	0	0	0	0	321,944	25,723	57,206	12,099	0	0	3,032,837	384,867	0	0	15,000	1,410	424,099
	655	615	108,191	571	93,822	11,421	913	27,255	5,764	0	0	9,960	1,264	5,400	761	22,551	2,120	212,836
	659	211	37,119	139	22,839	6,336	506	60,532	12,803	0	0	0	0	0	0	149,834	14,084	87,352
	660	133	23,397	568	93,329	26,140	2,089	5,440	1,151	0	0	195,405	24,797	194,493	27,424	2,276	214	172,400
	661	0	0	0	0	245,023	19,577	129,544	27,399	0	0	1,484,819	188,424	0	0	0	0	235,399
	662	20	3,518	76	12,488	36,429	2,911	17,649	3,733	0	0	331,853	42,112	66,995	9,446	103,808	9,758	83,966
	663	108	18,999	269	44,200	0	0	131,742	27,863	0	0	111,979	14,210	0	0	93,150	8,756	114,029
	690	143	25,157	42	6,901	168,976	13,501	254,239	53,772	0	0	0	0	0	0	0	0	99,331
	691	0	0	0	0	0	0	6,000	1,269	0	0	0	0	0	0	0	0	1,269
	692	0	0	0	0	124,895	9,979	115,506	24,430	0	0	451,550	57,302	0	0	80,000	7,520	99,230
	693	9	1,583	0	0	9,110	728	11,345	2,399	0	0	327,420	41,550	0	0	0	0	46,260
	694	249	43,804	14	2,300	121,179	9,682	16,650	3,521	0	0	98,333	12,478	0	0	0	0	71,787
	699	47	8,268	25	4,108	32,913	2,630	25,042	5,296	0	0	350,133	44,432	0	0	0	0	64,734
	897	0	0	0	0	1,104	88	204,101	43,167	0	0	569,865	72,316	0	0	0	0	115,571
	898	0	0	0	0	8,343	667	182,320	38,561	0	0	74,198	9,416	0	0	0	0	48,643
	903	0	0	0	0	25,850	2,065	29,627	6,266	0	0	742,550	94,230	0	0	0	0	102,561
Subtotal			270,215		279,988		104,914		281,864		0		1,376,468		37,631		43,862	2,394,942
3. Willie Mays																		
	664	6	1,056	0	0	131,772	10,529	375,829	79,488	499	52,769	866,074	109,905	0	0	0	0	253,746
	665	0	0	0	0	0	0	56,658	11,983	0	0	14,368	1,823	0	0	0	0	13,806
	671	604	106,256	96	15,774	4,048	323	22,870	4,837	0	0	722,925	91,739	0	0	83,713	7,869	226,799
	675	430	75,646	184	30,233	21,920	1,751	50,590	10,700	0	0	980	124	0	0	108,033	10,155	128,610
	676	124	21,814	192	31,548	4,256	340	0	0	0	0	82,772	10,504	0	0	5,000	470	64,676
Subtotal			204,772		77,555		12,943		107,008		52,769		214,095		0		18,494	687,637

Appendix A: Projected Wastewater Flows by Plant, Subarea and 2025 TAZ

2008 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
4. Bruton																		
	672	1,479	260,187	38	6,244	2,890	231	81,825	17,306	0	0	0	0	0	0	276,617	26,002	309,970
	677	582	102,386	302	49,622	800	64	23,264	4,920	0	0	0	0	66,321	9,351	131,083	12,322	178,666
	680	377	66,322	194	31,877	5,778	462	27,986	5,919	0	0	17,682	2,244	0	0	41,274	3,880	110,703
	681	390	68,609	216	35,491	96,973	7,748	0	0	205	21,679	84,312	10,699	0	0	551,992	51,887	196,114
	682	107	18,824	194	31,877	7,724	617	28,132	5,950	0	0	257,278	32,649	0	0	119,678	11,250	101,165
Subtotal			516,328		155,111		9,122		34,095		21,679		45,592		9,351		105,341	896,618
5. Raleigh-Frazier																		
	673	526	92,534	1,962	322,380	10,128	809	18,090	3,826	0	0	163,238	20,715	0	0	77,967	7,329	447,594
	674	512	90,072	1,016	166,941	156,306	12,489	61,473	13,002	0	0	0	0	0	0	33,025	3,104	285,607
	902	0	0	786	129,149	45,475	3,633	3,200	677	0	0	219,335	27,834	0	0	0	0	161,293
Subtotal			182,606		618,470		16,932		17,504		0		48,549		0		10,433	894,494
6. North Kirkman																		
	348	175	30,786	2,270	372,988	36,000	2,876	97,111	20,539	0	0	102,114	12,958	47,280	6,666	11,836	1,113	447,927
	349	0	0	1,120	184,029	632,907	50,569	485,223	102,625	0	0	9,300	1,180	0	0	434,640	40,856	379,260
	492	104	18,296	4,988	819,588	378,168	30,216	535,387	113,234	0	0	11,978	1,520	0	0	0	0	982,854
	603	939	165,190	611	100,395	48,215	3,852	39,965	8,453	0	0	691	88	0	0	89,378	8,402	286,379
Subtotal			214,272		1,477,001		87,514		244,851		0		15,746		6,666		50,370	2,096,419
7. South Kirkman 1																		
	444	334	58,758	1,586	260,599	86,415	6,905	92,945	19,658	0	0	0	0	0	0	0	0	345,919
	486	0	0	0	0	156,016	12,466	54,616	11,551	326	34,475	0	0	9,733	1,372	8,836	831	60,694
	493	0	0	982	161,354	5,000	400	247,575	52,362	0	0	5,549	704	0	0	0	0	214,820
Subtotal			58,758		421,953		19,770		83,571		34,475		704		1,372		831	621,433
8. South Kirkman 2																		
	443	0	0	0	0	312,896	25,000	121,204	25,635	2,547	269,345	0	0	0	0	0	0	319,980
	446	1	176	160	26,290	25,397	2,029	23,630	4,998	0	0	0	0	0	0	327,335	30,769	64,262
	485	0	0	0	0	0	0	834,414	176,479	0	0	0	0	0	0	0	0	176,479
	983	0	0	0	0	660,867	52,803	12,990	2,747	0	0	438,226	55,611	0	0	545	51	111,213
	986	0	0	0	0	0	0	976,849	206,604	0	0	0	0	0	0	0	0	206,604
	987	0	0	86	14,131	45,446	3,631	976,612	206,553	384	40,608	0	0	0	0	0	0	264,923
	989	0	0	0	0	0	0	755,589	159,807	0	0	0	0	0	0	0	0	159,807
	990	0	0	0	0	98,990	7,909	701,665	148,402	2,394	253,166	52,948	6,719	0	0	0	0	416,196
Subtotal			176		40,421		91,373		931,225		563,119		62,330		0		30,821	1,719,464
9. Lift Station 29																		
	981	0	0	0	0	16,969	1,356	126,313	26,715	2,866	303,080	0	0	0	0	840	79	331,229
	995	0	0	0	0	33,618	2,686	235,671	49,844	1,828	193,311	48,269	6,125	0	0	0	0	251,967
	996	0	0	0	0	181,832	14,528	138,742	29,344	893	94,435	180,823	22,946	0	0	0	0	161,253
Subtotal			0															744,450

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2008 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
10. Vineland																		
	668	0	0	3,166	520,212	38,427	3,070	34,615	7,321	0	0	0	0	0	0	80,000	7,520	538,123
	669	0	0	464	76,241	68,761	5,494	26,080	5,516	0	0	172,002	21,827	0	0	31,226	2,935	112,013
	670	0	0	777	127,670	326,515	26,089	41,797	8,840	0	0	3,105,207	394,051	0	0	0	0	556,650
	880	0	0	1,819	298,884	377,921	30,196	36,740	7,771	0	0	0	0	0	0	111,351	10,467	347,317
	881	0	0	0	0	0	0	1,456,941	308,143	0	0	0	0	0	0	0	0	308,143
	899	0	0	0	0	236,170	18,870	4,000	846	0	0	0	0	0	0	0	0	19,716
	900	0	0	1,912	314,165	41,861	3,345	80,180	16,958	224	23,688	109,148	13,851	0	0	0	0	372,006
	901	1	176	0	0	307,847	24,597	132,452	28,014	0	0	359,394	45,607	0	0	15,942	1,499	99,892
	924	0	0	1,058	173,842	71,905	5,745	761,234	161,001	0	0	0	0	0	0	84,420	7,935	348,524
Subtotal			176		1,511,013		117,406		544,409		23,688		475,336		0		30,356	2,702,384
11. Tampa North																		
	688	136	23,925	54	8,873	390,833	31,228	135,885	28,740	111	11,738	50,083	6,356	0	0	47,202	4,437	115,296
	689	306	53,832	88	14,459	169,788	13,566	34,881	7,377	152	16,074	87,518	11,106	0	0	0	0	116,415
	719	42	7,389	99	16,267	79,090	6,319	114,849	24,291	0	0	236,299	29,986	0	0	27,038	2,542	86,793
	720	167	29,379	437	71,804	47,553	3,799	211,423	44,716	0	0	271,445	34,446	0	0	41,623	3,913	188,058
	721	6	1,056	58	9,530	423,408	33,830	82,923	17,538	290	30,668	65,082	8,259	0	0	724,175	68,072	168,953
	724	25	4,398	121	19,882	157,952	12,620	374,824	79,275	0	0	315,896	40,087	22,260	3,139	10,354	973	160,375
Subtotal			119,978		140,815		101,363		201,937		58,480		130,240		3,139		79,937	835,889
12. Tampa South																		
	678	184	32,369	736	120,934	9,250	739	54,825	11,595	0	0	0	0	0	0	125,215	11,770	177,408
	679	215	37,823	160	26,290	1,128	90	47,037	9,948	0	0	0	0	0	0	91,202	8,573	82,724
	684	210	36,943	10	1,643	8,737	698	64,520	13,646	0	0	0	0	0	0	0	0	52,931
	685	0	0	0	0	69,204	5,529	14,193	3,002	328	34,686	21,690	2,752	0	0	160,744	15,110	61,080
	686	45	7,916	111	18,239	45,051	3,600	226,490	47,903	0	0	356,173	45,198	0	0	207,336	19,490	142,345
	687	46	8,092	115	18,896	22,778	1,820	87,213	18,446	0	0	312,903	39,707	0	0	32,043	3,012	89,973
	725	136	23,925	376	61,781	32,416	2,590	90,186	19,074	0	0	95,049	12,062	0	0	25,713	2,417	121,850
	727	134	23,573	423	69,504	500	40	49,747	10,521	0	0	34,547	4,384	0	0	13,667	1,285	109,308
	728	278	48,906	145	23,825	48,966	3,912	34,154	7,224	32	3,384	2,000	254	0	0	52,185	4,905	92,410
	729	25	4,398	2	329	102,638	8,201	37,866	8,009	0	0	63,868	8,105	0	0	10,000	940	29,981
	735	7	1,231	2	329	131,193	10,482	58,427	12,357	0	0	424,480	53,867	0	0	0	0	78,266
Subtotal			225,179		341,769		37,702		161,725		38,070		166,329		0		67,502	1,038,276
Water Conserv II Total			2,023,444		5,770,802		670,590		2,840,680		1,383,104		2,627,973		64,365		450,913	15,831,470

2008 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
Iron Bridge 2008																		
2008 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. Lift Station 2																		
	695	496	60,337	103	11,703	45,418	2,509	60,603	8,863	184	13,455	2,500	219	0	0	0	0	97,087
	696	243	29,560	214	24,315	152,614	8,432	32,749	4,790	0	0	0	0	0	0	43,551	2,831	69,927
	697	272	33,088	10	1,136	76,751	4,240	63,733	9,321	0	0	5,200	456	0	0	94,341	6,132	54,374
	698	521	63,378	21	2,386	2,130	118	130,307	19,057	0	0	184,035	16,149	0	0	3,996	260	101,348
	711	256	31,142	104	11,816	142,504	7,873	143,681	21,013	0	0	0	0	0	0	29,800	1,937	73,782
	712	241	29,317	169	19,202	75,115	4,150	141,714	20,726	0	0	85,392	7,493	0	0	17,862	1,161	82,049
	714	156	18,977	42	4,772	225,106	12,437	176,310	25,785	0	0	186,372	16,354	0	0	371,063	24,119	102,445
	715	151	18,369	102	11,589	161,077	8,900	76,816	11,234	0	0	7,500	658	2,737	267	1,500	98	51,114
	716	7	852	246	27,951	555,087	30,669	128,547	18,800	337	24,643	3,897	342	0	0	30,408	1,977	105,232
	717	13	1,581	366	41,585	853,471	47,154	82,319	12,039	295	21,572	1,000	88	0	0	0	0	124,019
	718	2	243	326	37,040	293,471	16,214	36,603	5,353	303	22,157	0	0	0	0	149,221	9,699	90,707
	753	0	0	0	0	2,049,769	113,250	48,733	7,127	0	0	64,009	5,617	0	0	25,065	1,629	127,623
	754	0	0	20	2,272	483,076	26,690	66,828	9,774	0	0	301,454	26,453	0	0	0	0	65,189
	755	77	9,367	199	22,610	115,559	6,385	46,868	6,854	0	0	0	0	0	0	15,000	975	46,191
	905	42	5,109	471	53,515	265,636	14,676	13,471	1,970	0	0	0	0	0	0	0	0	75,271
Subtotal			301,321		271,893		303,697		182,707		81,827		73,829		267		50,817	1,266,359
2. Downtown																		
	722	5	608	49	5,567	251,126	13,875	22,405	3,277	0	0	106,772	9,369	0	0	336,000	21,840	54,536
	723	1	122	326	37,040	172,605	9,536	96,098	14,054	0	0	81,371	7,140	0	0	184,585	11,998	79,891
	726	48	5,839	286	32,495	27,349	1,511	67,106	9,814	0	0	12,119	1,063	0	0	23,168	1,506	52,229
	746	0	0	734	83,397	800,606	44,233	-2,625	-384	169	12,358	0	0	0	0	0	0	139,605
	747	0	0	0	0	235,958	13,037	3,635	532	0	0	0	0	0	0	466,628	30,331	43,899
	748	0	0	310	35,222	2,063,134	113,988	175,536	25,672	248	18,135	8,600	755	0	0	32,420	2,107	195,879
	749	0	0	405	46,016	1,707,566	94,343	302,310	44,213	0	0	2,100	184	0	0	95,541	6,210	190,966
	750	0	0	0	0	893,211	49,350	66,661	9,749	0	0	6,952	610	0	0	0	0	59,709
	751	0	0	0	0	733,113	40,504	42,252	6,179	0	0	0	0	0	0	89,374	5,809	52,493
	752	0	0	654	74,307	446,754	24,683	29,362	4,294	0	0	0	0	0	0	254,501	16,543	119,827
	756	82	9,975	211	23,974	162,897	9,000	0	0	0	0	0	0	0	0	160,261	10,417	53,366
	757	47	5,717	198	22,497	60,848	3,362	16,081	2,352	0	0	1,000	88	0	0	800	52	34,068
	758	85	10,340	1,368	155,432	297,076	16,413	69,803	10,209	0	0	13,000	1,141	0	0	0	0	193,535
	906	30	3,649	234	26,587	522,911	28,891	10,061	1,471	78	5,704	3,992	350	0	0	118,460	7,700	74,353
	907	2	243	233	26,473	380,038	20,997	47,816	6,993	20	1,463	0	0	0	0	0	0	56,169
Subtotal			36,494		569,009		483,724		138,426		37,659		20,701		0		114,513	1,400,526

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2008 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
3. Mills																		
	731	0	0	0	0	101,632	5,615	33,770	4,939	0	0	913,841	80,190	0	0	0	0	90,744
	732	59	7,177	58	6,590	143,293	7,917	110,698	16,190	0	0	228,132	20,019	14,800	1,443	12,584	818	60,153
	733	7	852	11	1,250	204,821	11,316	20,679	3,024	22	1,609	37,292	3,272	338,720	33,025	1,400	91	54,439
	734	0	0	14	1,591	335,312	18,526	22,271	3,257	0	0	59,896	5,256	1,400,625	136,561	10,000	650	165,841
	736	1	122	2	227	458,987	25,359	89,558	13,098	0	0	197,053	17,291	0	0	8,000	520	56,617
	737	162	19,707	155	17,611	216,576	11,966	37,801	5,528	0	0	0	0	20,738	2,022	9,742	633	57,467
	738	201	24,451	117	13,294	12,659	699	114,257	16,710	0	0	0	0	0	0	0	0	55,154
	739	309	37,589	183	20,792	27,049	1,494	51,791	7,574	0	0	32,858	2,883	0	0	390,896	25,408	95,742
	740	794	96,588	111	12,612	7,104	392	2,960	433	0	0	0	0	0	0	2,718	177	110,202
	741	209	25,424	411	46,698	1,649	91	0	0	0	0	0	0	0	0	0	0	72,213
	742	77	9,367	868	98,622	82,949	4,583	51,601	7,547	0	0	0	0	0	0	80,752	5,249	125,367
	743	2	243	529	60,105	138,679	7,662	0	0	0	0	197,022	17,289	233,980	22,813	6,056	394	108,506
	744	0	0	0	0	1,030,719	56,947	600	88	0	0	3,600	316	0	0	0	0	57,351
	745	0	0	520	59,082	195,001	10,774	0	0	0	0	0	0	0	0	70,034	4,552	74,408
	839	584	71,042	8	909	2,954	163	2,754	403	0	0	0	0	0	0	17,000	1,105	73,622
	840	23	2,798	20	2,272	32,746	1,809	16,319	2,387	0	0	0	0	0	0	66,431	4,318	13,584
	841	145	17,639	404	45,902	16,424	907	114,206	16,703	0	0	0	0	0	0	48,774	3,170	84,322
	863	232	28,222	686	77,943	82,508	4,559	60,158	8,798	0	0	0	0	0	0	3,498	227	119,750
Subtotal			341,221		465,501		170,781		106,678		1,609		146,516		195,864		47,313	1,475,483
4. LS 1 & 7 North																		
	759	309	37,589	155	17,611	159,004	8,785	45,445	6,646	0	0	0	0	0	0	20,467	1,330	71,962
	760	219	26,641	222	25,224	381,422	21,074	224,197	32,789	0	0	3,500	307	0	0	39,184	2,547	108,581
	761	0	0	0	0	70,267	3,882	726,800	106,295	0	0	147,868	12,975	0	0	800	52	123,204
	762	487	59,242	452	51,356	150,328	8,306	21,227	3,104	0	0	0	0	4,432	432	17,475	1,136	123,577
	763	85	10,340	305	34,654	75,801	4,188	114,144	16,694	0	0	4,500	395	0	0	0	0	66,271
	764	143	17,396	126	14,316	164,096	9,066	34,920	5,107	0	0	0	0	0	0	0	0	45,885
	777	19	2,311	27	3,068	4,250	235	295,870	43,271	227	16,599	159,916	14,033	0	0	1,960	127	79,644
	788	7	852	156	17,725	24,225	1,338	25,709	3,760	0	0	0	0	0	0	292,173	18,991	42,666
Subtotal			154,371		163,954		56,874		217,666		16,599		27,710		432		24,184	661,789
5. LS 1 & 7 South																		
	836	761	92,574	806	91,578	4,190	231	85,420	12,493	0	0	0	0	0	0	50,000	3,250	200,126
	837	441	53,647	40	4,545	39,929	2,206	22,782	3,332	0	0	0	0	0	0	1,220	79	63,809
	838	362	44,036	0	0	0	0	0	0	0	0	0	0	0	0	39,363	2,559	46,595
	842	302	36,738	1,910	217,014	120,423	6,653	48,772	7,133	0	0	120,593	10,582	0	0	3,100	202	278,322
Subtotal			226,994		313,137		9,091		22,957		0		10,582		0		6,089	588,851

Appendix A: Projected Wastewater Flows by Plant, Subarea and 2025 TAZ

2008 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
6. LS 3G-2																		
	701	784	95,372	293	33,291	52,265	2,888	74,893	10,953	0	0	6,000	527	0	0	75,330	4,896	147,926
	702	361	43,915	340	38,631	25,430	1,405	61,444	8,986	0	0	9,700	851	0	0	61,927	4,025	97,813
	705	28	3,406	83	9,430	176,848	9,771	36,873	5,393	126	9,214	64,427	5,653	367,120	35,794	7,425	483	79,144
	706	184	22,383	14	1,591	72,893	4,027	0	0	0	0	71,912	6,310	1,602,731	156,266	64,797	4,212	194,790
	904	80	9,732	22	2,500	143,684	7,939	26,316	3,849	0	0	33,499	2,940	0	0	38,329	2,491	29,450
	923	336	40,874	59	6,704	11,061	611	41,679	6,096	0	0	21,473	1,884	0	0	254,037	16,512	72,680
Subtotal			215,681		92,146		26,641		35,276		9,214		18,165		192,060		32,620	621,803
7. LS 3G-3																		
	648	268	32,602	136	15,452	18,998	1,050	90,717	13,267	0	0	1,000	88	0	0	40,000	2,600	65,059
	700	789	95,980	103	11,703	129,099	7,133	161,019	23,549	0	0	17,170	1,507	0	0	161,585	10,503	150,374
	703	491	59,729	72	8,181	20,878	1,154	38,678	5,657	0	0	0	0	0	0	14,129	918	75,638
	704	40	4,866	171	19,429	166,086	9,176	203,763	29,800	0	0	38,082	3,342	0	0	2,136	139	66,752
	707	0	0	0	0	106,018	5,857	38,988	5,702	0	0	0	0	0	0	75,082	4,880	16,440
	713	152	18,490	82	9,317	147,231	8,135	85,906	12,564	0	0	230,189	20,199	22,385	2,183	1,493	97	70,984
Subtotal			211,667		64,082		32,504		90,539		0		25,135		2,183		19,138	445,247
8. LSLS3G-4																		
	708	367	44,645	0	0	119,096	6,580	9,779	1,430	0	0	4,880	428	0	0	24,875	1,617	54,700
	710	716	87,100	141	16,020	6,069	335	2,244	328	0	0	0	0	0	0	37,012	2,406	106,189
	779	488	59,364	181	20,565	26,208	1,448	63,736	9,321	0	0	0	0	0	0	94,212	6,124	96,822
Subtotal			191,108		36,586		8,363		11,080		0		428		0		10146.435	257,712
9. Colonial																		
	765	2	243	0	0	82,930	4,582	76,431	11,178	0	0	54,477	4,780	0	0	0	0	20,784
	766	0	0	0	0	25,800	1,425	342,718	50,123	0	0	136,696	11,995	0	0	5,723	372	63,915
	775	0	0	0	0	16,615	918	1,327,987	194,218	0	0	1,848	162	0	0	0	0	195,298
	776	34	4,136	0	0	739,044	40,832	0	0	0	0	1,858	163	0	0	0	0	45,131
Subtotal			4,379		0		47,757		255,519		0		17,101		0		372	325,128
10. NTC																		
	772	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	773	20	2,433	60	6,817	73,555	4,064	169,342	24,766	0	0	0	0	0	0	10,576	687	38,768
	774	0	0	212	24,087	219,698	12,138	114,666	16,770	0	0	120,944	10,613	0	0	9,500	618	64,226
	780	378	45,983	0	0	5,014	277	0	0	0	0	0	0	1,572	153	1,773	115	46,528
	781	1,135	138,070	1,868	212,242	796,634	44,014	200,030	29,254	0	0	0	0	678,000	66,105	245,142	15,934	505,620
Subtotal			186,486		243,147		60,493		70,791		0		10,613		66,258		17,354	655,142
Iron Bridge Total			1,869,722		2,219,433		1,199,927		1,131,639		146,908		350,780		457,064		322,547	7,698,039

