CHW
10/21/93

AN ORDINANCE 78947

ADOPTING AMENDMENTS TO THE CAPITAL IMPROVEMENTS PLAN AND MAXIMUM IMPACT FEE CALCULATION FOR WASTEWATER FACILITIES 1990-2000.

* * * * * * *

WHEREAS, in 1987, the 70th Texas Legislature enacted Senate Bill 336, subsequently codified as Chapter 395 of the Texas Local Government Code, which authorized political subdivisions to assess and collect impact fees; and

WHEREAS, the Act requires that pursuant to the assessment of impact fees, a Capital Improvements Plan (CIP) which identifies capital improvements or facility expansions must be developed; and

WHEREAS, on June 14, 1990, the San Antonio City Council approved Ordinance No. 71728, adopting the City of San Antonio Wastewater Management Department Capital Improvements Plan and maximum impact fee; and

WHEREAS, on April 30, 1992, the San Antonio City Council approved Ordinance No. 75686, approving the consolidation of the Water Works Board of Trustees, City of San Antonio Wastewater Management Department and the Alamo Conservation and Reuse District, into an agency known as the San Antonio Water System; and

WHEREAS, on August 4, 1993, the Capital Improvements Advisory Committee adopted the "Capital Improvements Plan and Maximum Impact Fee Calculation for Wastewater Facilities 1990-2000" and recommended approval of the amendments by the San Antonio Water System Board of Trustees, Planning Commission and City Council; and

WHEREAS, on August 17, 1993, the San Antonio Water System Board of Trustees approved Resolution No. 93-120, adopting the "Capital Improvements Plan and Maximum Impact Fee Calculation for Wastewater Facilities 1990-2000" and recommended approval of the amendments by the Planning Commission and City Council; and

WHEREAS, on August 25, 1993, the San Antonio Planning Commission approved Resolution No. 93-08-06, adopting the amendments to the "Capital Improvements Plan and Maximum Impact Fee Calculation for Wastewater Facilities 1990-2000" and recommended approval of the amendments by the City Council; and

WHEREAS, on September 9, 1993, the San Antonio City Council approved Ordinance No. 78654, setting a public hearing at 4:00 p.m. on October 14, 1993, to consider the adoption of amendments to the "Capital Improvements Plan and Maximum Impact Fee Calculation for Wastewater Facilities 1990-2000"; and

WHEREAS, notice for the adoption of the amendments to the "Capital Improvements Plan and Maximum Impact Fee Calculation for Wastewater Facilities 1990-2000" was duly placed in a newspaper having general circulation, all in accordance with Chapter 395 of the Local Government Code, Vernon's Texas Codes Annotated; and

WHEREAS, a formal public hearing was held on such amendments to the "Capital Improvements Plan and Maximum Impact Fee Calculation for Wastewater Facilities 1990-2000" by the City Council on October 14, 1993; and

WHEREAS, it is now necessary to formally adopt such amendments to the "Capital Improvements Plan and Maximum Impact Fee Calculation for Wastewater Facilities 1990-2000"; **NOW THEREFORE:**

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SAN ANTONIO:

SECTION 1: The City Council hereby adopts the amended "Capital Improvements Plan and Maximum Impact Fee Calculation for Wastewater Facilities 1990-2000". Said plan is incorporated herein by reference and is on file with the Office of the City Clerk and the President/Chief Executive Officer of the San Antonio Water System, 1001 East Market Street, San Antonio, Texas.

SECTION 2. This Ordinance shall become effective ten (10) days after its passage by the City Council. In the case of apartment and/or hotel development, this Ordinance's effective date shall be January 1, 1994. Any new development whose subdivision plat has been submitted to the City of San Antonio Planning Department in accordance with Chapter 35, Section 35-4210 of the City Code prior to the effective dates set out herein shall be subject to the impact fee rates in effect prior to the effective dates of this Ordinance.

SECTION 3. Should any Article, Section, Part, Paragraph, Sentence, Phrase, Clause, or Word of this Ordinance, for any reason, be held illegal, inoperative, or invalid, or if any exception to or limitation upon any general provision herein contained be held to be unconstitutional or invalid or ineffective, the remainder shall, nevertheless, stand effective and valid as if it had been enacted and ordained without the portion held to be unconstitutional or invalid or ineffective.

SECTION 4. It is officially found, determined, and declared that the meeting at which this Ordinance is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Ordinance, was given, all as required by Texas Revised Civil Statutes Annotated Article 6252-17, as amended.

PASSED AND APPROVED this 21st day of October, 1993.

M A Y O R

ATTEST: _____
ASSISTANT City Clerk

APPROVED AS TO FORM: _____
City Attorney

93-44

4:00 P.M. Amendments to Capital Imp. Wastewater Fac.

ITEM NO. 6C

MEETING OF THE CITY COUNCIL DATE: OCT 21 1993

MOTION BY: Perez SECONDED BY: Solis

ORD. NO. 78947 ZONING CASE

RESOL. PETITION

	ARTS & CULTURAL AFFAIRS
	AVIATION
	BUILDING INSPECTIONS
	BUILDING INSPECTIONS-HOUSE NUMBERING
	CITY ATTORNEY
	MUNICIPAL COURT
	REAL ESTATE (FASSNIDGE)
	REAL ESTATE (WOOD)
	REAL ESTATE (HUBBARD)
	TRIAL SECTION