Appendix A: Projected Wastewater Flows by Plant, Subarea and 2025 TAZ

Water Conserv I 2010																		
2010 FLOW	**Traffic zone**	**SF Res. Units**	**SF Res. Flow GPD**	**MF Res. Units**	**MF Res. Flow GPD**	**Office sq. ft.**	**Office Flow GPD**	**Retail sq. ft.**	**Retail Flow GPD**	**Hotel sq. ft.**	**Hotel Flow GPD**	**Industrial sq. ft.**	**Industrial Flow GPD**	**Hospital sq. ft.**	**Hospital Flow GPD**	**Gov. sq. ft.**	**Gov. Flow GPD**	**Total Flow GPD**
1. South Lake Nona																		
	477	0	0	0	0	400,000	20,910	200,000	27,675	0	0	200,000	16,605	0	0	298,000	18,327	83,517
	495	0	0	0	0	60,000	3,137	10,000	1,384	0	0	150,000	12,454	0	0	0	0	16,974
	505	550	63,303	100	10,750	10,000	523	120,000	16,605	0	0	0	0	0	0	280,000	17,220	108,401
Subtotal			63,303		10,750		24,570		45,664		0		29,059		0		35,547	208,892
2. North Lake Nona																		
	412	0	0	0	0	0	0	71,508	9,895	0	0	473,599	39,321	0	0	25,000	1,538	50,753
	504	1,782	205,103	1,053	113,200	108,610	5,678	228,511	31,620	36	2,491	101,914	8,461	0	0	115,269	7,089	373,642
	528	363	41,780	848	91,162	40,000	2,091	160,000	22,140	0	0	0	0	0	0	25,000	1,538	158,710
	529	1,414	162,748	474	50,956	38,773	2,027	22,560	3,122	0	0	0	0	0	0	0	0	218,852
Subtotal			409,631		255,317		9,795		66,777		2,491		47,782		0		10,164	801,957
3. Airport																		
	414	359	41,320	1	108	132,638	6,934	176,192	24,381	0	0	525,488	43,629	0	0	64,612	3,974	120,344
	415	98	11,280	0	0	102,741	5,371	10,541	1,459	0	0	1,239,082	102,875	0	0	0	0	120,984
	416	330	37,982	0	0	46,935	2,454	15,000	2,076	0	0	1,737,195	144,231	0	0	20,000	1,230	187,972
	494	0	0	0	0	0	0	8,231	1,139	446	30,858	0	0	0	0	4,446,950	273,487	305,484
	496	339	39,018	0	0	86,667	4,531	8,420	1,165	0	0	492,116	40,858	0	0	0	0	85,572
	497	60	6,906	0	0	152,904	7,993	16,089	2,226	0	0	890,849	73,963	0	0	307,000	18,881	109,968
	498	0	0	0	0	35,459	1,854	10,000	1,384	0	0	2,260,738	187,698	0	0	0	0	190,935
	499	0	0	0	0	34,633	1,810	27,930	3,865	0	0	917,722	76,194	0	0	0	0	81,869
	523	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	524	0	0	0	0	27,096	1,416	56,393	7,803	0	0	175,125	14,540	0	0	0	0	23,760
	525	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	526	0	0	0	0	51,500	2,692	160	22	0	0	113,526	9,425	0	0	0	0	12,140
	527	0	0	0	0	41,353	2,162	21,093	2,919	0	0	0	0	0	0	0	0	5,080
Subtotal			136,505		108		37,216		48,438		30,858		693,412		0		297,572	1,244,108
4. South 436																		
	399	0	0	0	0	836,864	43,747	430,282	59,540	2,078	143,772	534,355	44,365	0	0	0	0	291,424
	400	0	0	2,660	285,955	74,820	3,911	150,426	20,815	0	0	92,800	7,705	0	0	0	0	318,386
	474	0	0	0	0	106,840	5,585	179,519	24,841	0	0	350,213	29,076	0	0	0	0	59,502
	500	0	0	0	0	159,488	8,337	50,000	6,919	0	0	577,715	47,965	0	0	0	0	63,221
	501	0	0	327	35,153	261,588	13,675	245,465	33,966	0	0	160,000	13,284	0	0	57,584	3,541	99,619
	850	0	0	656	70,521	373,707	19,536	56,300	7,791	0	0	25,000	2,076	0	0	23,175	1,425	101,348
	851	228	26,242	0	0	65,000	3,398	60,572	8,382	250	17,297	0	0	0	0	0	0	55,319
	925	0	0	0	0	293,734	15,355	144,148	19,946	1,314	90,912	0	0	0	0	9,300	572	126,786
Subtotal			26,242		391,630		113,543		182,200		251,981		144,470		0		5,539	1,115,605

Appendix A: Projected Wastewater Flows by Plant, Subarea and 2025 TAZ

2010 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
5. North 436																		
	402	208	23,940	1,414	152,008	179,419	9,379	167,631	23,196	0	0	99,482	8,259	0	0	80,160	4,930	221,712
	475	0	0	538	57,836	133,592	6,984	6,422	889	0	0	58,143	4,827	0	0	0	0	70,536
	847	0	0	531	57,084	0	0	0	0	0	0	0	0	0	0	0	0	57,084
	848	0	0	417	44,828	2,000	105	197,066	27,269	0	0	0	0	0	0	0	0	72,202
Subtotal			23,940		311,756		16,467		51,354		0		13,087		0		4,930	421,533
6. LS69G-2																		
	403	0	0	1,390	149,428	14,804	774	2,520	349	0	0	0	0	0	0	0	0	150,550
	404	3	345	1,036	111,372	13,934	728	146,999	20,341	0	0	45,290	3,760	0	0	0	0	136,547
	405	706	81,259	1,516	162,973	4,844	253	33,728	4,667	0	0	0	0	0	0	55,000	3,383	252,535
	844	238	27,393	526	56,546	36,643	1,916	345,270	47,777	0	0	20,000	1,661	0	0	0	0	135,292
	845	1,071	123,269	1,492	160,393	3,457	181	169,707	23,483	0	0	0	0	0	0	0	0	307,326
	846	2	230	1,581	169,961	79,649	4,164	538,893	74,569	0	0	0	0	0	0	0	0	248,924
Subtotal			232,496		810,673		8,015		171,186		0		5,421		0		3,383	1,231,174
7. LS69G-1																		
	407	0	0	726	78,046	0	0	0	0	0	0	0	0	0	0	0	0	78,046
	408	181	20,833	483	51,923	4,888	256	60,226	8,334	0	0	70,200	5,828	0	0	130,000	7,995	95,169
	409	696	80,108	752	80,842	33,499	1,751	152,984	21,169	0	0	0	0	0	0	0	0	183,870
	476	392	45,118	565	60,739	13,600	711	85,166	11,785	0	0	0	0	0	0	47,062	2,894	121,247
Subtotal			146,058		271,550		2,718		41,288		0		5,828		0		10,889	478,332
8. LS12																		
	350	100	11,510	32	3,440	5,000	261	24,226	3,352	0	0	0	0	0	0	157,988	9,716	28,280
	351	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	769	235	27,048	0	0	9,434	493	101,827	14,090	0	0	0	0	0	0	59,724	3,673	45,304
	833	575	66,181	197	21,178	68,978	3,606	22,206	3,073	0	0	0	0	0	0	138,856	8,540	102,577
Subtotal			104,738		24,618		4,360		20,515		0		0		0		21,929	176,161
9. Conway(69fm-2)																		
	767	1	115	0	0	165,487	8,651	302,881	41,911	0	0	698,031	57,954	0	0	2,400	148	108,779
	768	0	0	0	0	36,623	1,914	174,718	24,177	0	0	76,299	6,335	0	0	0	0	32,426
	834	757	87,129	558	59,986	62,312	3,257	15,207	2,104	0	0	7,614	632	47,865	4,416	18,520	1,139	158,663
	835	590	67,907	270	29,026	13,413	701	53,806	7,445	0	0	2,600	216	0	0	69,230	4,258	109,553
	843	481	55,362	466	50,096	35,370	1,849	161,207	22,307	0	0	2,400	199	0	0	10,609	652	130,465
Subtotal			210,513		139,108		16,373		97,944		0		65,336		4,416		6,197	539,886
Water Conserv I Total			1,353,426		2,215,510		233,057		725,366		285,330		1,004,395		4,416		396,150	6,217,649

Appendix A: Projected Wastewater Flows by Plant, Subarea and 2025 TAZ

2010 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
Water Conserv II 2010																		
	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. Lift Station 85																		
	642	0	0	0	0	169,092	13,510	178,225	37,695	0	0	313,804	39,822	0	0	0	0	91,027
	652	188	33,073	585	96,123	58,958	4,711	14,685	3,106	0	0	0	0	0	0	32,892	3,092	140,104
	653	20	3,518	1,440	236,609	415,499	33,198	96,356	20,379	0	0	186,685	23,690	44,009	6,205	0	0	323,601
	654	1,107	194,745	2,276	373,974	24,547	1,961	330,345	69,868	0	0	0	0	0	0	99,949	9,395	649,943
Subtotal			231,336		706,706		53,381		131,048		0		63,512		6,205		12,487	1,204,675
2. Lift Station 45																		
	649	0	0	0	0	82,231	6,570	33,612	7,109	0	0	960,397	121,874	0	0	0	0	135,554
	650	1	176	0	0	124,874	9,977	24,882	5,263	0	0	2,123,774	269,507	0	0	0	0	284,923
	651	0	0	0	0	336,944	26,922	67,206	14,214	0	0	3,032,837	384,867	0	0	15,000	1,410	427,413
	655	615	108,191	571	93,822	11,421	913	27,255	5,764	0	0	9,960	1,264	5,400	761	22,551	2,120	212,836
	659	211	37,119	161	26,454	6,336	506	70,532	14,918	0	0	0	0	0	0	149,834	14,084	93,082
	660	133	23,397	568	93,329	31,140	2,488	5,440	1,151	0	0	195,405	24,797	194,493	27,424	2,276	214	172,800
	661	0	0	0	0	295,023	23,572	337,044	71,285	0	0	1,484,819	188,424	0	0	0	0	283,281
	662	52	9,148	651	106,967	66,429	5,308	32,649	6,905	0	0	331,853	42,112	66,995	9,446	120,808	11,356	191,242
	663	108	18,999	269	44,200	0	0	131,742	27,863	0	0	111,979	14,210	0	0	93,150	8,756	114,029
	690	147	25,860	42	6,901	180,976	14,460	262,878	55,599	0	0	0	0	0	0	0	0	102,820
	691	0	0	0	0	30,000	2,397	36,000	7,614	0	0	0	0	0	0	0	0	10,011
	692	0	0	0	0	130,895	10,459	118,506	25,064	0	0	451,550	57,302	0	0	80,000	7,520	100,344
	693	9	1,583	0	0	9,110	728	11,345	2,399	0	0	327,420	41,550	0	0	0	0	46,260
	694	252	44,332	14	2,300	121,179	9,682	16,650	3,521	0	0	98,333	12,478	0	0	0	0	72,315
	699	47	8,268	25	4,108	32,913	2,630	25,042	5,296	0	0	350,133	44,432	0	0	0	0	64,734
	897	0	0	0	0	1,104	88	204,101	43,167	0	0	569,865	72,316	0	0	0	0	115,571
	898	0	0	0	0	8,343	667	192,320	40,676	0	0	74,198	9,416	0	0	0	0	50,758
	903	0	0	0	0	25,850	2,065	74,627	15,784	0	0	632,550	80,271	0	0	0	0	98,120
Subtotal			277,076		378,082		119,432		353,592		0		1,364,819		37,631		45,460	2,576,092
3. Willie Mays																		
	664	6	1,056	0	0	142,772	11,407	379,313	80,225	499	52,769	866,074	109,905	0	0	0	0	255,362
	665	0	0	0	0	0	0	56,658	11,983	0	0	14,368	1,823	0	0	0	0	13,806
	671	604	106,256	96	15,774	9,048	723	22,870	4,837	0	0	755,525	95,876	0	0	83,713	7,869	231,335
	675	454	79,868	222	36,477	21,920	1,751	52,590	11,123	0	0	980	124	0	0	108,033	10,155	139,499
	676	146	25,684	192	31,548	7,256	580	15,000	3,173	0	0	82,772	10,504	0	0	5,000	470	71,958
Subtotal			212,864		83,799		14,462		111,340		52,769		218,232		0		18,494	711,961

Appendix A: Projected Wastewater Flows by Plant, Subarea and 2025 TAZ

2010 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
4. Bruton																		
	672	1,486	261,419	42	6,901	2,890	231	84,305	17,831	0	0	0	0	0	0	276,617	26,002	312,383
	677	588	103,442	302	49,622	800	64	27,264	5,766	0	0	0	0	66,321	9,351	131,083	12,322	180,567
	680	377	66,322	194	31,877	5,778	462	33,986	7,188	0	0	17,682	2,244	0	0	41,274	3,880	111,972
	681	391	68,785	216	35,491	96,973	7,748	0	0	205	21,679	84,312	10,699	0	0	561,992	52,827	197,230
	682	108	18,999	194	31,877	7,724	617	28,132	5,950	0	0	257,278	32,649	0	0	119,678	11,250	101,341
Subtotal			518,967		155,768		9,122		36,735		21,679		45,592		9,351		106,281	903,493
5. Raleigh-Frazier																		
	673	526	92,534	1,962	322,380	10,128	809	21,090	4,461	0	0	163,238	20,715	0	0	77,967	7,329	448,228
	674	512	90,072	1,016	166,941	156,306	12,489	61,473	13,002	0	0	0	0	0	0	33,025	3,104	285,607
	902	0	0	786	129,149	65,475	5,231	8,200	1,734	0	0	234,135	29,712	0	0	0	0	165,827
Subtotal			182,606		618,470		18,530		19,196		0		50,427		0		10,433	899,662
6. North Kirkman																		
	348	181	31,842	2,486	408,480	66,000	5,273	132,111	27,941	0	0	102,114	12,958	47,280	6,666	11,836	1,113	494,274
	349	0	0	1,120	184,029	727,907	58,160	510,223	107,912	0	0	9,300	1,180	0	0	464,640	43,676	394,958
	492	104	18,296	5,364	881,370	431,168	34,450	613,387	129,731	0	0	11,978	1,520	0	0	11,939	1,122	1,066,489
	603	939	165,190	611	100,395	48,215	3,852	39,965	8,453	0	0	691	88	0	0	89,378	8,402	286,379
Subtotal			215,327		1,574,273		101,736		274,038		0		15,746		6,666		54,313	2,242,099
7. South Kirkman 1																		
	444	334	58,758	1,586	260,599	136,415	10,900	99,338	21,010	0	0	0	0	0	0	0	0	351,266
	486	0	0	0	0	156,016	12,466	54,616	11,551	326	34,475	0	0	9,733	1,372	8,836	831	60,694
	493	0	0	982	161,354	5,000	400	272,575	57,650	0	0	5,549	704	0	0	0	0	220,108
Subtotal			58,758		421,953		23,765		90,211		34,475		704		1,372		831	632,068
8. South Kirkman 2																		
	443	0	0	0	0	312,896	25,000	121,204	25,635	2,681	283,516	0	0	0	0	0	0	334,151
	446	1	176	160	26,290	30,397	2,429	27,630	5,844	0	0	0	0	0	0	327,335	30,769	65,508
	485	0	0	336	55,209	0	0	898,638	190,062	0	0	0	0	0	0	0	0	245,271
	983	0	0	0	0	771,267	61,624	12,990	2,747	0	0	512,826	65,078	0	0	545	51	129,500
	986	0	0	0	0	0	0	976,849	206,604	0	0	0	0	0	0	0	0	206,604
	987	0	0	386	63,424	45,446	3,631	1,088,431	230,203	1,134	119,921	0	0	0	0	0	0	417,179
	989	0	0	0	0	0	0	755,589	159,807	0	0	0	0	0	0	0	0	159,807
	990	0	0	0	0	98,990	7,909	701,665	148,402	2,394	253,166	52,948	6,719	0	0	0	0	416,196
Subtotal			176		144,923		100,594		969,304		656,602		71,797		0		30,820	1,974,216
9. Lift Station 29																		
	981	0	0	334	54,880	16,969	1,356	126,313	26,715	2,866	303,080	0	0	0	0	840	79	386,110
	995	0	0	0	0	33,618	2,686	235,671	49,844	1,828	193,311	48,269	6,125	0	0	0	0	251,967
	996	0	0	0	0	181,832	14,528	138,742	29,344	893	94,435	180,823	22,946	0	0	0	0	161,253
Subtotal			0		54,880		18,570		105,904		590,826		29,071		0		79	799,330

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2010 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
10. Vineland																		
	668	0	0	3,566	585,937	55,427	4,429	44,615	9,436	0	0	0	0	0	0	80,000	7,520	607,321
	669	0	0	464	76,241	68,761	5,494	26,080	5,516	0	0	172,002	21,827	0	0	31,226	2,935	112,013
	670	0	0	777	127,670	331,515	26,488	41,797	8,840	0	0	3,105,207	394,051	0	0	0	0	557,049
	880	0	0	2,448	402,236	902,921	72,143	41,740	8,828	0	0	0	0	0	0	111,351	10,467	493,674
	881	0	0	0	0	0	0	1,805,865	381,940	0	0	0	0	0	0	0	0	381,940
	899	0	0	0	0	336,170	26,860	12,000	2,538	0	0	0	0	0	0	0	0	29,398
	900	0	0	1,912	314,165	49,861	3,984	80,180	16,958	224	23,688	109,148	13,851	0	0	0	0	372,645
	901	1	176	0	0	307,847	24,597	132,452	28,014	0	0	359,394	45,607	0	0	15,942	1,499	99,892
	924	0	0	1,831	300,855	234,820	18,762	801,234	169,461	375	39,656	0	0	0	0	84,420	7,935	536,670
Subtotal			176		1,807,103		182,757		631,531		63,344		475,336		0		30,356	3,190,604
11. Tampa North																		
	688	137	24,101	54	8,873	393,833	31,467	135,885	28,740	111	11,738	50,083	6,356	0	0	47,202	4,437	115,712
	689	310	54,536	88	14,459	169,788	13,566	34,881	7,377	152	16,074	87,518	11,106	0	0	0	0	117,118
	719	42	7,389	99	16,267	79,090	6,319	114,849	24,291	0	0	236,299	29,986	0	0	27,038	2,542	86,793
	720	177	31,138	457	75,091	47,553	3,799	211,423	44,716	0	0	271,445	34,446	0	0	47,974	4,510	193,700
	721	6	1,056	58	9,530	423,408	33,830	82,923	17,538	290	30,668	65,082	8,259	0	0	724,175	68,072	168,953
	724	25	4,398	121	19,882	157,952	12,620	374,824	79,275	0	0	315,896	40,087	22,260	3,139	10,354	973	160,375
Subtotal			122,617		144,102		101,603		201,937		58,480		130,240		3,139		80,534	842,651
12. Tampa South																		
	678	188	33,073	740	121,591	12,250	979	56,825	12,018	0	0	0	0	0	0	125,215	11,770	179,432
	679	219	38,527	162	26,619	1,128	90	57,037	12,063	0	0	0	0	0	0	160,002	15,040	92,339
	684	210	36,943	10	1,643	8,737	698	67,320	14,238	0	0	10,000	1,269	0	0	0	0	54,792
	685	0	0	0	0	69,204	5,529	14,193	3,002	328	34,686	21,690	2,752	0	0	160,744	15,110	61,080
	686	45	7,916	111	18,239	49,051	3,919	229,490	48,537	0	0	376,173	47,736	0	0	207,336	19,490	145,837
	687	48	8,444	119	19,553	24,778	1,980	87,213	18,446	0	0	312,903	39,707	0	0	32,043	3,012	91,142
	725	136	23,925	376	61,781	32,416	2,590	90,186	19,074	0	0	95,049	12,062	0	0	25,713	2,417	121,850
	727	148	26,036	455	74,762	500	40	49,747	10,521	0	0	34,547	4,384	0	0	13,667	1,285	117,028
	728	281	49,434	145	23,825	48,966	3,912	34,154	7,224	32	3,384	2,000	254	0	0	52,185	4,905	92,938
	729	25	4,398	2	329	102,638	8,201	37,866	8,009	0	0	63,868	8,105	0	0	10,000	940	29,981
	735	7	1,231	2	329	131,193	10,482	58,427	12,357	0	0	424,480	53,867	0	0	0	0	78,266
Subtotal			229,929		348,670		38,421		165,490		38,070		170,136		0		73,969	1,064,685
Water Conserv II Total			2,049,832		6,438,729		782,373		3,090,326		1,516,245		2,635,612		64,364		464,057	17,041,536

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Iron Bridge 2010																		
	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. Lift Station 2																		
	695	497	60,459	103	11,703	47,418	2,620	62,603	9,156	184	13,455	2,500	219	0	0	0	0	97,612
	696	246	29,925	218	24,769	154,614	8,542	32,749	4,790	0	0	0	0	0	0	43,551	2,831	70,857
	697	272	33,088	10	1,136	76,751	4,240	63,733	9,321	0	0	5,200	456	0	0	94,341	6,132	54,374
	698	521	63,378	21	2,386	2,130	118	130,307	19,057	0	0	184,035	16,149	0	0	3,996	260	101,348
	711	256	31,142	104	11,816	145,504	8,039	145,681	21,306	0	0	0	0	0	0	29,800	1,937	74,240
	712	245	29,804	169	19,202	75,115	4,150	143,214	20,945	0	0	81,392	7,142	0	0	17,862	1,161	82,404
	714	157	19,099	42	4,772	225,106	12,437	191,310	27,979	0	0	102,372	8,983	0	0	371,063	24,119	97,389
	715	150	18,247	102	11,589	164,077	9,065	83,816	12,258	0	0	7,500	658	2,737	267	1,500	98	52,182
	716	7	852	246	27,951	555,087	30,669	128,547	18,800	337	24,643	3,897	342	0	0	30,408	1,977	105,232
	717	13	1,581	842	95,668	853,471	47,154	91,319	13,355	295	21,572	1,000	88	0	0	0	0	179,419
	718	0	0	326	37,040	293,471	16,214	29,249	4,278	303	22,157	0	0	0	0	149,221	9,699	89,388
	753	0	0	349	39,653	2,128,968	117,625	74,133	10,842	0	0	21,590	1,895	0	0	25,065	1,629	171,645
	754	0	0	20	2,272	483,076	26,690	74,008	10,824	0	0	301,454	26,453	0	0	0	0	66,239
	755	77	9,367	199	22,610	115,559	6,385	46,868	6,854	0	0	0	0	0	0	15,000	975	46,191
	905	42	5,109	471	53,515	279,636	15,450	13,471	1,970	0	0	0	0	0	0	0	0	76,044
Subtotal			302,051		366,084		309,399		191,735		81,827		62,385		267		50,817	1,364,565
2. Downtown																		
	722	5	608	49	5,567	251,126	13,875	22,405	3,277	0	0	106,772	9,369	0	0	336,000	21,840	54,536
	723	1	122	326	37,040	172,605	9,536	96,098	14,054	0	0	81,371	7,140	0	0	184,585	11,998	79,891
	726	48	5,839	286	32,495	27,349	1,511	67,106	9,814	0	0	12,119	1,063	0	0	842,524	54,764	105,487
	746	0	0	961	109,189	800,606	44,233	373	55	169	12,358	0	0	0	0	0	0	165,835
	747	0	0	276	31,359	291,828	16,123	21,118	3,089	0	0	0	0	0	0	502,052	32,633	83,205
	748	0	0	310	35,222	2,063,134	113,988	175,536	25,672	248	18,135	8,600	755	0	0	32,420	2,107	195,879
	749	0	0	405	46,016	1,707,566	94,343	302,310	44,213	0	0	2,100	184	0	0	95,541	6,210	190,966
	750	0	0	0	0	893,211	49,350	48,874	7,148	0	0	6,952	610	0	0	0	0	57,108
	751	0	0	0	0	733,113	40,504	42,252	6,179	0	0	0	0	0	0	89,374	5,809	52,493
	752	0	0	694	78,852	442,375	24,441	29,362	4,294	0	0	0	0	0	0	254,501	16,543	124,130
	756	82	9,975	211	23,974	162,897	9,000	0	0	0	0	0	0	0	0	160,261	10,417	53,366
	757	47	5,717	198	22,497	60,848	3,362	16,081	2,352	0	0	1,000	88	0	0	800	52	34,068
	758	85	10,340	1,720	195,426	294,346	16,263	103,142	15,085	0	0	13,000	1,141	0	0	0	0	238,254
	906	30	3,649	314	35,677	522,911	28,891	17,026	2,490	78	5,704	3,992	350	0	0	118,460	7,700	84,461
	907	2	243	275	31,246	341,271	18,855	47,816	6,993	20	1,463	0	0	0	0	0	0	58,800
Subtotal			36,494		684,561		484,277		144,714		37,660		20,701		0		170,074	1,578,479

2010 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
3. Mills																		
	731	0	0	0	0	104,632	5,781	33,770	4,939	0	0	913,841	80,190	0	0	0	0	90,909
	732	56	6,812	388	44,085	163,293	9,022	310,698	45,440	0	0	228,132	20,019	14,800	1,443	12,584	818	127,638
	733	6	730	11	1,250	213,821	11,814	25,679	3,756	120	8,775	37,292	3,272	338,720	33,025	1,400	91	62,712
	734	0	0	12	1,363	255,044	14,091	24,271	3,550	0	0	79,896	7,011	1,316,803	128,388	10,000	650	155,053
	736	1	122	2	227	393,704	21,752	88,558	12,952	0	0	197,053	17,291	0	0	8,000	520	52,864
	737	163	19,829	161	18,293	218,576	12,076	37,801	5,528	0	0	0	0	20,738	2,022	9,742	633	58,381
	738	201	24,451	146	16,589	19,819	1,095	127,922	18,709	0	0	0	0	0	0	0	0	60,843
	739	309	37,589	189	21,474	27,049	1,494	55,735	8,151	0	0	32,858	2,883	0	0	390,896	25,408	97,000
	740	796	96,831	117	13,294	7,104	392	2,960	433	0	0	0	0	0	0	2,718	177	111,127
	741	210	25,546	411	46,698	1,649	91	0	0	0	0	0	0	0	0	0	0	72,335
	742	77	9,367	868	98,622	82,949	4,583	51,601	7,547	0	0	0	0	0	0	80,752	5,249	125,367
	743	2	243	529	60,105	164,679	9,099	0	0	0	0	197,022	17,289	233,980	22,813	6,056	394	109,942
	744	0	0	0	0	1,158,719	64,019	600	88	0	0	3,600	316	0	0	0	0	64,423
	745	0	0	520	59,082	117,852	6,511	0	0	0	0	0	0	0	0	0	0	65,594
	839	584	71,042	8	909	2,954	163	2,754	403	0	0	0	0	0	0	17,000	1,105	73,622
	840	23	2,798	20	2,272	35,746	1,975	16,319	2,387	0	0	0	0	0	0	66,431	4,318	13,750
	841	145	17,639	404	45,902	16,424	907	116,206	16,995	0	0	0	0	0	0	48,774	3,170	84,614
	863	232	28,222	690	78,398	82,508	4,559	60,158	8,798	0	0	0	0	0	0	3,498	227	120,204
Subtotal			341,221		508,563		169,425		139,673		8,775		148,271		187,691		42,760	1,546,381
4. LS 1 & 7 North																		
	759	309	37,589	155	17,611	159,004	8,785	45,445	6,646	0	0	0	0	0	0	20,467	1,330	71,962
	760	219	26,641	222	25,224	381,422	21,074	224,197	32,789	0	0	3,500	307	0	0	39,184	2,547	108,581
	761	0	0	0	0	70,267	3,882	741,800	108,488	0	0	102,868	9,027	0	0	800	52	121,449
	762	487	59,242	452	51,356	152,328	8,416	21,227	3,104	0	0	0	0	4,432	432	17,475	1,136	123,687
	763	85	10,340	308	34,995	75,801	4,188	116,144	16,986	0	0	4,500	395	0	0	0	0	66,904
	764	145	17,639	126	14,316	154,096	8,514	28,920	4,230	0	0	0	0	0	0	0	0	44,698
	777	19	2,311	27	3,068	9,250	511	303,870	44,441	227	16,599	159,916	14,033	0	0	1,960	127	81,090
	788	7	852	156	17,725	24,225	1,338	25,709	3,760	0	0	0	0	0	0	292,173	18,991	42,666
Subtotal			154,614		164,295		56,708		220,444		16,599		23,761		432		24,184	661,038
5. LS 1 & 7 South																		
	836	763	92,817	806	91,578	4,190	191,221	85,420	12,493	0	0	0	0	0	0	50,000	3,250	391,359
	837	441	53,647	40	4,545	39,929	2,206	22,782	3,332	0	0	0	0	0	0	1,220	79	63,809
	838	362	44,036	0	0	0	0	0	0	0	0	0	0	0	0	39,363	2,559	46,595
	842	303	36,859	1,910	217,014	121,923	6,736	48,772	7,133	0	0	120,593	10,582	0	0	3,100	202	278,526
Subtotal			227,359		313,137		200,163		22,958		0		10,582		0		6,090	780,288

Appendix A: Projected Wastewater Flows by Plant, Subarea and 2025 TAZ

2010 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
6. LS 3G-2																		
	701	784	95,372	293	33,291	52,265	2,888	77,893	11,392	0	0	6,000	527	0	0	75,330	4,896	148,365
	702	361	43,915	445	50,561	60,667	3,352	83,691	12,240	0	0	9,700	851	0	0	61,927	4,025	114,944
	705	24	2,920	83	9,430	226,848	12,533	36,873	5,393	126	9,214	64,427	5,653	377,120	36,769	7,425	483	82,395
	706	184	22,383	14	1,591	222,893	12,315	0	0	0	0	71,912	6,310	1,602,731	156,266	64,797	4,212	203,077
	904	79	9,610	22	2,500	218,684	12,082	35,816	5,238	0	0	33,499	2,940	0	0	38,329	2,491	34,861
	923	340	41,360	59	6,704	11,061	611	41,679	6,096	0	0	21,473	1,884	0	0	254,037	16,512	73,167
Subtotal			215,559		104,076		43,781		40,358		9,214		18,165		193,035		32,620	656,809
7. LS 3G-3																		
	648	254	30,898	296	33,632	18,998	1,050	90,717	13,267	0	0	5,880	516	0	0	40,000	2,600	81,963
	700	672	81,747	105	11,930	137,143	7,577	92,356	13,507	0	0	17,170	1,507	0	0	161,585	10,503	126,771
	703	492	59,851	72	8,181	22,378	1,236	38,678	5,657	0	0	0	0	0	0	14,129	918	75,843
	704	40	4,866	175	19,884	181,086	10,005	203,763	29,800	0	0	38,082	3,342	0	0	2,136	139	68,035
	707	0	0	0	0	106,018	5,857	38,988	5,702	0	0	0	0	0	0	75,082	4,880	16,440
	713	152	18,490	446	50,675	300,153	16,583	126,314	18,473	0	0	172,189	15,110	22,385	2,183	1,493	97	121,611
Subtotal			195,852		124,300		42,309		86,407		0		20,474		2,183		19,138	490,663
8. LSLS3G-4																		
	708	369	44,888	0	0	119,096	6,580	9,779	1,430	0	0	4,880	428	0	0	24,875	1,617	54,943
	710	716	87,100	141	16,020	7,069	391	3,244	474	0	0	0	0	0	0	47,012	3,056	107,041
	779	489	59,486	181	20,565	26,208	1,448	63,736	9,321	0	0	0	0	0	0	94,212	6,124	96,944
Subtotal			191,473		36,586		8,419		11,226		0		428		0		10,796	258,928
9. Colonial																		
	765	2	243	0	0	84,930	4,692	80,431	11,763	0	0	54,477	4,780	0	0	0	0	21,479
	766	0	0	0	0	25,800	1,425	347,718	50,854	0	0	111,696	9,801	0	0	5,723	372	62,453
	775	0	0	0	0	16,615	918	1,327,987	194,218	0	0	1,848	162	0	0	0	0	195,298
	776	34	4,136	0	0	739,044	40,832	0	0	0	0	1,858	163	0	0	0	0	45,131
Subtotal			4,379		0		47,868		256,835		0		14,907		0		372	324,361
10. NTC																		
	772	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	773	20	2,433	60	6,817	77,555	4,285	173,342	25,351	0	0	2,800	246	0	0	10,576	687	39,819
	774	0	0	212	24,087	219,698	12,138	99,666	14,576	0	0	95,944	8,419	0	0	9,500	618	59,838
	780	378	45,983	0	0	5,014	277	0	0	0	0	0	0	1,572	153	1,773	115	46,528
	781	1,395	169,698	2,820	320,408	1,398,046	77,242	295,303	43,188	0	0	0	0	678,000	66,105	259,142	16,844	693,486
Subtotal			218,114		351,313		93,942		83,115		0		8,665		66,258		18,264	839,672
Iron Bridge Total			1,887,116		2,652,915		1,456,291		1,197,465		154,075		328,339		449,866		375,115	8,501,183

Water Conserv I
2015

2015 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. South Lake Nona																		
	477	0	0	0	0	1,038,510	54,288	800,000	110,700	250	17,297	1,260,000	104,612	600,000	55,350	698,000	42,927	385,173
	495	0	0	0	0	135,000	7,057	25,000	3,459	0	0	350,000	29,059	0	0	0	0	39,575
	505	1,592	183,235	1,874	201,459	85,000	4,443	320,000	44,280	300	20,756	25,000	2,076	0	0	375,000	23,063	479,311
Subtotal			183,235		201,459		65,789		158,439		38,053		135,746		55,350		65,990	904,060
2. North Lake Nona																		
	412	0	0	0	0	100,000	5,228	131,508	18,197	0	0	773,599	64,228	0	0	45,000	2,768	90,420
	504	2,282	262,652	1,553	166,951	470,100	24,574	378,511	52,376	304	21,033	201,914	16,764	0	0	205,269	12,624	556,974
	528	605	69,634	1,469	157,920	190,000	9,932	1,260,000	174,353	0	0	0	0	0	0	105,000	6,458	418,297
	529	1,414	162,748	474	50,956	40,248	2,104	222,560	30,797	0	0	0	0	0	0	0	0	246,604
Subtotal			495,033		375,827		41,838		275,723		21,033		80,992		0		21,849	1,312,296
3. Airport																		
	414	381	43,852	121	13,008	232,638	12,161	276,192	38,218	0	0	575,488	47,780	0	0	64,612	3,974	158,993
	415	98	11,280	0	0	112,741	5,894	10,541	1,459	0	0	1,344,082	111,592	0	0	0	0	130,224
	416	330	37,982	0	0	71,935	3,760	15,000	2,076	0	0	1,887,195	156,684	0	0	25,000	1,538	202,040
	494	0	0	0	0	0	0	8,231	1,139	446	30,858	0	0	0	0	4,446,950	273,487	305,484
	496	445	51,218	220	23,650	91,667	4,792	8,420	1,165	0	0	642,116	53,312	0	0	0	0	134,137
	497	150	17,265	0	0	172,904	9,039	16,089	2,226	0	0	1,110,849	92,228	0	0	317,000	19,496	140,253
	498	0	0	0	0	45,459	2,376	13,000	1,799	0	0	2,260,738	187,698	0	0	0	0	191,873
	499	0	0	0	0	44,633	2,333	27,930	3,865	0	0	1,017,722	84,496	0	0	0	0	90,694
	523	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	524	0	0	0	0	27,096	1,416	56,393	7,803	0	0	175,125	14,540	0	0	0	0	23,760
	525	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	526	0	0	0	0	51,500	2,692	160	22	0	0	113,526	9,425	0	0	3,000,000	184,500	196,640
	527	0	0	0	0	41,353	2,162	21,093	2,919	0	0	0	0	0	0	0	0	5,080
Subtotal			161,597		36,658		46,625		62,691		30,858		757,756		0		482,994	1,579,178
4. South 436																		
	399	0	0	0	0	916,864	47,929	824,100	114,035	2,258	156,225	584,355	48,516	0	0	0	0	366,705
	400	0	0	2,660	285,955	84,820	4,434	210,426	29,118	0	0	112,800	9,365	0	0	0	0	328,872
	474	0	0	0	0	156,840	8,199	219,519	30,376	0	0	479,263	39,791	0	0	0	0	78,366
	500	0	0	0	0	174,488	9,121	90,000	12,454	120	8,303	647,715	53,777	0	0	0	0	83,654
	501	0	0	508	54,611	361,588	18,902	245,465	33,966	0	0	265,000	22,002	0	0	57,584	3,541	133,022
	850	0	0	656	70,521	448,707	23,456	66,300	9,174	0	0	75,000	6,227	0	0	23,175	1,425	110,804
	851	228	26,242	0	0	115,000	6,012	85,572	11,841	250	17,297	100,000	8,303	0	0	0	0	69,694
	925	0	0	0	0	393,734	20,582	154,148	21,330	1,314	90,912	0	0	0	0	9,300	572	133,397
Subtotal			26,242		411,088		138,635		262,294		272,737		187,980		0		5,539	1,304,515
5. North 436																		
	402	232	26,703	1,414	152,008	179,419	9,379	167,631	23,196	0	0	99,482	8,259	0	0	80,160	4,930	224,475
	475	0	0	538	57,836	143,592	7,506	6,422	889	0	0	58,143	4,827	0	0	0	0	71,058
	847	0	0	531	57,084	0	0	0	0	0	0	0	0	0	0	0	0	57,084
	848	0	0	417	44,828	2,000	105	197,066	27,269	0	0	0	0	0	0	0	0	72,202
Subtotal			26,703		311,756		16,990		51,354		0		13,087		0		4,930	424,819

2015 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
6. LS69G-2																		
	403	0	0	1,390	149,428	14,804	774	2,520	349	0	0	0	0	0	0	0	0	150,550
	404	3	345	1,036	111,372	13,934	728	146,999	20,341	0	0	45,290	3,760	0	0	0	0	136,547
	405	706	81,259	1,516	162,973	4,844	253	33,728	4,667	0	0	0	0	0	0	55,000	3,383	252,535
	844	238	27,393	526	56,546	36,643	1,916	345,270	47,777	0	0	20,000	1,661	0	0	0	0	135,292
	845	1,072	123,384	1,492	160,393	3,457	181	169,707	23,483	0	0	0	0	0	0	0	0	307,441
	846	2	230	1,581	169,961	79,649	4,164	538,893	74,569	0	0	0	0	0	0	0	0	248,924
Subtotal			232,612		810,673		8,015		171,186		0		5,421		0		3,383	1,231,289
7. LS69G-1																		
	407	0	0	726	78,046	0	0	0	0	0	0	0	0	0	0	0	0	78,046
	408	181	20,833	483	51,923	4,888	256	70,226	9,718	0	0	70,200	5,828	0	0	130,000	7,995	96,552
	409	696	80,108	752	80,842	33,499	1,751	152,984	21,169	0	0	0	0	0	0	0	0	183,870
	476	392	45,118	565	60,739	18,600	972	85,166	11,785	0	0	0	0	0	0	47,062	2,894	121,508
Subtotal			146,058		271,550		2,979		42,672		0		5,828		0		10,889	479,977
8. LS12																		
	350	100	11,510	32	3,440	5,000	261	24,226	3,352	0	0	0	0	0	0	157,988	9,716	28,280
	351	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	769	235	27,048	0	0	9,434	493	101,827	14,090	0	0	0	0	0	0	59,724	3,673	45,304
	833	579	66,641	205	22,038	71,978	3,763	26,206	3,626	0	0	0	0	0	0	138,856	8,540	104,608
Subtotal			105,199		25,478		4,517		21,069		0		0		0		21,929	178,192
9. Conway(69fm-2)																		
	767	1	115	0	0	165,487	8,651	305,881	42,326	0	0	698,031	57,954	0	0	2,400	148	109,194
	768	0	0	0	0	36,623	1,914	177,718	24,592	0	0	76,299	6,335	0	0	0	0	32,841
	834	759	87,359	558	59,986	62,312	3,257	15,207	2,104	0	0	7,614	632	47,865	4,416	18,520	1,139	158,894
	835	590	67,907	270	29,026	13,413	701	53,806	7,445	0	0	2,600	216	0	0	69,230	4,258	109,553
	843	481	55,362	466	50,096	35,370	1,849	166,207	22,999	0	0	2,400	199	0	0	10,609	652	131,157
Subtotal			210,743		139,108		16,373		99,467		0		65,336		4,416		6,197	541,639
Water Conserv I Total			1,587,422		2,583,597		341,761		1,144,895		362,681		1,252,146		59,761		623,700	7,955,963

Water Conserv II
2015

2015 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. Lift Station 85																		
	642	0	0	0	0	169,092	13,510	178,225	37,695	0	0	328,804	41,725	0	0	0	0	92,930
	652	188	33,073	585	96,123	58,958	4,711	14,685	3,106	0	0	0	0	0	0	32,892	3,092	140,104
	653	20	3,518	1,440	236,609	415,499	33,198	96,356	20,379	0	0	186,685	23,690	44,009	6,205	0	0	323,601
	654	1,107	194,745	2,276	373,974	24,547	1,961	340,345	71,983	0	0	0	0	0	0	99,949	9,395	652,058
Subtotal			231,336		706,706		53,381		133,163		0		65,416		6,205		12,487	1,208,694
2. Lift Station 45																		
	649	0	0	0	0	82,231	6,570	33,612	7,109	0	0	960,397	121,874	0	0	0	0	135,554
	650	1	176	0	0	134,874	10,776	24,882	5,263	0	0	2,123,774	269,507	0	0	0	0	285,722
	651	0	0	0	0	346,944	27,721	72,206	15,272	0	0	3,032,837	384,867	0	0	15,000	1,410	429,269
	655	615	108,191	571	93,822	11,421	913	27,255	5,764	0	0	9,960	1,264	5,400	761	22,551	2,120	212,836
	659	211	37,119	161	26,454	6,336	506	70,532	14,918	0	0	3,200	406	0	0	149,834	14,084	93,488
	660	133	23,397	568	93,329	41,140	3,287	5,440	1,151	0	0	195,405	24,797	194,493	27,424	2,276	214	173,599
	661	0	0	0	0	341,030	27,248	337,044	71,285	0	0	1,484,819	188,424	0	0	0	0	286,957

2015 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
	662	112	19,703	1,259	206,869	106,429	8,504	290,649	61,472	0	0	371,853	47,188	66,995	9,446	200,808	18,876	372,058
	663	108	18,999	269	44,200	0	0	131,742	27,863	0	0	111,979	14,210	0	0	93,150	8,756	114,029
	690	153	26,916	46	7,558	210,976	16,857	262,878	55,599	0	0	0	0	0	0	0	0	106,930
	691	0	0	0	0	30,000	2,397	236,000	49,914	0	0	0	0	0	0	0	0	52,311
	692	0	0	0	0	140,895	11,258	118,506	25,064	0	0	451,550	57,302	0	0	80,000	7,520	101,143
	693	9	1,583	0	0	9,110	728	11,345	2,399	0	0	327,420	41,550	0	0	0	0	46,260
	694	252	44,332	14	2,300	121,179	9,682	16,650	3,521	0	0	98,333	12,478	0	0	0	0	72,315
	699	47	8,268	25	4,108	32,913	2,630	25,042	5,296	0	0	350,133	44,432	0	0	0	0	64,734
	897	0	0	0	0	1,104	88	204,101	43,167	0	0	569,865	72,316	0	0	0	0	115,571
	898	0	0	0	0	8,343	667	192,320	40,676	0	0	74,198	9,416	0	0	0	0	50,758
	903	0	0	0	0	30,850	2,465	89,627	18,956	0	0	632,550	80,271	0	0	0	0	101,692
Subtotal			288,686		478,641		132,296		454,689		0		1,370,301		37,631		52,980	2,815,225
3. Willie Mays																		
	664	6	1,056	0	0	142,772	11,407	379,313	80,225	499	52,769	866,074	109,905	0	0	0	0	255,362
	665	0	0	0	0	3,800	304	56,658	11,983	0	0	24,368	3,092	0	0	0	0	15,379
	671	604	106,256	96	15,774	9,048	723	25,870	5,472	0	0	755,525	95,876	0	0	83,713	7,869	231,970
	675	454	79,868	222	36,477	21,920	1,751	54,590	11,546	0	0	20,980	2,662	0	0	108,033	10,155	142,460
	676	146	25,684	192	31,548	7,256	580	20,000	4,230	0	0	82,772	10,504	0	0	5,000	470	73,016
Subtotal			212,864		83,799		14,765		113,455		52,769		222,039		0		18,494	718,187
4. Bruton																		
	672	1,490	262,122	42	6,901	2,890	231	84,305	17,831	0	0	0	0	0	0	276,617	26,002	313,087
	677	592	104,145	302	49,622	2,800	224	27,264	5,766	0	0	0	0	66,321	9,351	131,083	12,322	181,431
	680	377	66,322	194	31,877	7,778	621	36,986	7,823	0	0	17,682	2,244	0	0	41,274	3,880	112,766
	681	391	68,785	216	35,491	96,973	7,748	0	0	205	21,679	84,312	10,699	0	0	561,992	52,827	197,230
	682	110	19,351	194	31,877	9,724	777	33,132	7,007	0	0	297,278	37,725	0	0	119,678	11,250	107,987
Subtotal			520,726		155,768		9,601		38,427		21,679		50,668		9,351		106,281	912,500
5. Raleigh-Frazier																		
	673	526	92,534	1,962	322,380	10,128	809	27,090	5,730	0	0	163,238	20,715	0	0	77,967	7,329	449,497
	674	512	90,072	1,016	166,941	156,306	12,489	106,473	22,519	0	0	0	0	0	0	33,025	3,104	295,125
	902	0	0	786	129,149	65,475	5,231	13,200	2,792	0	0	234,135	29,712	0	0	0	0	166,884
Subtotal			182,606		618,470		18,530		31,040		0		50,427		0		10,433	911,506
6. North Kirkman																		
	348	181	31,842	2,936	482,420	204,000	16,300	527,111	111,484	0	0	102,114	12,958	47,280	6,666	11,836	1,113	662,783
	349	0	0	1,120	184,029	777,907	62,155	530,223	112,142	0	0	9,300	1,180	0	0	494,640	46,496	406,003
	492	104	18,296	5,364	881,370	481,168	38,445	643,387	136,076	200	21,150	11,978	1,520	0	0	11,939	1,122	1,097,979
	603	939	165,190	611	100,395	48,215	3,852	39,965	8,453	0	0	691	88	0	0	89,378	8,402	286,379
Subtotal			215,327		1,648,214		120,752		368,155		21,150		15,746		6,666		57,133	2,453,143
7. South Kirkman 1																		
	444	334	58,758	1,586	260,599	152,415	12,178	130,338	27,566	150	15,863	0	0	0	0	0	0	374,963
	486	0	0	0	0	163,016	13,025	54,616	11,551	326	34,475	0	0	9,733	1,372	8,836	831	61,254
	493	0	0	982	161,354	5,000	400	272,575	57,650	0	0	5,549	704	0	0	0	0	220,108
Subtotal			58,758		421,953		25,602		96,767		50,337		704		1,372		831	656,325
8. South Kirkman 2																		
	443	0	0	421	69,175	332,896	26,598	151,204	31,980	3,204	338,823	0	0	0	0	0	0	466,576
	446	1	176	160	26,290	50,397	4,027	32,630	6,901	0	0	0	0	0	0	327,335	30,769	68,163
	485	0	0	636	104,502	0	0	898,638	190,062	184	19,458	0	0	0	0	0	0	314,022
	983	0	0	0	0	771,267	61,624	12,990	2,747	0	0	512,826	65,078	0	0	545	51	129,500
	986	0	0	0	0	0	0	976,849	206,604	0	0	0	0	0	0	0	0	206,604

2015 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
	987	0	0	636	104,502	45,446	3,631	1,138,431	240,778	2,022	213,827	0	0	0	0	0	0	562,738
	989	0	0	0	0	0	0	755,589	159,807	0	0	0	0	0	0	0	0	159,807
	990	0	0	0	0	98,990	7,909	701,665	148,402	2,894	306,041	52,948	6,719	0	0	0	0	469,071
Subtotal			176		304,470		103,790		987,281		878,148		71,797		0		30,821	2,376,482
9. Lift Station 29																		
	981	0	0	334	54,880	16,969	1,356	126,313	26,715	2,986	315,770	0	0	0	0	840	79	398,800
	995	0	0	0	0	33,618	2,686	235,671	49,844	2,371	250,733	48,269	6,125	0	0	0	0	309,389
	996	0	0	255	41,900	181,832	14,528	280,742	59,377	1,742	184,217	180,823	22,946	0	0	0	0	322,968
Subtotal			0		96,780		18,570		135,937		750,719		29,072		0		79	1,031,157
10. Vineland																		
	668	0	0	4,036	663,163	61,427	4,908	54,615	11,551	0	0	0	0	0	0	80,000	7,520	687,142
	669	0	0	464	76,241	68,761	5,494	26,080	5,516	0	0	172,002	21,827	0	0	31,226	2,935	112,013
	670	0	0	777	127,670	331,515	26,488	41,797	8,840	0	0	3,105,207	394,051	0	0	0	0	557,049
	880	0	0	2,448	402,236	1,102,921	88,123	51,740	10,943	300	31,725	0	0	0	0	191,351	17,987	551,014
	881	0	0	700	115,018	0	0	1,866,941	394,858	0	0	0	0	0	0	0	0	509,876
	899	0	0	0	0	336,170	26,860	12,000	2,538	0	0	0	0	0	0	0	0	29,398
	900	0	0	1,912	314,165	49,861	3,984	80,180	16,958	224	23,688	109,148	13,851	0	0	0	0	372,645
	901	1	176	0	0	500,847	40,018	132,452	28,014	0	0	359,394	45,607	0	0	15,942	1,499	115,313
	924	0	0	2,731	448,736	334,820	26,752	948,434	200,594	509	53,827	0	0	0	0	84,420	7,935	737,844
Subtotal			176		2,147,229		222,627		679,812		109,240		475,336		0		37,876	3,672,296
11. Tampa North																		
	688	137	24,101	54	8,873	394,833	31,547	137,885	29,163	111	11,738	50,083	6,356	0	0	47,202	4,437	116,215
	689	312	54,887	88	14,459	174,788	13,966	34,881	7,377	316	33,417	87,518	11,106	0	0	0	0	135,213
	719	42	7,389	99	16,267	79,090	6,319	114,849	24,291	0	0	236,299	29,986	0	0	27,038	2,542	86,793
	720	177	31,138	472	77,555	47,553	3,799	211,423	44,716	0	0	271,445	34,446	0	0	47,974	4,510	196,165
	721	6	1,056	58	9,530	623,408	49,810	82,923	17,538	290	30,668	65,082	8,259	0	0	329,688	30,991	147,851
	724	25	4,398	163	26,783	192,952	15,417	385,545	81,543	0	0	315,896	40,087	22,260	3,139	13,754	1,293	172,659
Subtotal			122,969		153,467		120,859		204,628		75,823		130,240		3,139		43,772	854,896
12. Tampa South																		
	678	190	33,425	345	56,688	15,250	1,218	56,825	12,018	0	0	0	0	0	0	125,215	11,770	115,120
	679	223	39,230	174	28,590	1,128	90	57,037	12,063	0	0	0	0	0	0	250,002	23,500	103,474
	684	210	36,943	10	1,643	11,737	938	71,320	15,084	0	0	10,000	1,269	0	0	0	0	55,877
	685	0	0	0	0	74,204	5,929	16,193	3,425	328	34,686	21,690	2,752	0	0	160,744	15,110	61,902
	686	45	7,916	111	18,239	52,051	4,159	229,490	48,537	0	0	381,173	48,371	0	0	207,336	19,490	146,712
	687	49	8,620	119	19,553	26,778	2,140	87,213	18,446	0	0	312,903	39,707	0	0	32,043	3,012	91,478
	725	136	23,925	376	61,781	32,416	2,590	90,186	19,074	0	0	95,049	12,062	0	0	25,713	2,417	121,850
	727	205	36,064	601	98,752	500	40	49,747	10,521	0	0	34,547	4,384	0	0	13,667	1,285	151,045
	728	283	49,786	145	23,825	48,966	3,912	34,154	7,224	32	3,384	10,700	1,358	0	0	52,185	4,905	94,394
	729	25	4,398	2	329	104,638	8,361	40,866	8,643	0	0	63,868	8,105	0	0	10,000	940	30,775
	735	7	1,231	2	329	131,193	10,482	58,427	12,357	0	0	424,480	53,867	0	0	0	0	78,266
Subtotal			241,540		309,728		39,859		167,393		38,070		171,875		0		82,429	1,050,894
Water Conserv II Total			2,075,164		7,125,226		880,633		3,410,747		1,997,935		2,653,620		64,365		453,615	18,661,304

2015 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
Iron Bridge																		
2015																		
2015 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. Lift Station 2																		
	695	499	60,702	103	11,703	47,418	2,620	62,603	9,156	184	13,455	2,500	219	0	0	0	0	97,855
	696	248	30,169	226	25,678	154,614	8,542	32,749	4,790	0	0	0	0	0	0	43,551	2,831	72,009
	697	272	33,088	120	13,634	76,751	4,240	83,733	12,246	0	0	5,200	456	0	0	94,341	6,132	69,797
	698	522	63,500	21	2,386	2,130	118	130,307	19,057	0	0	184,035	16,149	0	0	3,996	260	101,470
	711	256	31,142	104	11,816	145,504	8,039	145,681	21,306	0	0	0	0	0	0	29,800	1,937	74,240
	712	246	29,925	169	19,202	75,115	4,150	143,214	20,945	0	0	81,392	7,142	0	0	17,862	1,161	82,525
	714	157	19,099	42	4,772	297,906	16,459	201,310	29,442	0	0	92,372	8,106	0	0	371,063	24,119	101,996
	715	149	18,125	100	11,362	164,077	9,065	87,816	12,843	0	0	7,500	658	2,737	267	1,500	98	52,418
	716	7	852	410	46,584	555,087	30,669	151,813	22,203	337	24,643	3,897	342	0	0	30,408	1,977	127,269
	717	263	31,993	842	95,668	908,607	50,201	102,407	14,977	295	21,572	1,000	88	0	0	0	0	214,499
	718	0	0	726	82,488	324,621	17,935	56,937	8,327	303	22,157	0	0	0	0	149,221	9,699	140,607
	753	0	0	469	53,288	2,533,968	140,002	101,733	14,878	350	25,594	21,590	1,895	0	0	25,065	1,629	237,285
	754	0	0	20	2,272	483,076	26,690	74,008	10,824	0	0	301,454	26,453	0	0	0	0	66,239
	755	77	9,367	199	22,610	115,559	6,385	46,868	6,854	0	0	0	0	0	0	15,000	975	46,191
	905	42	5,109	503	57,151	281,899	15,575	13,471	1,970	0	0	0	0	0	0	0	0	79,805
Subtotal			333,071		460,615		340,690		209,818		107,421		61,507		267		50,817	1,564,206
2. Downtown																		
	722	5	608	92	10,453	251,126	13,875	29,905	4,374	0	0	106,772	9,369	0	0	336,000	21,840	60,519
	723	1	122	326	37,040	172,605	9,536	96,098	14,054	0	0	81,371	7,140	0	0	184,585	11,998	79,891
	726	48	5,839	286	32,495	27,349	1,511	67,106	9,814	0	0	12,119	1,063	0	0	842,524	54,764	105,487
	746	0	0	1,086	123,391	993,106	54,869	9,373	1,371	319	23,327	0	0	0	0	0	0	202,958
	747	0	0	276	31,359	291,828	16,123	21,118	3,089	0	0	0	0	0	0	502,052	32,633	83,205
	748	0	0	310	35,222	2,063,134	113,988	175,536	25,672	248	18,135	8,600	755	0	0	32,420	2,107	195,879
	749	0	0	405	46,016	1,707,566	94,343	302,310	44,213	0	0	2,100	184	0	0	95,541	6,210	190,966
	750	0	0	0	0	1,085,211	59,958	63,874	9,342	0	0	6,952	610	0	0	0	0	69,910
	751	0	0	0	0	733,113	40,504	42,252	6,179	0	0	0	0	0	0	89,374	5,809	52,493
	752	0	0	881	100,099	457,375	25,270	39,168	5,728	0	0	0	0	0	0	254,501	16,543	147,640
	756	82	9,975	211	23,974	162,897	9,000	0	0	0	0	0	0	0	0	160,261	10,417	53,366
	757	47	5,717	198	22,497	60,848	3,362	16,081	2,352	0	0	1,000	88	0	0	800	52	34,068
	758	85	10,340	2,396	272,234	301,346	16,649	148,142	21,666	0	0	13,000	1,141	0	0	0	0	322,029
	906	30	3,649	342	38,858	522,911	28,891	17,026	2,490	78	5,704	3,992	350	0	0	118,460	7,700	87,642
	907	2	243	275	31,246	341,271	18,855	54,836	8,020	245	17,916	0	0	0	0	0	0	76,279
Subtotal			36,494		804,884		506,736		158,363		65,081		20,701		0		170,074	1,762,333
3. Mills																		
	731	0	0	0	0	104,632	5,781	33,770	4,939	0	0	913,841	80,190	0	0	0	0	90,909
	732	52	6,326	404	45,902	218,293	12,061	505,453	73,923	0	0	228,132	20,019	14,800	1,443	12,584	818	160,491
	733	5	608	11	1,250	213,821	11,814	25,679	3,756	120	8,775	37,292	3,272	338,720	33,025	1,400	91	62,591
	734	0	0	12	1,363	260,044	14,367	24,271	3,550	0	0	79,896	7,011	1,916,803	186,888	10,000	650	213,830
	736	1	122	177	20,111	813,704	44,957	148,558	21,727	150	10,969	197,053	17,291	0	0	8,000	520	115,696
	737	163	19,829	161	18,293	220,576	12,187	37,801	5,528	0	0	0	0	20,738	2,022	9,742	633	58,492
	738	201	24,451	146	16,589	19,819	1,095	139,922	20,464	0	0	0	0	0	0	0	0	62,598
	739	309	37,589	189	21,474	27,049	1,494	55,735	8,151	0	0	32,858	2,883	0	0	390,896	25,408	97,000
	740	797	96,953	117	13,294	7,104	392	2,960	433	0	0	0	0	0	0	2,718	177	111,249
	741	210	25,546	411	46,698	1,649	91	0	0	0	0	0	0	0	0	0	0	72,335
	742	77	9,367	868	98,622	82,949	4,583	51,601	7,547	0	0	0	0	0	0	80,752	5,249	125,367
	743	2	243	529	60,105	164,679	9,099	0	0	0	0	197,022	17,289	233,980	22,813	6,056	394	109,942

2015 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
	744	0	0	0	0	1,071,250	59,187	600	88	0	0	3,600	316	0	0	0	0	59,590
	745	0	0	770	87,487	517,852	28,611	25,000	3,656	0	0	0	0	0	0	500,000	32,500	152,255
	839	585	71,164	8	909	2,954	163	2,754	403	0	0	0	0	0	0	17,000	1,105	73,744
	840	23	2,798	20	2,272	38,746	2,141	16,319	2,387	0	0	0	0	0	0	66,431	4,318	13,916
	841	153	18,612	404	45,902	16,424	907	116,206	16,995	0	0	0	0	0	0	48,774	3,170	85,587
	863	233	28,344	698	79,307	82,508	4,559	60,158	8,798	0	0	0	0	0	0	3,498	227	121,235
Subtotal			341,951		559,579		213,489		182,343		19,744		148,271		246,191		75,260	1,786,827
4. LS 1 & 7 North																		
	759	309	37,589	155	17,611	179,004	9,890	45,445	6,646	0	0	0	0	0	0	20,467	1,330	73,067
	760	219	26,641	222	25,224	381,422	21,074	224,197	32,789	0	0	3,500	307	0	0	39,184	2,547	108,581
	761	0	0	0	0	72,267	3,993	756,800	110,682	0	0	32,868	2,884	0	0	800	52	117,611
	762	487	59,242	452	51,356	152,328	8,416	21,227	3,104	0	0	0	0	4,432	432	17,475	1,136	123,687
	763	85	10,340	310	35,222	75,801	4,188	116,144	16,986	0	0	4,500	395	0	0	0	0	67,131
	764	145	17,639	128	14,543	154,096	8,514	28,920	4,230	0	0	0	0	0	0	0	0	44,926
	777	19	2,311	27	3,068	9,250	511	303,870	44,441	227	16,599	179,916	15,788	0	0	1,960	127	82,845
	788	7	852	156	17,725	24,225	1,338	25,709	3,760	0	0	0	0	0	0	292,173	18,991	42,666
Subtotal			154,614		164,749		57,924		222,638		16,599		19,374		432		24,184	660,514
5. LS 1 & 7 South																		
	836	764	92,939	806	91,578	4,190	231	85,420	12,493	0	0	0	0	0	0	50,000	3,250	200,491
	837	441	53,647	40	4,545	39,929	2,206	23,782	3,478	0	0	0	0	0	0	1,220	79	63,955
	838	362	44,036	0	0	0	0	0	0	0	0	0	0	0	0	39,363	2,559	46,595
	842	304	36,981	1,910	217,014	121,923	6,736	48,772	7,133	0	0	120,593	10,582	0	0	3,100	202	278,648
Subtotal			227,602		313,137		9,174		23,104		0		10,582		0		6,089	589,688
6. LS 3G-2																		
	701	785	95,493	293	33,291	52,265	2,888	80,893	11,831	0	0	6,000	527	0	0	75,330	4,896	148,925
	702	363	44,158	445	50,561	60,667	3,352	83,691	12,240	0	0	9,700	851	0	0	61,927	4,025	115,187
	705	22	2,676	283	32,154	330,848	18,279	56,873	8,318	126	9,214	64,427	5,653	427,120	41,644	129,425	8,413	126,352
	706	184	22,383	14	1,591	372,893	20,602	20,000	2,925	0	0	71,912	6,310	2,042,731	199,166	64,797	4,212	257,190
	904	77	9,367	22	2,500	238,684	13,187	45,738	6,689	0	0	33,499	2,940	0	0	38,329	2,491	37,174
	923	340	41,360	59	6,704	11,061	611	41,679	6,096	0	0	21,473	1,884	0	0	254,037	16,512	73,167
Subtotal			215,438		126,800		58,920		48,098		9,214		18,165		240,810		40,550	757,994
7. LS 3G-3																		
	648	254	30,898	296	33,632	21,998	1,215	102,717	15,022	0	0	5,880	516	0	0	40,000	2,600	83,884
	700	672	81,747	405	46,016	217,143	11,997	152,356	22,282	0	0	17,170	1,507	0	0	280,000	18,200	181,749
	703	493	59,972	72	8,181	23,378	1,292	38,678	5,657	0	0	0	0	0	0	14,129	918	76,020
	704	40	4,866	175	19,884	201,086	11,110	213,687	31,252	0	0	38,082	3,342	0	0	2,136	139	70,592
	707	0	0	0	0	106,018	5,857	48,988	7,164	0	0	0	0	0	0	75,082	4,880	17,902
	713	152	18,490	646	73,399	420,153	23,213	164,314	24,031	0	0	142,189	12,477	22,385	2,183	1,493	97	153,890
Subtotal			195,974		181,110		54,685		105,408		0		17,841		2,183		26,835	584,036
8. LSLS3G-4																		
	708	371	45,131	0	0	119,096	6,580	9,779	1,430	0	0	4,880	428	0	0	24,875	1,617	55,187
	710	716	87,100	141	16,020	7,069	391	3,244	474	0	0	0	0	0	0	47,012	3,056	107,041
	779	490	59,607	181	20,565	26,208	1,448	63,736	9,321	0	0	0	0	0	0	94,212	6,124	97,066
Subtotal			191,838		36,586		8,419		11,226		0		428		0		10,796	259,293

2015 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
9. Colonial																		
	765	2	243	0	0	87,930	4,858	85,431	12,494	0	0	54,477	4,780	0	0	0	0	22,376
	766	0	0	0	0	25,800	1,425	352,718	51,585	0	0	111,696	9,801	0	0	5,723	372	63,184
	775	0	0	0	0	16,615	918	1,432,587	209,516	0	0	1,848	162	0	0	0	0	210,596
	776	34	4,136	0	0	739,044	40,832	0	0	0	0	1,858	163	0	0	0	0	45,131
Subtotal			4,379		0		48,034		273,595		0		14,907		0		372	341,287
10. NTC																		
	772	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	773	20	2,433	60	6,817	77,555	4,285	173,342	25,351	0	0	2,800	246	0	0	10,576	687	39,819
	774	0	0	212	24,087	239,698	13,243	104,666	15,307	0	0	95,944	8,419	0	0	9,500	618	61,675
	780	378	45,983	0	0	5,014	277	0	0	0	0	0	0	1,572	153	1,773	115	46,528
	781	1,395	169,698	2,820	320,408	1,398,046	77,242	295,303	43,188	0	0	0	0	678,000	66,105	259,142	16,844	693,486
Subtotal			218,114		351,313		95,047		83,847		0		8,665		66,258		18,264	841,509
Iron Bridge Total			1,919,476		2,998,773		1,393,116		1,318,439		218,059		320,441		556,142		423,242	9,147,688

Appendix A: Projected Wastewater Flows by Plant, Subarea and 2025 TAZ

Water Conserv I
2020

2020 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. South Lake Nona																		
	477	0	0	0	0	1,438,510	75,198	1,300,000	179,888	250	17,297	2,210,000	183,485	900,000	83,025	1,001,000	61,562	600,454
	495	0	0	0	0	210,000	10,978	35,000	4,843	0	0	475,000	39,437	0	0	10,000	615	55,873
	505	2,792	321,352	3,624	389,587	155,500	8,129	520,000	71,955	300	20,756	75,000	6,227	0	0	375,000	23,063	841,068
Subtotal			321,352		389,587		94,305		256,686		38,053		229,149		83,025		85,239	1,497,395
2. North Lake Nona																		
	412	0	0	0	0	200,000	10,455	191,508	26,500	0	0	1,073,599	89,136	0	0	55,000	3,383	129,473
	504	2,579	296,836	2,220	238,654	820,100	42,871	501,321	69,370	304	21,033	301,914	25,066	0	0	290,000	17,835	711,666
	528	605	69,634	1,769	190,171	294,600	15,400	1,660,000	229,703	300	20,756	0	0	0	0	105,000	6,458	532,121
	529	1,414	162,748	474	50,956	40,248	2,104	363,456	50,293	0	0	0	0	0	0	0	0	266,101
Subtotal			529,217		479,781		70,830		375,866		41,789		114,202		0		27,675	1,639,361
3. Airport																		
	414	381	43,852	251	26,983	352,638	18,434	341,192	47,212	250	17,297	625,488	51,931	0	0	64,612	3,974	209,683
	415	108	12,431	0	0	112,741	5,894	10,541	1,459	0	0	1,444,082	119,895	0	0	0	0	139,678
	416	330	37,982	0	0	101,935	5,329	20,000	2,768	0	0	2,037,195	169,138	0	0	25,000	1,538	216,754
	494	0	0	0	0	0	0	8,231	1,139	446	30,858	0	0	0	0	4,475,860	275,265	307,262
	496	445	51,218	220	23,650	91,667	4,792	8,420	1,165	0	0	792,116	65,765	0	0	0	0	146,591
	497	150	17,265	0	0	187,904	9,823	26,089	3,610	0	0	1,310,849	108,833	0	0	317,000	19,496	159,026
	498	0	0	0	0	50,459	2,638	13,000	1,799	0	0	2,310,738	191,849	0	0	0	0	196,286
	499	0	0	0	0	54,633	2,856	30,930	4,280	0	0	1,117,722	92,799	0	0	0	0	99,935
	523	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	524	0	0	0	0	27,096	1,416	56,393	7,803	0	0	175,125	14,540	0	0	0	0	23,760
	525	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	526	0	0	0	0	51,500	2,692	160	22	0	0	113,526	9,425	0	0	4,000,000	246,000	258,140
	527	0	0	0	0	41,353	2,162	21,093	2,919	0	0	0	0	0	0	0	0	5,080
Subtotal			162,748		50,633		56,035		74,176		48,155		824,176		0		546,272	1,762,194
4. South 436																		
	399	0	0	0	0	976,864	51,066	824,100	114,035	2,258	156,225	654,355	54,328	0	0	0	0	375,654
	400	0	0	2,660	285,955	94,820	4,957	250,426	34,653	0	0	112,800	9,365	0	0	0	0	334,930
	474	0	0	0	0	226,840	11,858	269,519	37,295	0	0	729,263	60,547	0	0	0	0	109,700
	500	0	0	0	0	174,488	9,121	120,000	16,605	300	20,756	797,715	66,230	0	0	0	0	112,713
	501	0	0	508	54,611	411,588	21,516	265,465	36,734	0	0	265,000	22,002	0	0	57,584	3,541	138,404
	850	0	0	956	102,772	498,707	26,070	86,300	11,942	200	13,838	175,000	14,529	0	0	23,175	1,425	170,576
	851	228	26,242	0	0	155,000	8,103	110,572	15,300	250	17,297	150,000	12,454	0	0	0	0	79,396
	925	0	0	0	0	443,734	23,196	164,148	22,714	1,314	90,912	0	0	0	0	9,300	572	137,394
Subtotal			26,242		443,338		155,886		289,277		299,028		239,455		0		5,539	1,458,766

Appendix A: Projected Wastewater Flows by Plant, Subarea and 2025 TAZ

2020 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
5. North 436																		
	402	250	28,774	1,414	152,008	184,419	9,641	169,631	23,473	0	0	99,482	8,259	0	0	80,160	4,930	227,085
	475	0	0	538	57,836	148,592	7,768	6,422	889	0	0	58,143	4,827	0	0	0	0	71,320
	847	0	0	531	57,084	0	0	0	0	0	0	0	0	0	0	0	0	57,084
	848	0	0	417	44,828	5,000	261	202,066	27,961	0	0	0	0	0	0	0	0	73,051
Subtotal			28,774		311,756		17,670		52,322		0		13,087		0		4,930	428,539
6. LS69G-2																		
	403	0	0	1,390	149,428	14,804	774	2,520	349	0	0	0	0	0	0	0	0	150,550
	404	3	345	1,036	111,372	13,934	728	146,999	20,341	0	0	45,290	3,760	0	0	0	0	136,547
	405	706	81,259	1,516	162,973	4,844	253	33,728	4,667	0	0	0	0	0	0	55,000	3,383	252,535
	844	238	27,393	526	56,546	36,643	1,916	355,270	49,160	0	0	20,000	1,661	0	0	0	0	136,676
	845	1,073	123,499	1,492	160,393	3,457	181	169,707	23,483	0	0	0	0	0	0	0	0	307,556
	846	2	230	1,581	169,961	94,649	4,948	543,893	75,261	0	0	0	0	0	0	0	0	250,400
Subtotal			232,727		810,673		8,800		173,262		0		5,421		0		3,383	1,234,264
7. LS69G-1																		
	407	0	0	726	78,046	0	0	0	0	0	0	0	0	0	0	0	0	78,046
	408	181	20,833	483	51,923	9,888	517	70,226	9,718	0	0	70,200	5,828	0	0	130,000	7,995	96,814
	409	696	80,108	752	80,842	38,499	2,013	152,984	21,169	0	0	0	0	0	0	0	0	184,131
	476	392	45,118	565	60,739	18,600	972	88,166	12,200	0	0	0	0	0	0	47,062	2,894	121,923
Subtotal			146,058		271,550		3,502		43,087		0		5,828		0		10,889	480,915
8. LS12																		
	350	100	11,510	32	3,440	5,000	261	24,226	3,352	0	0	0	0	0	0	157,988	9,716	28,280
	351	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	769	236	27,163	0	0	11,434	598	101,827	14,090	0	0	0	0	0	0	59,724	3,673	45,524
	833	580	66,756	205	22,038	76,978	4,024	26,206	3,626	0	0	0	0	0	0	138,856	8,540	104,984
Subtotal			105,429		25,478		4,883		21,069		0		0		0		21,929	178,788
9. Conway(69fm-2)																		
	767	1	115	0	0	165,487	8,651	305,881	42,326	0	0	748,031	62,105	0	0	2,400	148	113,345
	768	0	0	0	0	36,623	1,914	179,718	24,868	0	0	76,299	6,335	0	0	0	0	33,118
	834	760	87,474	570	61,276	62,312	3,257	17,207	2,381	0	0	7,614	632	47,865	4,416	18,520	1,139	160,575
	835	590	67,907	270	29,026	13,413	701	53,806	7,445	0	0	2,600	216	0	0	69,230	4,258	109,553
	843	481	55,362	466	50,096	37,370	1,954	166,207	22,999	0	0	2,400	199	0	0	10,609	652	131,262
Subtotal			210,858		140,398		16,477		100,020		0		69,487		4,416		6,197	547,853
Water Conserv I Total			1,763,405		2,923,194		428,387		1,385,764		427,025		1,500,805		87,441		712,052	9,228,073

Appendix A: Projected Wastewater Flows by Plant, Subarea and 2025 TAZ

2020 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
Water Conserv I 2020																		
2020 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. Lift Station 85																		
	642	0	0	0	0	169,092	13,510	178,225	37,695	0	0	328,804	41,725	0	0	0	0	92,930
	652	194	34,129	589	96,780	58,958	4,711	14,685	3,106	0	0	0	0	0	0	32,892	3,092	141,817
	653	20	3,518	1,440	236,609	415,499	33,198	96,356	20,379	0	0	186,685	23,690	44,009	6,205	0	0	323,601
	654	1,107	194,745	2,276	373,974	24,547	1,961	340,345	71,983	0	0	0	0	0	0	99,949	9,395	652,058
Subtotal			232,392		707,363		53,381		133,163		0		65,416		6,205		12,487	1,210,406
2. Lift Station 45																		
	649	0	0	0	0	82,231	6,570	33,612	7,109	0	0	960,397	121,874	0	0	0	0	135,554
	650	1	176	0	0	144,874	11,575	24,882	5,263	0	0	2,123,774	269,507	0	0	0	0	286,521
	651	0	0	0	0	356,944	28,520	75,206	15,906	0	0	3,032,837	384,867	0	0	15,000	1,410	430,703
	655	615	108,191	571	93,822	11,421	913	27,255	5,764	0	0	9,960	1,264	5,400	761	22,551	2,120	212,836
	659	211	37,119	161	26,454	6,336	506	75,532	15,975	0	0	3,200	406	0	0	149,834	14,084	94,545
	660	133	23,397	568	93,329	61,140	4,885	5,440	1,151	0	0	195,405	24,797	194,493	27,424	2,276	214	175,197
	661	0	0	0	0	341,030	27,248	337,044	71,285	0	0	1,484,819	188,424	0	0	0	0	286,957
	662	112	19,703	1,310	215,249	106,429	8,504	305,649	64,645	0	0	371,853	47,188	66,995	9,446	200,808	18,876	383,611
	663	108	18,999	269	44,200	0	0	131,742	27,863	0	0	111,979	14,210	0	0	93,150	8,756	114,029
	690	155	27,268	46	7,558	210,976	16,857	267,878	56,656	0	0	0	0	0	0	0	0	108,339
	691	0	0	0	0	40,000	3,196	336,000	71,064	0	0	0	0	0	0	0	0	74,260
	692	0	0	0	0	150,895	12,057	123,506	26,122	0	0	451,550	57,302	0	0	80,000	7,520	103,000
	693	9	1,583	0	0	14,110	1,127	11,345	2,399	0	0	327,420	41,550	0	0	0	0	46,660
	694	252	44,332	14	2,300	123,179	9,842	16,650	3,521	0	0	98,333	12,478	0	0	0	0	72,474
	699	47	8,268	25	4,108	32,913	2,630	25,042	5,296	0	0	350,133	44,432	0	0	0	0	64,734
	897	0	0	0	0	1,104	88	204,101	43,167	0	0	569,865	72,316	0	0	0	0	115,571
	898	0	0	0	0	8,343	667	197,320	41,733	0	0	74,198	9,416	0	0	0	0	51,816
	903	0	0	0	0	30,850	2,465	99,627	21,071	0	0	632,550	80,271	0	0	0	0	103,807
Subtotal			289,038		487,021		137,650		485,991		0		1,370,301		37,631		52,980	2,860,612
3. Willie Mays																		
	664	6	1,056	0	0	147,772	11,807	379,313	80,225	499	52,769	866,074	109,905	0	0	0	0	255,761
	665	0	0	0	0	3,800	304	56,658	11,983	0	0	24,368	3,092	0	0	0	0	15,379
	671	604	106,256	96	15,774	9,048	723	25,870	5,472	0	0	755,525	95,876	0	0	83,713	7,869	231,970
	675	454	79,868	222	36,477	21,920	1,751	54,590	11,546	0	0	20,980	2,662	0	0	108,033	10,155	142,460
	676	146	25,684	192	31,548	10,256	819	25,000	5,288	0	0	82,772	10,504	0	0	5,000	470	74,313
Subtotal			212,864		83,799		15,404		114,513		52,769		222,039		0		18,494	719,883

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2020 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
4. Bruton																		
	672	1,494	262,826	44	7,230	5,890	471	87,305	18,465	0	0	0	0	0	0	276,617	26,002	314,993
	677	594	104,497	302	49,622	2,800	224	29,264	6,189	0	0	0	0	66,321	9,351	131,083	12,322	182,205
	680	378	66,498	206	33,848	7,778	621	36,986	7,823	0	0	17,682	2,244	0	0	41,274	3,880	114,914
	681	392	68,961	216	35,491	96,973	7,748	0	0	205	21,679	84,312	10,699	0	0	561,992	52,827	197,406
	682	111	19,527	194	31,877	9,724	777	33,132	7,007	0	0	307,278	38,994	0	0	119,678	11,250	109,431
Subtotal			522,309		158,068		9,841		39,484		21,679		51,937		9,351		106,281	918,950
5. Raleigh-Frazier																		
	673	526	92,534	1,962	322,380	10,128	809	27,090	5,730	0	0	163,238	20,715	0	0	77,967	7,329	449,497
	674	512	90,072	1,016	166,941	156,306	12,489	111,473	23,577	0	0	0	0	0	0	33,025	3,104	296,182
	902	0	0	786	129,149	65,475	5,231	13,200	2,792	0	0	274,135	34,788	0	0	0	0	171,960
Subtotal			182,606		618,470		18,530		32,098		0		55,503		0		10,433	917,640
6. North Kirkman																		
	348	181	31,842	2,936	482,420	214,000	17,099	587,111	124,174	0	0	102,114	12,958	47,280	6,666	11,836	1,113	676,272
	349	0	0	1,120	184,029	827,907	66,150	555,223	117,430	0	0	9,300	1,180	0	0	514,640	48,376	417,165
	492	104	18,296	5,364	881,370	506,168	40,443	653,387	138,191	200	21,150	11,978	1,520	0	0	11,939	1,122	1,102,092
	603	939	165,190	611	100,395	48,215	3,852	39,965	8,453	0	0	691	88	0	0	89,378	8,402	286,379
Subtotal			215,327		1,648,214		127,544		388,248		21,150		15,746		6,666		59,013	2,481,907
7. South Kirkman 1																		
	444	334	58,758	1,586	260,599	202,415	16,173	130,338	27,566	150	15,863	0	0	0	0	0	0	378,958
	486	0	0	0	0	163,016	13,025	54,616	11,551	326	34,475	0	0	9,733	1,372	8,836	831	61,254
	493	0	0	982	161,354	10,000	799	277,575	58,707	0	0	5,549	704	0	0	0	0	221,565
Subtotal			58,758		421,953		29,997		97,825		50,337		704		1,372		831	661,777
8. South Kirkman 2																		
	443	0	0	948	155,768	372,896	29,794	181,204	38,325	3,454	365,261	0	0	0	0	0	0	589,147
	446	1	176	160	26,290	50,397	4,027	32,630	6,901	0	0	0	0	0	0	327,335	30,769	68,163
	485	0	0	936	153,796	0	0	898,638	190,062	184	19,458	0	0	0	0	0	0	363,316
	983	0	0	0	0	771,267	61,624	12,990	2,747	0	0	512,826	65,078	0	0	545	51	129,500
	986	0	0	0	0	0	0	976,849	206,604	0	0	0	0	0	0	0	0	206,604
	987	0	0	636	104,502	45,446	3,631	1,188,431	251,353	2,522	266,702	0	0	0	0	0	0	626,188
	989	0	0	0	0	0	0	755,589	159,807	0	0	0	0	0	0	0	0	159,807
	990	0	0	0	0	98,990	7,909	701,665	148,402	3,894	411,791	52,948	6,719	0	0	0	0	574,821
Subtotal			176		440,356		106,986		1,004,201		1,063,211		71,797		0		30,821	2,717,547
9. Lift Station 29																		
	981	0	0	334	54,880	16,969	1,356	126,313	26,715	2,986	315,770	0	0	0	0	840	79	398,800
	995	0	0	0	0	33,618	2,686	235,671	49,844	2,871	303,608	48,269	6,125	0	0	0	0	362,264
	996	0	0	255	41,900	181,832	14,528	280,742	59,377	2,242	237,092	180,823	22,946	0	0	0	0	375,843
Subtotal			0		96,780		18,570		135,937		856,469		29,072		0		79	1,136,907

Appendix A: Projected Wastewater Flows by Plant, Subarea and 2025 TAZ

2020 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
10. Vineland																		
	668	0	0	4,316	709,171	71,427	5,707	54,615	11,551	0	0	0	0	0	0	80,000	7,520	733,949
	669	0	0	464	76,241	68,761	5,494	26,080	5,516	0	0	172,002	21,827	0	0	31,226	2,935	112,013
	670	0	0	777	127,670	331,515	26,488	41,797	8,840	0	0	3,105,207	394,051	0	0	0	0	557,049
	880	0	0	2,748	451,529	1,252,921	100,108	51,740	10,943	300	31,725	0	0	0	0	191,351	17,987	612,293
	881	0	0	700	115,018	0	0	1,866,941	394,858	0	0	0	0	0	0	0	0	509,876
	899	0	0	0	0	336,170	26,860	12,000	2,538	0	0	0	0	0	0	0	0	29,398
	900	0	0	1,912	314,165	54,861	4,383	80,180	16,958	224	23,688	109,148	13,851	0	0	0	0	373,045
	901	1	176	0	0	500,847	40,018	132,452	28,014	375	39,656	359,394	45,607	0	0	15,942	1,499	154,969
	924	0	0	3,151	517,747	459,820	36,740	1,148,434	242,894	509	53,827	0	0	0	0	84,420	7,935	859,143
Subtotal			176		2,311,541		245,798		722,112		148,896		475,336		0		37,876	3,941,735
11. Tampa North																		
	688	137	24,101	54	8,873	394,833	31,547	137,885	29,163	111	11,738	50,083	6,356	0	0	47,202	4,437	116,215
	689	312	54,887	88	14,459	179,788	14,365	36,881	7,800	316	33,417	87,518	11,106	0	0	0	0	136,035
	719	42	7,389	99	16,267	79,090	6,319	114,849	24,291	0	0	236,299	29,986	0	0	27,038	2,542	86,793
	720	177	31,138	472	77,555	47,553	3,799	211,423	44,716	0	0	271,445	34,446	0	0	47,974	4,510	196,165
	721	6	1,056	258	42,392	923,408	73,780	132,923	28,113	590	62,393	65,082	8,259	0	0	529,688	49,791	265,784
	724	25	4,398	163	26,783	192,952	15,417	385,545	81,543	0	0	315,896	40,087	22,260	3,139	13,754	1,293	172,659
Subtotal			122,969		186,330		145,228		215,626		107,548		130,240		3,139		62,572	973,651
12. Tampa South																		
	678	296	52,073	345	56,688	15,250	1,218	59,825	12,653	0	0	0	0	0	0	125,215	11,770	134,402
	679	227	39,934	174	28,590	1,128	90	57,037	12,063	0	0	0	0	0	0	268,302	25,220	105,898
	684	210	36,943	10	1,643	11,737	938	71,320	15,084	0	0	10,000	1,269	0	0	0	0	55,877
	685	0	0	0	0	74,204	5,929	16,193	3,425	328	34,686	21,690	2,752	0	0	160,744	15,110	61,902
	686	45	7,916	111	18,239	52,051	4,159	231,490	48,960	0	0	386,173	49,005	0	0	207,336	19,490	147,769
	687	49	8,620	119	19,553	26,778	2,140	87,213	18,446	0	0	312,903	39,707	0	0	32,043	3,012	91,478
	725	136	23,925	376	61,781	32,416	2,590	90,186	19,074	0	0	95,049	12,062	0	0	25,713	2,417	121,850
	727	205	36,064	601	98,752	500	40	49,747	10,521	0	0	34,547	4,384	0	0	13,667	1,285	151,045
	728	285	50,137	145	23,825	48,966	3,912	34,154	7,224	32	3,384	10,700	1,358	0	0	52,185	4,905	94,746
	729	25	4,398	2	329	104,638	8,361	40,866	8,643	0	0	63,868	8,105	0	0	10,000	940	30,775
	735	7	1,231	2	329	131,193	10,482	58,427	12,357	0	0	424,480	53,867	0	0	0	0	78,266
Subtotal			261,243		309,728		39,859		168,451		38,070		172,509		0		84,149	1,074,009
Water Conserv II Total			2,097,858		7,469,624		948,787		3,537,647		2,360,129		2,660,599		64,365		476,015	19,615,024

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2020 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
Iron Bridge 2020																		
2020 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. Lift Station 2																		
	695	500	60,824	103	11,703	49,418	2,730	64,603	9,448	184	13,455	2,500	219	0	0	0	0	98,380
	696	249	30,290	242	27,496	154,614	8,542	32,749	4,790	0	0	0	0	0	0	43,551	2,831	73,949
	697	272	33,088	120	13,634	78,751	4,351	83,733	12,246	0	0	5,200	456	0	0	94,341	6,132	69,908
	698	522	63,500	21	2,386	2,130	118	130,307	19,057	0	0	184,035	16,149	0	0	3,996	260	101,470
	711	257	31,263	104	11,816	148,504	8,205	145,681	21,306	0	0	0	0	0	0	29,800	1,937	74,528
	712	246	29,925	169	19,202	77,115	4,261	143,214	20,945	0	0	77,392	6,791	0	0	17,862	1,161	82,285
	714	157	19,099	202	22,951	357,906	19,774	216,310	31,635	0	0	92,372	8,106	0	0	371,063	24,119	125,684
	715	149	18,125	102	11,589	167,077	9,231	89,816	13,136	0	0	7,500	658	2,737	267	1,500	98	53,104
	716	7	852	410	46,584	788,087	43,542	157,813	23,080	337	24,643	3,897	342	0	0	30,408	1,977	141,019
	717	263	31,993	842	95,668	908,607	50,201	102,407	14,977	295	21,572	1,000	88	0	0	0	0	214,499
	718	0	0	926	105,212	386,921	21,377	112,312	16,426	303	22,157	0	0	0	0	149,221	9,699	174,871
	753	0	0	669	76,012	2,840,968	156,963	121,733	17,803	350	25,594	21,590	1,895	0	0	25,065	1,629	279,896
	754	0	0	20	2,272	483,076	26,690	74,008	10,824	0	0	301,454	26,453	0	0	0	0	66,239
	755	77	9,367	199	22,610	115,559	6,385	46,868	6,854	0	0	0	0	0	0	15,000	975	46,191
	905	42	5,109	503	57,151	281,899	15,575	13,471	1,970	0	0	0	0	0	0	0	0	79,805
Subtotal			333,436		526,288		377,945		224,497		107,421		61,156		267		50,817	1,681,827
2. Downtown																		
	722	5	608	92	10,453	251,126	13,875	29,905	4,374	0	0	106,772	9,369	0	0	336,000	21,840	60,519
	723	1	122	586	66,581	362,605	20,034	111,098	16,248	0	0	81,371	7,140	0	0	184,585	11,998	122,123
	726	48	5,839	286	32,495	27,349	1,511	67,106	9,814	0	0	12,119	1,063	0	0	842,524	54,764	105,487
	746	0	0	1,086	123,391	993,106	54,869	9,373	1,371	319	23,327	0	0	0	0	0	0	202,958
	747	0	0	276	31,359	291,828	16,123	21,118	3,089	0	0	0	0	0	0	502,052	32,633	83,205
	748	0	0	310	35,222	2,063,134	113,988	175,536	25,672	248	18,135	8,600	755	0	0	32,420	2,107	195,879
	749	0	0	405	46,016	1,707,566	94,343	302,310	44,213	0	0	2,100	184	0	0	95,541	6,210	190,966
	750	0	0	0	0	1,085,211	59,958	72,430	10,593	0	0	6,952	610	0	0	0	0	71,161
	751	0	0	0	0	733,113	40,504	42,252	6,179	0	0	0	0	0	0	89,374	5,809	52,493
	752	0	0	881	100,099	457,375	25,270	39,168	5,728	0	0	0	0	0	0	254,501	16,543	147,640
	756	82	9,975	211	23,974	162,897	9,000	0	0	0	0	0	0	0	0	160,261	10,417	53,366
	757	47	5,717	198	22,497	60,848	3,362	16,081	2,352	0	0	1,000	88	0	0	800	52	34,068
	758	85	10,340	2,906	330,180	301,346	16,649	185,142	27,077	0	0	13,000	1,141	0	0	0	0	385,387
	906	30	3,649	342	38,858	522,911	28,891	17,026	2,490	78	5,704	3,992	350	0	0	118,460	7,700	87,642
	907	2	243	275	31,246	341,271	18,855	54,836	8,020	245	17,916	0	0	0	0	0	0	76,279
Subtotal			36,494		892,371		517,233		167,219		65,081		20,701		0		170,074	1,869,174

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3. Mills																		
	731	0	0	0	0	104,632	5,781	33,770	4,939	0	0	913,841	80,190	0	0	0	0	90,909
	732	48	5,839	420	47,720	220,293	12,171	505,453	73,923	0	0	228,132	20,019	14,800	1,443	12,584	818	161,933
	733	3	365	11	1,250	217,821	12,035	25,679	3,756	120	8,775	37,292	3,272	338,720	33,025	1,400	91	62,568
	734	0	0	12	1,363	265,044	14,644	28,271	4,135	0	0	79,896	7,011	1,916,803	186,888	10,000	650	214,691
	736	1	122	177	20,111	813,704	44,957	148,558	21,727	150	10,969	197,053	17,291	0	0	8,000	520	115,696
	737	165	20,072	161	18,293	220,576	12,187	37,801	5,528	0	0	0	0	20,738	2,022	9,742	633	58,735
	738	202	24,573	146	16,589	19,819	1,095	139,922	20,464	0	0	0	0	0	0	0	0	62,720
	739	309	37,589	189	21,474	27,049	1,494	55,735	8,151	0	0	32,858	2,883	0	0	440,896	28,658	100,250
	740	799	97,196	117	13,294	7,104	392	2,960	433	0	0	0	0	0	0	2,718	177	111,492
	741	212	25,789	411	46,698	1,649	91	0	0	0	0	0	0	0	0	0	0	72,578
	742	77	9,367	868	98,622	82,949	4,583	51,601	7,547	0	0	0	0	0	0	80,752	5,249	125,367
	743	2	243	529	60,105	164,679	9,099	0	0	0	0	197,022	17,289	293,980	28,663	6,056	394	115,792
	744	0	0	0	0	1,071,250	59,187	600	88	0	0	3,600	316	0	0	0	0	59,590
	745	0	0	770	87,487	917,852	50,711	50,000	7,313	200	14,625	0	0	0	0	500,000	32,500	192,636
	839	586	71,285	8	909	2,954	163	2,754	403	0	0	0	0	0	0	17,000	1,105	73,865
	840	23	2,798	20	2,272	38,746	2,141	19,319	2,825	0	0	0	0	0	0	66,431	4,318	14,354
	841	161	19,585	404	45,902	16,424	907	116,206	16,995	0	0	0	0	0	0	48,774	3,170	86,561
	863	234	28,466	698	79,307	82,508	4,559	60,158	8,798	0	0	0	0	0	0	3,498	227	121,356
Subtotal			343,289		561,396		236,197		187,023		34,369		148,271		252,041		78,510	1,841,096
4. LS 1 & 7 North																		
	759	309	37,589	155	17,611	179,004	9,890	45,445	6,646	0	0	0	0	0	0	20,467	1,330	73,067
	760	217	26,398	222	25,224	381,422	21,074	224,197	32,789	0	0	3,500	307	0	0	39,184	2,547	108,338
	761	0	0	0	0	72,267	3,993	776,800	113,607	0	0	32,868	2,884	0	0	800	52	120,536
	762	487	59,242	452	51,356	152,328	8,416	21,227	3,104	0	0	0	0	4,432	432	17,475	1,136	123,687
	763	85	10,340	310	35,222	75,801	4,188	116,144	16,986	0	0	4,500	395	0	0	0	0	67,131
	764	145	17,639	128	14,543	154,096	8,514	28,920	4,230	0	0	0	0	0	0	0	0	44,926
	777	19	2,311	27	3,068	9,250	511	303,870	44,441	227	16,599	199,916	17,543	0	0	1,960	127	84,600
	788	7	852	156	17,725	24,225	1,338	27,409	4,009	0	0	0	0	0	0	292,173	18,991	42,914
Subtotal			154,371		164,749		57,924		225,812		16,599		21,129		432		24,184	665,199
5. LS 1 & 7 South																		
	836	764	92,939	806	91,578	4,190	231	85,420	12,493	0	0	0	0	0	0	50,000	3,250	200,491
	837	441	53,647	40	4,545	39,929	2,206	24,982	3,654	0	0	0	0	0	0	1,220	79	64,130
	838	362	44,036	0	0	0	0	0	0	0	0	0	0	0	0	39,363	2,559	46,595
	842	304	36,981	1,910	217,014	121,923	6,736	48,772	7,133	0	0	120,593	10,582	0	0	3,100	202	278,648
Subtotal			227,602		313,137		9,174		23,279		0		10,582		0		6,089	589,864

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6. LS 3G-2																		
	701	786	95,615	293	33,291	52,265	2,888	82,893	12,123	0	0	6,000	527	0	0	75,330	4,896	149,339
	702	364	44,280	445	50,561	60,667	3,352	83,691	12,240	0	0	9,700	851	0	0	61,927	4,025	115,309
	705	20	2,433	483	54,878	430,848	23,804	76,873	11,243	426	31,151	64,427	5,653	427,120	41,644	129,425	8,413	179,220
	706	184	22,383	14	1,591	472,893	26,127	40,000	5,850	0	0	71,912	6,310	2,042,731	199,166	64,797	4,212	265,640
	904	77	9,367	22	2,500	258,684	14,292	45,738	6,689	0	0	33,499	2,940	0	0	38,329	2,491	38,279
	923	340	41,360	59	6,704	11,061	611	41,679	6,096	0	0	21,473	1,884	0	0	254,037	16,512	73,167
Subtotal			215,438		149,524		71,075		54,240		31,151		18,165		240,810		40,550	820,953
7. LS 3G-3																		
	648	254	30,898	296	33,632	21,998	1,215	102,717	15,022	0	0	5,880	516	0	0	40,000	2,600	83,884
	700	672	81,747	405	46,016	217,143	11,997	152,356	22,282	0	0	17,170	1,507	0	0	280,000	18,200	181,749
	703	494	60,094	72	8,181	23,378	1,292	38,678	5,657	0	0	0	0	0	0	14,129	918	76,141
	704	40	4,866	175	19,884	221,086	12,215	213,687	31,252	0	0	38,082	3,342	0	0	2,136	139	71,697
	707	0	0	0	0	106,018	5,857	58,988	8,627	0	0	0	0	0	0	75,082	4,880	19,365
	713	152	18,490	646	73,399	420,153	23,213	164,314	24,031	0	0	132,189	11,600	22,385	2,183	1,493	97	153,012
Subtotal			196,096		181,110		55,790		106,871		0		16,964		2,183		26,835	585,848
8. LSLS3G-4																		
	708	371	45,131	0	0	119,096	6,580	11,779	1,723	0	0	4,880	428	0	0	24,875	1,617	55,479
	710	716	87,100	141	16,020	7,069	391	3,244	474	0	0	0	0	0	0	47,012	3,056	107,041
	779	490	59,607	181	20,565	26,208	1,448	65,736	9,614	0	0	0	0	0	0	94,212	6,124	97,358
Subtotal			191,838		36,586		8,419		11,811		0		428		0		10,796	259,878
9. Colonial																		
	765	2	243	0	0	90,930	5,024	90,431	13,226	0	0	54,477	4,780	0	0	0	0	23,273
	766	0	0	0	0	25,800	1,425	357,718	52,316	0	0	106,696	9,363	0	0	5,723	372	63,476
	775	0	0	0	0	16,615	918	1,442,587	210,978	0	0	1,848	162	0	0	0	0	212,058
	776	34	4,136	0	0	739,044	40,832	0	0	0	0	1,858	163	0	0	0	0	45,131
Subtotal			4,379		0		48,199		276,520		0		14,468		0		372	343,939
10. NTC																		
	772	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	773	20	2,433	60	6,817	79,555	4,395	175,342	25,644	0	0	2,800	246	0	0	10,576	687	40,222
	774	0	0	212	24,087	239,698	13,243	104,666	15,307	0	0	95,944	8,419	0	0	9,500	618	61,675
	780	379	46,104	0	0	5,014	277	0	0	0	0	0	0	1,572	153	1,773	115	46,650
	781	1,395	169,698	2,820	320,408	1,398,046	77,242	295,303	43,188	0	0	0	0	678,000	66,105	259,142	16,844	693,486
Subtotal			218,236		351,313		95,158		84,139		0		8,665		66,258		18,264	842,033
Iron Bridge Total			1,921,179		3,176,474		1,477,113		1,361,412		254,621		320,529		561,992		426,492	9,499,812

Water Conserv I
2025

2025 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. South Lake Nona																		
	477	0	0	0	0	1,538,510	80,426	1,300,000	179,888	250	17,297	2,210,000	183,485	900,000	83,025	1,001,000	61,562	605,682
	495	0	0	0	0	260,000	13,592	55,000	7,611	0	0	600,000	49,815	0	0	10,000	615	71,632
	505	2,792	321,352	3,624	389,587	155,500	8,129	620,000	85,793	300	20,756	75,000	6,227	0	0	375,000	23,063	854,906
Subtotal			321,352		389,587		102,146		273,291		38,053		239,527		83,025		85,239	1,532,220
2. North Lake Nona																		
	412	0	0	0	0	320,000	16,728	251,508	34,802	0	0	1,373,599	114,043	0	0	65,000	3,998	169,571
	504	2,579	296,836	2,220	238,654	860,100	44,962	501,321	69,370	304	21,033	351,914	29,218	0	0	290,000	17,835	717,908
	528	605	69,634	2,069	222,422	344,600	18,014	1,800,000	249,075	300	20,756	0	0	0	0	105,000	6,458	586,358
	529	1,414	162,748	474	50,956	40,248	2,104	363,456	50,293	0	0	0	0	0	0	0	0	266,101
Subtotal			529,217		512,032		81,808		403,541		41,789		143,261		0		28,290	1,739,938
3. Airport																		
	414	381	43,852	251	26,983	472,638	24,707	371,192	51,364	250	17,297	650,488	54,007	0	0	64,612	3,974	222,183
	415	108	12,431	0	0	122,741	6,416	10,541	1,459	0	0	1,519,082	126,122	0	0	0	0	146,427
	416	330	37,982	0	0	131,935	6,897	20,000	2,768	0	0	2,147,195	178,271	0	0	30,000	1,845	227,762
	494	0	0	0	0	0	0	8,231	1,139	446	30,858	0	0	0	0	4,475,860	275,265	307,262
	496	445	51,218	220	23,650	91,667	4,792	8,420	1,165	0	0	942,116	78,219	0	0	0	0	159,045
	497	150	17,265	0	0	222,904	11,652	26,089	3,610	0	0	1,510,849	125,438	0	0	327,000	20,111	178,076
	498	0	0	0	0	55,459	2,899	13,000	1,799	0	0	2,310,738	191,849	0	0	0	0	196,547
	499	0	0	0	0	64,633	3,379	30,930	4,280	0	0	1,217,722	101,101	0	0	0	0	108,760
	523	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	524	0	0	0	0	27,096	1,416	56,393	7,803	0	0	175,125	14,540	0	0	0	0	23,760
	525	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	526	0	0	0	0	51,500	2,692	160	22	0	0	113,526	9,425	0	0	4,750,000	292,125	304,265
	527	0	0	0	0	41,353	2,162	21,093	2,919	0	0	0	0	0	0	0	0	5,080
Subtotal			162,748		50,633		67,013		78,327		48,155		878,972		0		593,320	1,879,167
4. South 436																		
	399	0	0	0	0	976,864	51,066	824,100	114,035	2,458	170,063	704,355	58,479	0	0	0	0	393,642
	400	0	0	2,660	285,955	104,820	5,479	275,426	38,112	0	0	132,800	11,026	0	0	0	0	340,573
	474	0	0	0	0	296,840	15,517	319,519	44,213	0	0	1,029,263	85,455	0	0	0	0	145,185
	500	0	0	0	0	224,488	11,735	150,000	20,756	300	20,756	922,715	76,608	0	0	0	0	129,856
	501	0	0	508	54,611	461,588	24,130	285,465	39,501	0	0	265,000	22,002	0	0	57,584	3,541	143,785
	850	0	0	956	102,772	573,707	29,991	101,300	14,017	200	13,838	175,000	14,529	0	0	23,175	1,425	176,572
	851	228	26,242	0	0	205,000	10,716	140,572	19,452	250	17,297	200,000	16,605	0	0	0	0	90,312
	925	0	0	0	0	503,734	26,333	174,148	24,098	1,566	108,348	0	0	0	0	9,300	572	159,350
Subtotal			26,242		443,338		174,967		314,185		330,301		284,704		0		5,539	1,579,275

Appendix A: Projected Wastewater Flows by Plant, Subarea and 2025 TAZ

2025 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
5. North 436																		
	402	268	30,846	1,414	152,008	184,419	9,641	174,631	24,165	0	0	99,482	8,259	0	0	80,160	4,930	229,848
	475	0	0	538	57,836	148,592	7,768	6,422	889	0	0	58,143	4,827	0	0	0	0	71,320
	847	0	0	531	57,084	0	0	0	0	0	0	0	0	0	0	0	0	57,084
	848	0	0	417	44,828	5,000	261	202,066	27,961	0	0	0	0	0	0	0	0	73,051
Subtotal			30,846		311,756		17,670		53,014		0		13,087		0		4,930	431,302
6. LS69G-2																		
	403	0	0	1,390	149,428	14,804	774	2,520	349	0	0	0	0	0	0	0	0	150,550
	404	3	345	1,036	111,372	13,934	728	146,999	20,341	0	0	45,290	3,760	0	0	0	0	136,547
	405	706	81,259	1,516	162,973	4,844	253	33,728	4,667	0	0	0	0	0	0	55,000	3,383	252,535
	844	238	27,393	526	56,546	39,643	2,072	365,270	50,544	0	0	20,000	1,661	0	0	0	0	138,216
	845	1,074	123,614	1,492	160,393	3,457	181	169,707	23,483	0	0	0	0	0	0	0	0	307,671
	846	2	230	1,581	169,961	99,649	5,209	543,893	75,261	0	0	0	0	0	0	0	0	250,661
Subtotal			232,842		810,673		9,218		174,645		0		5,421		0		3,383	1,236,181
7. LS69G-1																		
	407	0	0	726	78,046	0	0	0	0	0	0	0	0	0	0	0	0	78,046
	408	181	20,833	483	51,923	14,888	778	80,226	11,101	0	0	70,200	5,828	0	0	130,000	7,995	98,459
	409	696	80,108	752	80,842	38,499	2,013	152,984	21,169	0	0	0	0	0	0	0	0	184,131
	476	392	45,118	565	60,739	18,600	972	88,166	12,200	0	0	0	0	0	0	47,062	2,894	121,923
Subtotal			146,058		271,550		3,763		44,470		0		5,828		0		10,889	482,560
8. LS12																		
	350	100	11,510	32	3,440	8,000	418	29,226	4,044	0	0	0	0	0	0	157,988	9,716	29,128
	351	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	769	236	27,163	0	0	11,434	598	103,827	14,367	0	0	0	0	0	0	59,724	3,673	45,801
	833	580	66,756	205	22,038	83,978	4,390	26,206	3,626	0	0	0	0	0	0	138,856	8,540	105,350
Subtotal			105,429		25,478		5,406		22,037		0		0		0		21,929	180,279
9. Conway(69fm-2)																		
	767	1	115	0	0	165,487	8,651	305,881	42,326	0	0	748,031	62,105	0	0	2,400	148	113,345
	768	0	0	0	0	36,623	1,914	179,718	24,868	0	0	76,299	6,335	0	0	0	0	33,118
	834	761	87,589	582	62,566	62,312	3,257	17,207	2,381	0	0	7,614	632	47,865	4,416	18,520	1,139	161,980
	835	590	67,907	270	29,026	13,413	701	53,806	7,445	0	0	2,600	216	0	0	69,230	4,258	109,553
	843	481	55,362	466	50,096	37,370	1,954	166,207	22,999	0	0	2,400	199	0	0	10,609	652	131,262
Subtotal			210,973		141,688		16,477		100,020		0		69,487		4,416		6,197	549,258
Water Conserv I Total			1,765,707		2,956,735		478,466		1,463,531		458,298		1,640,287		87,441		759,714	9,610,179

2025 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
Water Conserv II 2025																		
2025 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. Lift Station 85																		
	642	0	0	0	0	169,092	13,510	178,225	37,695	0	0	338,804	42,994	0	0	0	0	94,199
	652	194	34,129	589	96,780	58,958	4,711	14,685	3,106	0	0	0	0	0	0	32,892	3,092	141,817
	653	20	3,518	1,440	236,609	415,499	33,198	96,356	20,379	0	0	186,685	23,690	44,009	6,205	0	0	323,601
	654	1,107	194,745	2,276	373,974	24,547	1,961	350,345	74,098	0	0	0	0	0	0	99,949	9,395	654,173
Subtotal			232,392		707,363		53,381		135,278		0		66,685		6,205		12,487	1,213,790
2. Lift Station 45																		
	649	0	0	0	0	82,231	6,570	33,612	7,109	0	0	960,397	121,874	0	0	0	0	135,554
	650	1	176	0	0	154,874	12,374	24,882	5,263	0	0	2,123,774	269,507	0	0	0	0	287,320
	651	0	0	0	0	356,944	28,520	80,206	16,964	0	0	3,032,837	384,867	0	0	15,000	1,410	431,760
	655	615	108,191	571	93,822	11,421	913	27,255	5,764	0	0	9,960	1,264	5,400	761	22,551	2,120	212,836
	659	211	37,119	161	26,454	6,336	506	80,532	17,033	0	0	3,200	406	0	0	149,834	14,084	95,603
	660	133	23,397	568	93,329	76,140	6,084	5,440	1,151	0	0	195,405	24,797	194,493	27,424	2,276	214	176,395
	661	0	0	0	0	341,030	27,248	337,044	71,285	0	0	1,484,819	188,424	0	0	0	0	286,957
	662	112	19,703	1,310	215,249	116,429	9,303	305,649	64,645	0	0	391,853	49,726	66,995	9,446	200,808	18,876	386,948
	663	108	18,999	269	44,200	0	0	131,742	27,863	0	0	111,979	14,210	0	0	93,150	8,756	114,029
	690	157	27,620	50	8,216	220,976	17,656	277,878	58,771	0	0	0	0	0	0	0	0	112,262
	691	0	0	0	0	40,000	3,196	436,000	92,214	0	0	0	0	0	0	0	0	95,410
	692	0	0	0	0	162,895	13,015	135,506	28,660	0	0	451,550	57,302	0	0	80,000	7,520	106,497
	693	9	1,583	0	0	16,110	1,287	11,345	2,399	0	0	327,420	41,550	0	0	0	0	46,820
	694	252	44,332	14	2,300	126,179	10,082	16,650	3,521	0	0	98,333	12,478	0	0	0	0	72,714
	699	47	8,268	25	4,108	32,913	2,630	25,042	5,296	0	0	350,133	44,432	0	0	0	0	64,734
	897	0	0	0	0	1,104	88	204,101	43,167	0	0	569,865	72,316	0	0	0	0	115,571
	898	0	0	0	0	8,343	667	207,320	43,848	0	0	74,198	9,416	0	0	0	0	53,931
	903	0	0	0	0	35,850	2,864	109,627	23,186	0	0	632,550	80,271	0	0	0	0	106,321
Subtotal			289,390		487,678		143,003		518,139		0		1,372,839		37,631		52,980	2,901,661
3. Willie Mays																		
	664	6	1,056	0	0	152,772	12,206	379,313	80,225	499	52,769	866,074	109,905	0	0	0	0	256,161
	665	0	0	0	0	3,800	304	56,658	11,983	0	0	29,368	3,727	0	0	0	0	16,014
	671	604	106,256	96	15,774	9,048	723	27,870	5,895	0	0	755,525	95,876	0	0	83,713	7,869	232,393
	675	454	79,868	222	36,477	21,920	1,751	57,590	12,180	0	0	20,980	2,662	0	0	108,033	10,155	143,095
	676	146	25,684	192	31,548	10,256	819	30,000	6,345	0	0	82,772	10,504	0	0	5,000	470	75,371
Subtotal			212,864		83,799		15,804		116,628		52,769		222,674		0		18,494	723,032

Appendix A: Projected Wastewater Flows by Plant, Subarea and 2025 TAZ

2025 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
4. Bruton																		
	672	1,498	263,530	44	7,230	5,890	471	89,305	18,888	0	0	0	0	0	0	276,617	26,002	316,120
	677	596	104,849	302	49,622	2,800	224	29,264	6,189	0	0	0	0	66,321	9,351	131,083	12,322	182,557
	680	379	66,674	206	33,848	7,778	621	38,986	8,246	0	0	17,682	2,244	0	0	41,274	3,880	115,513
	681	393	69,137	216	35,491	96,973	7,748	0	0	205	21,679	84,312	10,699	0	0	561,992	52,827	197,582
	682	112	19,703	194	31,877	9,724	777	35,132	7,430	0	0	332,278	42,166	0	0	119,678	11,250	113,203
Subtotal			523,893		126,192		9,841		40,753		21,679		55,109		9,351		106,281	924,975
5. Raleigh-Frazier																		
	673	526	92,534	1,962	322,380	10,128	809	30,090	6,364	0	0	163,238	20,715	0	0	77,967	7,329	450,132
	674	512	90,072	1,016	166,941	156,306	12,489	111,473	23,577	0	0	0	0	0	0	33,025	3,104	296,182
	902	0	0	786	129,149	75,475	6,030	13,200	2,792	0	0	294,135	37,326	0	0	0	0	175,297
Subtotal			182,606		618,470		19,329		32,732		0		58,041		0		10,433	921,611
6. North Kirkman																		
	348	181	31,842	2,936	482,420	247,000	19,735	617,111	130,519	0	0	102,114	12,958	47,280	6,666	11,836	1,113	685,253
	349	0	0	1,120	184,029	877,907	70,145	570,223	120,602	0	0	9,300	1,180	0	0	514,640	48,376	424,333
	492	104	18,296	5,364	881,370	536,168	42,840	688,387	145,594	200	21,150	11,978	1,520	0	0	11,939	1,122	1,111,891
	603	939	165,190	611	100,395	48,215	3,852	39,965	8,453	0	0	691	88	0	0	89,378	8,402	286,379
Subtotal			215,327		1,648,214		136,572		405,168		21,150		15,746		6,666		59,013	2,507,856
7. South Kirkman 1																		
	444	334	58,758	1,586	260,599	202,415	16,173	130,338	27,566	150	15,863	0	0	0	0	0	0	378,958
	486	0	0	0	0	163,016	13,025	54,616	11,551	326	34,475	0	0	9,733	1,372	8,836	831	61,254
	493	0	0	982	161,354	10,000	799	287,575	60,822	0	0	5,549	704	0	0	0	0	223,680
Subtotal			58,758		421,953		29,997		99,940		50,337		704		1,372		831	663,892
8. South Kirkman 2																		
	443	0	0	1,474	242,196	392,896	31,392	211,204	44,670	3,704	391,698	0	0	0	0	0	0	709,956
	446	1	176	160	26,290	55,397	4,426	32,630	6,901	0	0	0	0	0	0	327,335	30,769	68,563
	485	0	0	936	153,796	0	0	898,638	190,062	184	19,458	0	0	0	0	0	0	363,316
	983	0	0	0	0	771,267	61,624	12,990	2,747	0	0	512,826	65,078	0	0	545	51	129,500
	986	0	0	0	0	0	0	976,849	206,604	0	0	0	0	0	0	0	0	206,604
	987	0	0	636	104,502	45,446	3,631	1,188,431	251,353	2,772	293,139	0	0	0	0	0	0	652,626
	989	0	0	0	0	0	0	755,589	159,807	0	0	0	0	0	0	0	0	159,807
	990	0	0	0	0	98,990	7,909	701,665	148,402	4,994	528,116	52,948	6,719	0	0	0	0	691,146
Subtotal			176		526,784		108,983		1,010,546		1,232,411		71,797		0		30,821	2,981,518
9. Lift Station 29																		
	981	0	0	334	54,880	16,969	1,356	126,313	26,715	2,986	315,770	0	0	0	0	840	79	398,800
	995	0	0	0	0	33,618	2,686	235,671	49,844	2,871	303,608	48,269	6,125	0	0	0	0	362,264
	996	0	0	255	41,900	181,832	14,528	280,742	59,377	2,242	237,092	180,823	22,946	0	0	0	0	375,843
Subtotal			0		96,780		18,570		135,937		856,469		29,072		0		79	1,136,907

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2025 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
10. Vineland																		
	668	0	0	4,316	709,171	76,427	6,107	54,615	11,551	0	0	0	0	0	0	80,000	7,520	734,348
	669	0	0	464	76,241	68,761	5,494	26,080	5,516	0	0	172,002	21,827	0	0	31,226	2,935	112,013
	670	0	0	777	127,670	331,515	26,488	41,797	8,840	0	0	3,105,207	394,051	0	0	0	0	557,049
	880	0	0	2,748	451,529	1,252,921	100,108	56,740	12,001	300	31,725	0	0	0	0	191,351	17,987	613,350
	881	0	0	700	115,018	0	0	2,066,941	437,158	0	0	0	0	0	0	0	0	552,176
	899	0	0	0	0	336,170	26,860	12,000	2,538	0	0	0	0	0	0	0	0	29,398
	900	0	0	1,912	314,165	54,861	4,383	80,180	16,958	224	23,688	109,148	13,851	0	0	0	0	373,045
	901	1	176	0	0	500,847	40,018	132,452	28,014	375	39,656	359,394	45,607	0	0	15,942	1,499	154,969
	924	0	0	3,151	517,747	459,820	36,740	1,168,434	247,124	509	53,827	0	0	0	0	84,420	7,935	863,373
Subtotal			176		2,311,541		246,198		769,699		148,896		475,336		0		37,876	3,989,722
11. Tampa North																		
	688	138	24,277	54	8,873	394,833	31,547	137,885	29,163	111	11,738	50,083	6,356	0	0	47,202	4,437	116,391
	689	312	54,887	88	14,459	189,788	15,164	40,881	8,646	316	33,417	87,518	11,106	0	0	0	0	137,680
	719	42	7,389	99	16,267	79,090	6,319	114,849	24,291	0	0	236,299	29,986	0	0	27,038	2,542	86,793
	720	177	31,138	472	77,555	47,553	3,799	211,423	44,716	0	0	271,445	34,446	0	0	47,974	4,510	196,165
	721	6	1,056	458	75,255	1,173,408	93,755	182,923	38,688	590	62,393	65,082	8,259	0	0	529,688	49,791	329,196
	724	25	4,398	163	26,783	192,952	15,417	385,545	81,543	0	0	315,896	40,087	22,260	3,139	13,754	1,293	172,659
Subtotal			123,145		219,192		166,002		227,047		107,548		130,240		3,139		62,572	1,038,884
12. Tampa South																		
	678	296	52,073	345	56,688	15,250	1,218	62,825	13,287	0	0	0	0	0	0	125,215	11,770	135,036
	679	231	40,638	174	28,590	1,128	90	62,037	13,121	0	0	0	0	0	0	268,302	25,220	107,659
	684	210	36,943	10	1,643	11,737	938	75,320	15,930	0	0	10,000	1,269	0	0	0	0	56,723
	685	0	0	0	0	74,204	5,929	18,193	3,848	328	34,686	21,690	2,752	0	0	160,744	15,110	62,325
	686	45	7,916	111	18,239	55,051	4,399	231,490	48,960	0	0	386,173	49,005	0	0	207,336	19,490	148,009
	687	49	8,620	119	19,553	26,778	2,140	87,213	18,446	0	0	312,903	39,707	0	0	32,043	3,012	91,478
	725	136	23,925	376	61,781	282,416	22,565	110,186	23,304	0	0	95,049	12,062	0	0	25,713	2,417	146,055
	727	205	36,064	601	98,752	500	40	49,747	10,521	0	0	34,547	4,384	0	0	13,667	1,285	151,045
	728	287	50,489	145	23,825	48,966	3,912	34,154	7,224	32	3,384	20,700	2,627	0	0	52,185	4,905	96,367
	729	25	4,398	2	329	104,638	8,361	40,866	8,643	0	0	63,868	8,105	0	0	10,000	940	30,775
	735	7	1,231	2	329	131,193	10,482	58,427	12,357	0	0	424,480	53,867	0	0	0	0	78,266
Subtotal			262,298		309,728		60,074		175,642		38,070		173,778		0		84,149	1,103,739
Water Conserv II Total			2,101,025		7,557,695		1,007,753		3,667,508		2,529,329		2,672,020		64,365		476,016	20,107,586

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Iron Bridge 2025																		
2025 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. Lift Station 2																		
	695	502	61,067	103	11,703	52,418	2,896	64,603	9,448	184	13,455	2,500	219	0	0	0	0	98,789
	696	250	30,412	242	27,496	156,614	8,653	32,749	4,790	0	0	0	0	0	0	43,551	2,831	74,181
	697	272	33,088	120	13,634	78,751	4,351	83,733	12,246	0	0	5,200	456	0	0	94,341	6,132	69,908
	698	523	63,622	21	2,386	2,130	118	132,307	19,350	0	0	184,035	16,149	0	0	3,996	260	101,884
	711	257	31,263	104	11,816	150,504	8,315	145,681	21,306	0	0	0	0	0	0	29,800	1,937	74,638
	712	246	29,925	169	19,202	79,115	4,371	145,214	21,238	0	0	77,392	6,791	0	0	17,862	1,161	82,688
	714	157	19,099	202	22,951	357,906	19,774	221,310	32,367	0	0	92,372	8,106	0	0	371,063	24,119	126,416
	715	149	18,125	102	11,589	167,077	9,231	94,816	13,867	0	0	7,500	658	2,737	267	1,500	98	53,835
	716	7	852	1,060	120,437	855,587	47,271	175,913	25,727	337	24,643	3,897	342	0	0	30,408	1,977	221,249
	717	263	31,993	842	95,668	908,607	50,201	102,407	14,977	295	21,572	1,000	88	0	0	0	0	214,499
	718	0	0	1,226	139,298	386,921	21,377	112,312	16,426	303	22,157	0	0	0	0	149,221	9,699	208,957
	753	0	0	669	76,012	3,140,968	173,538	141,733	20,728	500	36,563	21,590	1,895	0	0	25,065	1,629	310,365
	754	0	0	20	2,272	483,076	26,690	74,008	10,824	0	0	301,454	26,453	0	0	0	0	66,239
	755	77	9,367	199	22,610	115,559	6,385	46,868	6,854	0	0	0	0	0	0	15,000	975	46,191
	905	42	5,109	503	57,151	281,899	15,575	13,471	1,970	0	0	0	0	0	0	0	0	79,805
Subtotal			333,922		634,227		398,747		232,117		118,389		61,156		267		50,817	1,829,643
2. Downtown																		
	722	5	608	92	10,453	251,126	13,875	29,905	4,374	0	0	106,772	9,369	0	0	336,000	21,840	60,519
	723	1	122	586	66,581	362,605	20,034	111,098	16,248	0	0	81,371	7,140	0	0	184,585	11,998	122,123
	726	48	5,839	286	32,495	27,349	1,511	67,106	9,814	0	0	12,119	1,063	0	0	842,524	54,764	105,487
	746	0	0	1,086	123,391	993,106	54,869	9,373	1,371	319	23,327	0	0	0	0	0	0	202,958
	747	0	0	276	31,359	291,828	16,123	21,118	3,089	0	0	0	0	0	0	502,052	32,633	83,205
	748	0	0	310	35,222	2,063,134	113,988	175,536	25,672	248	18,135	8,600	755	0	0	32,420	2,107	195,879
	749	0	0	405	46,016	1,707,566	94,343	302,310	44,213	0	0	2,100	184	0	0	95,541	6,210	190,966
	750	0	0	0	0	1,085,211	59,958	72,430	10,593	0	0	6,952	610	0	0	0	0	71,161
	751	0	0	0	0	733,113	40,504	42,252	6,179	0	0	0	0	0	0	89,374	5,809	52,493
	752	0	0	881	100,099	457,375	25,270	39,168	5,728	0	0	0	0	0	0	254,501	16,543	147,640
	756	82	9,975	211	23,974	162,897	9,000	0	0	0	0	0	0	0	0	160,261	10,417	53,366
	757	47	5,717	198	22,497	60,848	3,362	16,081	2,352	0	0	1,000	88	0	0	800	52	34,068
	758	85	10,340	2,906	330,180	301,346	16,649	185,142	27,077	0	0	13,000	1,141	0	0	0	0	385,387
	906	30	3,649	342	38,858	522,911	28,891	17,026	2,490	78	5,704	3,992	350	0	0	118,460	7,700	87,642
	907	2	243	275	31,246	341,271	18,855	54,836	8,020	245	17,916	0	0	0	0	0	0	76,279
Subtotal			36,494		892,371		517,233		167,219		65,081		20,701		0		170,074	1,869,174

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3. Mills																		
	731	0	0	0	0	107,632	5,947	33,770	4,939	0	0	913,841	80,190	0	0	0	0	91,075
	732	44	5,352	436	49,538	220,293	12,171	505,453	73,923	0	0	228,132	20,019	14,800	1,443	12,584	818	163,264
	733	3	365	11	1,250	222,821	12,311	32,679	4,779	120	8,775	37,292	3,272	338,720	33,025	1,400	91	63,868
	734	0	0	12	1,363	275,044	15,196	28,271	4,135	0	0	79,896	7,011	1,916,803	186,888	10,000	650	215,243
	736	1	122	177	20,111	813,704	44,957	148,558	21,727	150	10,969	197,053	17,291	0	0	8,000	520	115,696
	737	165	20,072	163	18,520	220,576	12,187	37,801	5,528	0	0	0	0	20,738	2,022	9,742	633	58,962
	738	202	24,573	146	16,589	19,819	1,095	139,922	20,464	0	0	0	0	0	0	0	0	62,720
	739	309	37,589	189	21,474	27,049	1,494	55,735	8,151	0	0	32,858	2,883	0	0	440,896	28,658	100,250
	740	800	97,318	117	13,294	7,104	392	2,960	433	0	0	0	0	0	0	2,718	177	111,614
	741	212	25,789	411	46,698	1,649	91	0	0	0	0	0	0	0	0	0	0	72,578
	742	77	9,367	868	98,622	82,949	4,583	51,601	7,547	0	0	0	0	0	0	80,752	5,249	125,367
	743	2	243	529	60,105	164,679	9,099	0	0	0	0	197,022	17,289	293,980	28,663	6,056	394	115,792
	744	0	0	0	0	1,191,250	65,817	600	88	0	0	3,600	316	0	0	0	0	66,220
	745	0	0	770	87,487	917,852	50,711	50,000	7,313	200	14,625	0	0	0	0	500,000	32,500	192,636
	839	587	71,407	8	909	2,954	163	2,754	403	0	0	0	0	0	0	17,000	1,105	73,987
	840	23	2,798	20	2,272	38,746	2,141	19,319	2,825	0	0	0	0	0	0	66,431	4,318	14,354
	841	167	20,315	404	45,902	16,424	907	116,206	16,995	0	0	0	0	0	0	48,774	3,170	87,290
	863	235	28,587	706	80,216	82,508	4,559	60,158	8,798	0	0	0	0	0	0	3,498	227	122,387
Subtotal			343,897		564,351		243,821		188,046		34,369		148,271		252,041		78,510	1,853,307
4. LS 1 & 7 North																		
	759	309	37,589	155	17,611	179,004	9,890	49,445	7,231	0	0	0	0	0	0	20,467	1,330	73,652
	760	217	26,398	222	25,224	384,422	21,239	224,197	32,789	0	0	3,500	307	0	0	39,184	2,547	108,503
	761	0	0	0	0	74,267	4,103	796,800	116,532	0	0	32,868	2,884	0	0	800	52	123,571
	762	487	59,242	452	51,356	152,328	8,416	21,227	3,104	0	0	0	0	4,432	432	17,475	1,136	123,687
	763	85	10,340	310	35,222	75,801	4,188	116,144	16,986	0	0	4,500	395	0	0	0	0	67,131
	764	145	17,639	132	14,998	154,096	8,514	28,920	4,230	0	0	0	0	0	0	0	0	45,380
	777	19	2,311	27	3,068	9,250	511	303,870	44,441	227	16,599	219,916	19,298	0	0	1,960	127	86,355
	788	7	852	156	17,725	24,225	1,338	27,409	4,009	0	0	0	0	0	0	292,173	18,991	42,914
Subtotal			154,371		165,203		58,200		229,322		16,599		22,884		432		24,184	671,195
5. LS 1 & 7 South																		
	836	764	92,939	806	91,578	4,190	231	85,420	12,493	0	0	0	0	0	0	50,000	3,250	200,491
	837	441	53,647	40	4,545	39,929	2,206	24,982	3,654	0	0	0	0	0	0	1,220	79	64,130
	838	362	44,036	0	0	0	0	0	0	0	0	0	0	0	0	39,363	2,559	46,595
	842	305	37,102	1,910	217,014	121,923	6,736	48,772	7,133	0	0	120,593	10,582	0	0	3,100	202	278,769
Subtotal			227,724		313,137		9,174		23,279		0		10,582		0		6,089	589,985

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6. LS 3G-2																		
	701	787	95,737	293	33,291	52,265	2,888	82,893	12,123	0	0	6,000	527	0	0	75,330	4,896	149,461
	702	365	44,401	445	50,561	60,667	3,352	83,691	12,240	0	0	9,700	851	0	0	61,927	4,025	115,430
	705	19	2,311	483	54,878	530,848	29,329	96,373	14,095	426	31,151	64,427	5,653	427,120	41,644	129,425	8,413	187,475
	706	184	22,383	14	1,591	592,893	32,757	60,000	8,775	0	0	71,912	6,310	2,582,731	251,816	186,797	12,142	335,775
	904	77	9,367	22	2,500	268,684	14,845	45,738	6,689	0	0	33,499	2,940	0	0	38,329	2,491	38,831
	923	340	41,360	59	6,704	11,061	611	41,679	6,096	0	0	21,473	1,884	0	0	254,037	16,512	73,167
Subtotal			215,559		149,524		83,782		60,017		31,151		18,165		293,460		48,480	900,139
7. LS 3G-3																		
	648	254	30,898	296	33,632	21,998	1,215	102,717	15,022	0	0	5,880	516	0	0	40,000	2,600	83,884
	700	672	81,747	405	46,016	217,143	11,997	154,356	22,575	0	0	17,170	1,507	0	0	280,000	18,200	182,042
	703	495	60,216	96	10,908	24,378	1,347	38,678	5,657	0	0	0	0	0	0	14,129	918	79,045
	704	40	4,866	177	20,111	231,086	12,768	213,687	31,252	0	0	38,082	3,342	0	0	2,136	139	72,476
	707	0	0	0	0	106,018	5,857	68,988	10,089	0	0	0	0	0	0	75,082	4,880	20,827
	713	152	18,490	646	73,399	420,153	23,213	164,314	24,031	0	0	132,189	11,600	22,385	2,183	1,493	97	153,012
Subtotal			196,217		184,064		56,398		108,626		0		16,964		2,183		26,835	591,286
8. LSLS3G-4																		
	708	372	45,253	0	0	119,096	6,580	11,779	1,723	0	0	4,880	428	0	0	24,875	1,617	55,601
	710	716	87,100	141	16,020	7,069	391	3,244	474	0	0	0	0	0	0	47,012	3,056	107,041
	779	490	59,607	181	20,565	26,208	1,448	65,736	9,614	0	0	0	0	0	0	94,212	6,124	97,358
Subtotal			191,960		36,586		8,419		11,811		0		428		0		10,796	260,000
9. Colonial																		
	765	2	243	0	0	90,930	5,024	95,431	13,957	0	0	54,477	4,780	0	0	0	0	24,004
	766	0	0	0	0	25,800	1,425	362,718	53,048	0	0	106,696	9,363	0	0	13,723	892	64,728
	775	0	0	0	0	16,615	918	1,442,587	210,978	0	0	1,848	162	0	0	0	0	212,058
	776	34	4,136	0	0	739,044	40,832	0	0	0	0	1,858	163	0	0	0	0	45,131
Subtotal			4,379		0		48,199		277,983		0		14,468		0		892	345,922
10. NTC																		
	772	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	773	20	2,433	60	6,817	79,555	4,395	175,342	25,644	0	0	2,800	246	0	0	10,576	687	40,222
	774	0	0	212	24,087	249,698	13,796	104,666	15,307	0	0	95,944	8,419	0	0	9,500	618	62,227
	780	379	46,104	0	0	5,014	277	0	0	0	0	0	0	1,572	153	1,773	115	46,650
	781	1,395	169,698	2,820	320,408	1,398,046	77,242	295,303	43,188	0	0	0	0	678,000	66,105	259,142	16,844	693,486
Subtotal			218,236		351,313		95,710		84,139		0		8,665		66,258		18,264	842,586
Iron Bridge Total			1,922,760		3,290,776		1,519,683		1,382,560		265,590		322,284		614,642		434,942	9,753,237

Water Conserv I
2030

2030 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. South Lake Nona																		
	477	0	0	0	0	1,538,510	80,426	1,300,000	179,888	250	17,297	2,210,000	183,485	950,000	87,638	1,001,000	61,562	610,294
	495	0	0	0	0	310,000	16,205	75,000	10,378	0	0	725,000	60,193	0	0	20,000	1,230	88,007
	505	2,792	321,352	3,624	389,587	155,500	8,129	694,500	96,101	300	20,756	75,000	6,227	0	0	375,000	23,063	865,215
Subtotal			321,352		389,587		104,760		286,367		38,053		249,905		87,638		85,854	1,563,515
2. North Lake Nona																		
	412	0	0	0	0	470,000	24,569	311,508	43,105	0	0	1,673,599	138,951	0	0	75,000	4,613	211,237
	504	2,579	296,836	2,220	238,654	860,100	44,962	501,321	69,370	304	21,033	401,914	33,369	0	0	290,000	17,835	722,059
	528	605	69,634	2,369	254,672	344,600	18,014	1,829,750	253,192	300	20,756	0	0	0	0	105,000	6,458	622,725
	529	1,414	162,748	474	50,956	40,248	2,104	363,456	50,293	0	0	0	0	0	0	0	0	266,101
Subtotal			529,217		544,283		89,649		415,960		41,789		172,319		0		28,905	1,822,122
3. Airport																		
	414	381	43,852	251	26,983	557,638	29,151	386,192	53,439	450	31,134	675,488	56,082	0	0	64,612	3,974	244,615
	415	108	12,431	0	0	132,741	6,939	10,541	1,459	0	0	1,569,082	130,273	0	0	0	0	151,101
	416	330	37,982	0	0	161,935	8,465	23,000	3,183	0	0	2,247,195	186,573	0	0	30,000	1,845	238,048
	494	0	0	0	0	0	0	8,231	1,139	446	30,858	0	0	0	0	4,495,860	276,495	308,492
	496	445	51,218	220	23,650	96,667	5,053	8,420	1,165	0	0	1,042,116	86,522	0	0	0	0	167,609
	497	150	17,265	0	0	237,904	12,436	26,089	3,610	0	0	1,660,849	137,892	0	0	327,000	20,111	191,314
	498	0	0	0	0	60,459	3,160	15,000	2,076	0	0	2,310,738	191,849	0	0	0	0	197,085
	499	0	0	0	0	79,633	4,163	30,930	4,280	0	0	1,317,722	109,404	0	0	0	0	117,847
	523	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	524	0	0	0	0	27,096	1,416	56,393	7,803	0	0	175,125	14,540	0	0	0	0	23,760
	525	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	526	0	0	0	0	51,500	2,692	160	22	0	0	113,526	9,425	0	0	5,250,000	322,875	335,015
	527	0	0	0	0	41,353	2,162	21,093	2,919	0	0	0	0	0	0	0	0	5,080
Subtotal			162,748		50,633		75,638		81,095		61,992		922,561		0		625,300	1,979,966
4. South 436																		
	399	0	0	0	0	976,864	51,066	824,100	114,035	2,458	170,063	704,355	58,479	0	0	0	0	393,642
	400	0	0	2,660	285,955	104,820	5,479	295,426	40,880	0	0	132,800	11,026	0	0	0	0	343,340
	474	0	0	0	0	366,840	19,177	369,519	51,132	150	10,378	1,329,263	110,362	0	0	0	0	191,049
	500	0	0	0	0	274,488	14,349	200,000	27,675	300	20,756	1,047,715	86,987	0	0	0	0	149,767
	501	0	0	508	54,611	511,588	26,743	305,465	42,269	0	0	265,000	22,002	0	0	57,584	3,541	149,166
	850	0	0	956	102,772	633,707	33,127	111,300	15,401	200	13,838	200,000	16,605	0	0	23,175	1,425	183,168
	851	228	26,242	0	0	255,000	13,330	160,572	22,219	250	17,297	250,000	20,756	0	0	0	0	99,845
	925	0	0	0	0	553,734	28,946	184,148	25,481	1,566	108,348	0	0	0	0	9,300	572	163,347
Subtotal			26,242		443,338		192,217		339,092		340,679		326,216		0		5,539	1,673,324

Appendix A: Projected Wastewater Flows by Plant, Subarea and 2025 TAZ

2030 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
5. North 436																		
	402	268	30,846	1,414	152,008	189,419	9,902	179,631	24,856	0	0	99,482	8,259	0	0	80,160	4,930	230,802
	475	0	0	538	57,836	153,592	8,029	6,422	889	0	0	58,143	4,827	0	0	0	0	71,581
	847	0	0	531	57,084	0	0	0	0	0	0	0	0	0	0	0	0	57,084
	848	0	0	417	44,828	5,000	261	202,066	27,961	0	0	0	0	0	0	0	0	73,051
Subtotal			30,846		311,756		18,192		53,706		0		13,087		0		4,930	432,517
6. LS69G-2																		
	403	0	0	1,390	149,428	14,804	774	2,520	349	0	0	0	0	0	0	0	0	150,550
	404	3	345	1,036	111,372	13,934	728	146,999	20,341	0	0	45,290	3,760	0	0	0	0	136,547
	405	706	81,259	1,516	162,973	4,844	253	33,728	4,667	0	0	0	0	0	0	55,000	3,383	252,535
	844	238	27,393	526	56,546	39,643	2,072	375,270	51,928	0	0	20,000	1,661	0	0	0	0	139,600
	845	1,074	123,614	1,504	161,683	3,457	181	169,707	23,483	0	0	0	0	0	0	0	0	308,961
	846	2	230	1,581	169,961	99,649	5,209	546,893	75,676	0	0	0	0	0	0	0	0	251,076
Subtotal			232,842		811,963		9,218		176,444		0		5,421		0		3,383	1,239,270
7. LS69G-1																		
	407	0	0	726	78,046	0	0	0	0	0	0	0	0	0	0	0	0	78,046
	408	181	20,833	483	51,923	14,888	778	80,226	11,101	0	0	70,200	5,828	0	0	130,000	7,995	98,459
	409	696	80,108	752	80,842	38,499	2,013	157,984	21,861	0	0	0	0	0	0	0	0	184,823
	476	392	45,118	565	60,739	18,600	972	88,166	12,200	0	0	0	0	0	0	47,062	2,894	121,923
Subtotal			146,058		271,550		3,763		45,162		0		5,828		0		10,889	483,252
8. LS12																		
	350	100	11,510	32	3,440	8,000	418	29,226	4,044	0	0	0	0	0	0	157,988	9,716	29,128
	351	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	769	236	27,163	0	0	13,434	702	106,827	14,782	0	0	0	0	0	0	59,724	3,673	46,320
	833	580	66,756	205	22,038	83,978	4,390	26,206	3,626	0	0	0	0	0	0	138,856	8,540	105,350
Subtotal			105,429		25,478		5,510		22,453		0		0		0		21,929	180,799
9. Conway(69fm-2)																		
	767	1	115	0	0	165,487	8,651	307,881	42,603	0	0	798,031	66,257	0	0	2,400	148	117,773
	768	0	0	0	0	36,623	1,914	181,718	25,145	0	0	76,299	6,335	0	0	0	0	33,394
	834	761	87,589	582	62,566	65,312	3,414	17,207	2,381	0	0	7,614	632	47,865	4,416	18,520	1,139	162,137
	835	590	67,907	270	29,026	13,413	701	53,806	7,445	0	0	2,600	216	0	0	69,230	4,258	109,553
	843	482	55,477	466	50,096	37,370	1,954	181,207	25,075	0	0	2,400	199	0	0	10,609	652	133,453
Subtotal			211,088		141,688		16,634		102,649		0		73,639		4,416		6,197	556,310
Water Conserv I Total			1,765,822		2,990,276		515,582		1,522,928		482,514		1,768,976		92,053		792,924	9,931,074

Appendix A: Projected Wastewater Flows by Plant, Subarea and 2025 TAZ

2030 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
Water Conserv II 2030																		
2030 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. Lift Station 85																		
	642	0	0	0	0	169,092	13,510	178,225	37,695	0	0	338,804	42,994	0	0	0	0	94,199
	652	194	34,129	589	96,780	58,958	4,711	14,685	3,106	0	0	0	0	0	0	32,892	3,092	141,817
	653	20	3,518	1,440	236,609	415,499	33,198	96,356	20,379	0	0	186,685	23,690	44,009	6,205	0	0	323,601
	654	1,107	194,745	2,276	373,974	24,547	1,961	365,345	77,270	0	0	0	0	0	0	99,949	9,395	657,346
Subtotal			232,392		707,363		53,381		138,450		0		66,685		6,205		12,487	1,216,963
2. Lift Station 45																		
	649	0	0	0	0	82,231	6,570	33,612	7,109	0	0	960,397	121,874	0	0	0	0	135,554
	650	1	176	0	0	174,874	13,972	24,882	5,263	0	0	2,123,774	269,507	0	0	0	0	288,918
	651	0	0	0	0	356,944	28,520	85,206	18,021	0	0	3,032,837	384,867	0	0	15,000	1,410	432,818
	655	615	108,191	571	93,822	11,421	913	27,255	5,764	0	0	9,960	1,264	5,400	761	22,551	2,120	212,836
	659	211	37,119	161	26,454	6,336	506	85,532	18,090	0	0	3,200	406	0	0	149,834	14,084	96,660
	660	133	23,397	568	93,329	81,140	6,483	5,440	1,151	0	0	195,405	24,797	194,493	27,424	2,276	214	176,795
	661	0	0	0	0	341,030	27,248	337,044	71,285	0	0	1,484,819	188,424	0	0	0	0	286,957
	662	112	19,703	1,310	215,249	126,429	10,102	320,649	67,817	0	0	391,853	49,726	66,995	9,446	200,808	18,876	390,919
	663	108	18,999	269	44,200	0	0	131,742	27,863	0	0	111,979	14,210	0	0	93,150	8,756	114,029
	690	159	27,971	54	8,873	220,976	17,656	287,878	60,886	0	0	0	0	0	0	0	0	115,386
	691	0	0	0	0	50,000	3,995	480,000	101,520	0	0	0	0	0	0	0	0	105,515
	692	0	0	0	0	162,895	13,015	140,506	29,717	0	0	451,550	57,302	0	0	80,000	7,520	107,554
	693	9	1,583	0	0	16,110	1,287	11,345	2,399	0	0	327,420	41,550	0	0	0	0	46,820
	694	252	44,332	14	2,300	126,179	10,082	16,650	3,521	0	0	98,333	12,478	0	0	0	0	72,714
	699	47	8,268	25	4,108	32,913	2,630	25,042	5,296	0	0	350,133	44,432	0	0	0	0	64,734
	897	0	0	0	0	1,104	88	204,101	43,167	0	0	569,865	72,316	0	0	0	0	115,571
	898	0	0	0	0	8,343	667	207,320	43,848	0	0	74,198	9,416	0	0	0	0	53,931
	903	0	0	0	0	40,850	3,264	119,627	25,301	0	0	632,550	80,271	0	0	0	0	108,836
Subtotal			289,742		488,335		146,998		538,020		0		1,372,839		37,631		52,980	2,926,546
3. Willie Mays																		
	664	6	1,056	0	0	157,772	12,606	384,313	81,282	499	52,769	866,074	109,905	0	0	0	0	257,618
	665	0	0	0	0	3,800	304	56,658	11,983	0	0	29,368	3,727	0	0	0	0	16,014
	671	604	106,256	96	15,774	9,048	723	27,870	5,895	0	0	755,525	95,876	0	0	83,713	7,869	232,393
	675	454	79,868	222	36,477	24,920	1,991	59,590	12,603	0	0	20,980	2,662	0	0	108,033	10,155	143,757
	676	146	25,684	192	31,548	10,256	819	30,000	6,345	0	0	82,772	10,504	0	0	5,000	470	75,371
Subtotal			212,864		83,799		16,443		118,108		52,769		222,674		0		18,494	725,152

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2030 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
4. Bruton																		
	672	1,502	264,233	44	7,230	8,890	710	91,305	19,311	0	0	0	0	0	0	276,617	26,002	317,486
	677	598	105,201	302	49,622	2,800	224	31,264	6,612	0	0	0	0	66,321	9,351	131,083	12,322	183,332
	680	380	66,850	218	35,820	10,778	861	40,986	8,669	0	0	17,682	2,244	0	0	41,274	3,880	118,323
	681	394	69,313	216	35,491	96,973	7,748	0	0	205	21,679	84,312	10,699	0	0	571,992	53,767	198,698
	682	113	19,879	194	31,877	12,724	1,017	35,132	7,430	0	0	357,278	45,339	0	0	119,678	11,250	116,791
Subtotal			525,476		160,040		10,560		42,022		21,679		58,282		9,351		107,221	934,630
5. Raleigh-Frazier																		
	673	526	92,534	1,962	322,380	10,128	809	30,090	6,364	0	0	163,238	20,715	0	0	77,967	7,329	450,132
	674	512	90,072	1,016	166,941	156,306	12,489	111,473	23,577	0	0	0	0	0	0	33,025	3,104	296,182
	902	0	0	786	129,149	75,475	6,030	13,200	2,792	0	0	314,135	39,864	0	0	0	0	177,835
Subtotal			182,606		618,470		19,329		32,732		0		60,579		0		10,433	924,149
6. North Kirkman																		
	348	181	31,842	2,936	482,420	257,000	20,534	642,111	135,806	0	0	102,114	12,958	47,280	6,666	11,836	1,113	691,340
	349	0	0	1,120	184,029	877,907	70,145	580,223	122,717	0	0	9,300	1,180	0	0	524,640	49,316	427,388
	492	104	18,296	5,364	881,370	536,168	42,840	723,387	152,996	200	21,150	11,978	1,520	0	0	11,939	1,122	1,119,294
	603	939	165,190	611	100,395	48,215	3,852	39,965	8,453	0	0	691	88	0	0	89,378	8,402	286,379
Subtotal			215,327		1,648,214		137,371		419,973		21,150		15,746		6,666		59,953	2,524,400
7. South Kirkman 1																		
	444	334	58,758	1,586	260,599	202,415	16,173	130,338	27,566	150	15,863	0	0	0	0	0	0	378,958
	486	0	0	0	0	163,016	13,025	54,616	11,551	326	34,475	0	0	9,733	1,372	8,836	831	61,254
	493	0	0	982	161,354	10,000	799	292,575	61,880	0	0	5,549	704	0	0	0	0	224,737
Subtotal			58,758		421,953		29,997		100,997		50,337		704		1,372		831	664,949
8. South Kirkman 2																		
	443	0	0	2,000	328,624	392,896	31,392	211,204	44,670	3,704	391,698	0	0	0	0	0	0	796,384
	446	1	176	160	26,290	55,397	4,426	32,630	6,901	0	0	0	0	0	0	327,335	30,769	68,563
	485	0	0	936	153,796	0	0	898,638	190,062	184	19,458	0	0	0	0	0	0	363,316
	983	0	0	0	0	771,267	61,624	12,990	2,747	0	0	512,826	65,078	0	0	545	51	129,500
	986	0	0	0	0	0	0	976,849	206,604	0	0	0	0	0	0	0	0	206,604
	987	0	0	636	104,502	45,446	3,631	1,188,431	251,353	3,022	319,577	0	0	0	0	0	0	679,063
	989	0	0	0	0	0	0	755,589	159,807	0	0	0	0	0	0	0	0	159,807
	990	0	0	0	0	98,990	7,909	701,665	148,402	7,094	750,191	52,948	6,719	0	0	0	0	913,221
Subtotal			176		613,212		108,983		1,010,546		1,480,923		71,797		0		30,821	3,316,458
9. Lift Station 29																		
	981	0	0	334	54,880	16,969	1,356	126,313	26,715	2,986	315,770	0	0	0	0	840	79	398,800
	995	0	0	0	0	33,618	2,686	235,671	49,844	2,871	303,608	48,269	6,125	0	0	0	0	362,264
	996	0	0	255	41,900	181,832	14,528	280,742	59,377	2,242	237,092	180,823	22,946	0	0	0	0	375,843
Subtotal			0		96,780		18,570		135,937		856,469		29,072		0		79	1,136,907

2030 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
10. Vineland																		
	668	0	0	4,316	709,171	81,427	6,506	54,615	11,551	0	0	0	0	0	0	80,000	7,520	734,748
	669	0	0	464	76,241	68,761	5,494	26,080	5,516	0	0	172,002	21,827	0	0	31,226	2,935	112,013
	670	0	0	777	127,670	331,515	26,488	41,797	8,840	0	0	3,105,207	394,051	0	0	0	0	557,049
	880	0	0	3,048	500,823	1,252,921	100,108	56,740	12,001	300	31,725	0	0	0	0	191,351	17,987	662,644
	881	0	0	700	115,018	0	0	2,066,941	437,158	0	0	0	0	0	0	0	0	552,176
	899	0	0	0	0	336,170	26,860	12,000	2,538	0	0	0	0	0	0	0	0	29,398
	900	0	0	1,912	314,165	54,861	4,383	80,180	16,958	224	23,688	109,148	13,851	0	0	0	0	373,045
	901	1	176	0	0	500,847	40,018	132,452	28,014	375	39,656	359,394	45,607	0	0	15,942	1,499	154,969
	924	0	0	3,151	517,747	479,820	38,338	1,183,434	250,296	509	53,827	0	0	0	0	84,420	7,935	868,143
Subtotal			176												0			4,044,185
11. Tampa North																		
	688	138	24,277	54	8,873	396,833	31,707	137,885	29,163	111	11,738	50,083	6,356	0	0	47,202	4,437	116,550
	689	312	54,887	88	14,459	194,788	15,564	42,881	9,069	316	33,417	87,518	11,106	0	0	0	0	138,503
	719	42	7,389	99	16,267	79,090	6,319	114,849	24,291	0	0	236,299	29,986	0	0	27,038	2,542	86,793
	720	177	31,138	472	77,555	47,553	3,799	211,423	44,716	0	0	271,445	34,446	0	0	47,974	4,510	196,165
	721	6	1,056	858	140,980	1,373,408	109,735	182,923	38,688	590	62,393	65,082	8,259	0	0	529,688	49,791	410,901
	724	25	4,398	163	26,783	192,952	15,417	385,545	81,543	0	0	315,896	40,087	22,260	3,139	13,754	1,293	172,659
Subtotal			123,145		284,917		182,541		227,470		107,548		130,240		3,139		62,572	1,121,571
12. Tampa South																		
	678	296	52,073	345	56,688	18,250	1,458	65,825	13,922	0	0	0	0	0	0	125,215	11,770	135,911
	679	233	40,990	174	28,590	1,128	90	62,037	13,121	0	0	0	0	0	0	268,302	25,220	108,011
	684	210	36,943	10	1,643	11,737	938	80,320	16,988	0	0	10,000	1,269	0	0	0	0	57,781
	685	0	0	0	0	74,204	5,929	18,193	3,848	328	34,686	21,690	2,752	0	0	160,744	15,110	62,325
	686	45	7,916	111	18,239	59,051	4,718	236,490	50,018	0	0	391,173	49,640	0	0	207,336	19,490	150,020
	687	49	8,620	119	19,553	28,778	2,299	89,213	18,869	0	0	312,903	39,707	0	0	32,043	3,012	92,061
	725	136	23,925	376	61,781	282,416	22,565	110,186	23,304	0	0	95,049	12,062	0	0	25,713	2,417	146,055
	727	205	36,064	601	98,752	500	40	49,747	10,521	0	0	34,547	4,384	0	0	13,667	1,285	151,045
	728	289	50,841	145	23,825	48,966	3,912	34,154	7,224	32	3,384	30,700	3,896	0	0	52,185	4,905	97,988
	729	25	4,398	2	329	104,638	8,361	43,866	9,278	0	0	63,868	8,105	0	0	10,000	940	31,410
	735	7	1,231	2	329	131,193	10,482	58,427	12,357	0	0	424,480	53,867	0	0	0	0	78,266
Subtotal			263,002		309,728		60,793		179,449		38,070		175,682		0		84,149	1,110,873
Water Conserv II Total			526,004		619,456		121,586		358,898		76,140		351,363		64,364		168,299	20,646,783

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2030 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD

Iron Bridge
2030

2030 FLOW	Traffic zone	SF Res. Units	SF Res. Flow GPD	MF Res. Units	MF Res. Flow GPD	Office sq. ft.	Office Flow GPD	Retail sq. ft.	Retail Flow GPD	Hotel sq. ft.	Hotel Flow GPD	Industrial sq. ft.	Industrial Flow GPD	Hospital sq. ft.	Hospital Flow GPD	Gov. sq. ft.	Gov. Flow GPD	Total Flow GPD
1. Lift Station 2																		
	695	504	61,310	103	11,703	55,418	3,062	66,603	9,741	184	13,455	2,500	219	0	0	0	0	99,490
	696	251	30,534	282	32,041	159,614	8,819	32,749	4,790	0	0	0	0	0	0	43,551	2,831	79,013
	697	272	33,088	192	21,815	80,751	4,461	83,733	12,246	0	0	5,200	456	0	0	94,341	6,132	78,199
	698	524	63,743	21	2,386	2,130	118	132,307	19,350	0	0	184,035	16,149	0	0	3,996	260	102,006
	711	258	31,385	104	11,816	152,504	8,426	147,681	21,598	0	0	0	0	0	0	29,800	1,937	75,163
	712	246	29,925	169	19,202	79,115	4,371	147,214	21,530	0	0	77,392	6,791	0	0	17,862	1,161	82,980
	714	157	19,099	422	47,948	357,906	19,774	226,310	33,098	0	0	92,372	8,106	0	0	371,063	24,119	152,143
	715	149	18,125	104	11,816	169,077	9,342	99,816	14,598	0	0	7,500	658	2,737	267	1,500	98	54,904
	716	7	852	1,277	145,093	855,587	47,271	175,913	25,727	337	24,643	3,897	342	0	0	30,408	1,977	245,904
	717	263	31,993	842	95,668	908,607	50,201	102,407	14,977	295	21,572	1,000	88	0	0	0	0	214,499
	718	0	0	1,426	162,022	418,071	23,098	139,999	20,475	303	22,157	0	0	0	0	149,221	9,699	237,452
	753	0	0	669	76,012	3,440,968	190,113	161,733	23,653	500	36,563	21,590	1,895	0	0	25,065	1,629	329,865
	754	0	0	20	2,272	483,076	26,690	74,008	10,824	0	0	301,454	26,453	0	0	0	0	66,239
	755	77	9,367	199	22,610	115,559	6,385	46,868	6,854	0	0	0	0	0	0	15,000	975	46,191
	905	42	5,109	503	57,151	281,899	15,575	13,471	1,970	0	0	0	0	0	0	0	0	79,805
Subtotal			334,531		719,555		417,706		241,431		118,389		61,156		267		50,817	1,943,853
2. Downtown																		
	722	5	608	92	10,453	251,126	13,875	29,905	4,374	0	0	106,772	9,369	0	0	336,000	21,840	60,519
	723	1	122	586	66,581	362,605	20,034	111,098	16,248	0	0	81,371	7,140	0	0	184,585	11,998	122,123
	726	48	5,839	286	32,495	27,349	1,511	67,106	9,814	0	0	12,119	1,063	0	0	842,524	54,764	105,487
	746	0	0	1,086	123,391	993,106	54,869	9,373	1,371	319	23,327	0	0	0	0	0	0	202,958
	747	0	0	276	31,359	291,828	16,123	21,118	3,089	0	0	0	0	0	0	502,052	32,633	83,205
	748	0	0	310	35,222	2,063,134	113,988	175,536	25,672	248	18,135	8,600	755	0	0	32,420	2,107	195,879
	749	0	0	405	46,016	1,707,566	94,343	302,310	44,213	0	0	2,100	184	0	0	95,541	6,210	190,966
	750	0	0	350	39,767	1,085,211	59,958	72,430	10,593	0	0	6,952	610	0	0	0	0	110,928
	751	0	0	0	0	733,113	40,504	42,252	6,179	0	0	0	0	0	0	89,374	5,809	52,493
	752	0	0	881	100,099	457,375	25,270	39,168	5,728	0	0	0	0	0	0	254,501	16,543	147,640
	756	82	9,975	211	23,974	162,897	9,000	0	0	0	0	0	0	0	0	160,261	10,417	53,366
	757	47	5,717	198	22,497	60,848	3,362	16,081	2,352	0	0	1,000	88	0	0	800	52	34,068
	758	85	10,340	2,906	330,180	301,346	16,649	185,142	27,077	0	0	13,000	1,141	0	0	0	0	385,387
	906	30	3,649	342	38,858	522,911	28,891	17,026	2,490	78	5,704	3,992	350	0	0	118,460	7,700	87,642
	907	2	243	275	31,246	341,271	18,855	54,836	8,020	245	17,916	0	0	0	0	0	0	76,279
Subtotal			36,494		932,138		517,233		167,219		65,081		20,701		0		170,074	1,908,941

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3. Mills																		
	731	0	0	0	0	110,632	6,112	33,770	4,939	0	0	913,841	80,190	0	0	0	0	91,241
	732	48	5,839	556	63,173	220,293	12,171	505,453	73,923	0	0	228,132	20,019	14,800	1,443	12,584	818	177,385
	733	2	243	43	4,886	227,821	12,587	32,679	4,779	120	8,775	37,292	3,272	338,720	33,025	1,400	91	67,659
	734	0	0	12	1,363	280,044	15,472	30,271	4,427	0	0	79,896	7,011	1,916,803	186,888	10,000	650	215,812
	736	1	122	297	33,745	813,704	44,957	148,558	21,727	150	10,969	197,053	17,291	0	0	8,000	520	129,331
	737	165	20,072	163	18,520	223,576	12,353	37,801	5,528	0	0	0	0	20,738	2,022	9,742	633	59,128
	738	202	24,573	146	16,589	21,819	1,205	139,922	20,464	0	0	0	0	0	0	0	0	62,830
	739	309	37,589	189	21,474	27,049	1,494	55,735	8,151	0	0	32,858	2,883	0	0	440,896	28,658	100,250
	740	801	97,440	117	13,294	7,104	392	2,960	433	0	0	0	0	0	0	2,718	177	111,735
	741	212	25,789	411	46,698	1,649	91	0	0	0	0	0	0	0	0	0	0	72,578
	742	77	9,367	868	98,622	82,949	4,583	51,601	7,547	0	0	0	0	0	0	80,752	5,249	125,367
	743	2	243	529	60,105	164,679	9,099	0	0	0	0	197,022	17,289	293,980	28,663	6,056	394	115,792
	744	0	0	0	0	1,191,250	65,817	600	88	0	0	3,600	316	0	0	0	0	66,220
	745	0	0	1,020	115,892	917,852	50,711	50,000	7,313	200	14,625	0	0	0	0	500,000	32,500	221,041
	839	588	71,529	8	909	2,954	163	2,754	403	0	0	0	0	0	0	17,000	1,105	74,109
	840	23	2,798	20	2,272	38,746	2,141	19,319	2,825	0	0	0	0	0	0	66,431	4,318	14,354
	841	167	20,315	404	45,902	19,424	1,073	119,206	17,434	0	0	0	0	0	0	48,774	3,170	87,895
	863	235	28,587	712	80,897	82,508	4,559	60,158	8,798	0	0	0	0	0	0	3,498	227	123,069
Subtotal			344,506		624,342		244,981		188,778		34,369		148,271		252,041		78,510	1,915,798
4. LS 1 & 7 North																		
	759	309	37,589	155	17,611	179,004	9,890	49,445	7,231	0	0	0	0	0	0	20,467	1,330	73,652
	760	216	26,276	222	25,224	388,422	21,460	224,197	32,789	0	0	3,500	307	0	0	39,184	2,547	108,603
	761	0	0	0	0	74,267	4,103	811,800	118,726	0	0	32,868	2,884	0	0	800	52	125,765
	762	487	59,242	452	51,356	154,328	8,527	21,227	3,104	0	0	0	0	4,432	432	17,475	1,136	123,798
	763	85	10,340	314	35,677	75,801	4,188	118,144	17,279	0	0	4,500	395	0	0	0	0	67,878
	764	145	17,639	132	14,998	154,096	8,514	28,920	4,230	0	0	0	0	0	0	0	0	45,380
	777	19	2,311	27	3,068	9,250	511	303,870	44,441	227	16,599	219,916	19,298	0	0	1,960	127	86,355
	788	7	852	156	17,725	24,225	1,338	27,409	4,009	0	0	0	0	0	0	292,173	18,991	42,914
Subtotal			154,249		165,658		58,531		231,808		16,599		22,884		432		24,184	674,346
5. LS 1 & 7 South																		
	836	765	93,060	806	91,578	4,190	231	85,420	12,493	0	0	0	0	0	0	50,000	3,250	200,612
	837	441	53,647	40	4,545	39,929	2,206	24,982	3,654	0	0	0	0	0	0	1,220	79	64,130
	838	362	44,036	0	0	0	0	0	0	0	0	0	0	0	0	39,363	2,559	46,595
	842	305	37,102	1,910	217,014	121,923	6,736	48,772	7,133	0	0	120,593	10,582	0	0	3,100	202	278,769
Subtotal			227,846		96,123		9,174		23,279		0		10,582		0		6,089	590,107

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6. LS 3G-2																		
	701	787	95,737	293	33,291	52,265	2,888	85,893	12,562	0	0	6,000	527	0	0	75,330	4,896	149,900
	702	366	44,523	445	50,561	60,667	3,352	83,691	12,240	0	0	9,700	851	0	0	61,927	4,025	115,552
	705	18	2,190	683	77,602	620,848	34,302	96,373	14,095	426	31,151	64,427	5,653	427,120	41,644	129,425	8,413	215,050
	706	184	22,383	14	1,591	614,893	33,973	79,000	11,554	0	0	71,912	6,310	2,582,731	251,816	186,797	12,142	339,769
	904	77	9,367	22	2,500	277,684	15,342	45,738	6,689	0	0	33,499	2,940	0	0	38,329	2,491	39,329
	923	340	41,360	59	6,704	11,061	611	41,679	6,096	0	0	21,473	1,884	0	0	254,037	16,512	73,167
Subtotal			215,559		172,248		90,467		63,235		31,151		18,165		293,460		48,480	932,766
7. LS 3G-3																		
	648	254	30,898	296	33,632	21,998	1,215	102,717	15,022	0	0	5,880	516	0	0	40,000	2,600	83,884
	700	672	81,747	501	56,924	217,143	11,997	154,356	22,575	0	0	17,170	1,507	0	0	280,000	18,200	192,949
	703	495	60,216	96	10,908	24,378	1,347	38,678	5,657	0	0	0	0	0	0	14,129	918	79,045
	704	40	4,866	177	20,111	240,086	13,265	213,687	31,252	0	0	38,082	3,342	0	0	2,136	139	72,974
	707	0	0	0	0	106,018	5,857	78,488	11,479	0	0	0	0	0	0	75,082	4,880	22,217
	713	152	18,490	646	73,399	420,153	23,213	164,314	24,031	0	0	122,189	10,722	22,385	2,183	1,493	97	152,135
Subtotal			196,217		194,972		56,895		110,015		0		16,086		2,183		26,835	603,203
8. LSLS3G-4																		
	708	373	45,375	0	0	119,096	6,580	13,779	2,015	0	0	4,880	428	0	0	24,875	1,617	56,015
	710	716	87,100	141	16,020	9,069	501	3,244	474	0	0	0	0	0	0	47,012	3,056	107,151
	779	490	59,607	181	20,565	26,208	1,448	67,736	9,906	0	0	0	0	0	0	94,212	6,124	97,651
Subtotal			192,081		36,586		8,529		12,396		0		428		0		10,796	260,817
9. Colonial																		
	765	2	243	0	0	92,930	5,134	97,431	14,249	0	0	54,477	4,780	0	0	0	0	24,407
	766	0	0	0	0	25,800	1,425	365,718	53,486	0	0	106,696	9,363	0	0	23,723	1,542	65,816
	775	0	0	0	0	16,615	918	1,442,587	210,978	0	0	1,848	162	0	0	0	0	212,058
	776	34	4,136	0	0	739,044	40,832	0	0	0	0	1,858	163	0	0	0	0	45,131
Subtotal			4,379		0		48,310		278,714		0		14,468		0		1,542	347,413
10. NTC																		
	772	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	773	20	2,433	60	6,817	81,555	4,506	177,342	25,936	0	0	2,800	246	0	0	10,576	687	40,625
	774	0	0	212	24,087	261,698	14,459	106,666	15,600	0	0	95,944	8,419	0	0	9,500	618	63,183
	780	379	46,104	0	0	5,014	277	0	0	0	0	0	0	1,572	153	1,773	115	46,650
	781	1,395	169,698	2,820	320,408	1,398,046	77,242	295,303	43,188	0	0	0	0	678,000	66,105	259,142	16,844	693,486
Subtotal			218,236		351,312		96,484		84,724		0		8,665		66,258		18,264	843,944
Iron Bridge Total			1,924,099		3,292,934		1,548,311		1,401,599		265,590		321,406		614,642		435,592	10,021,188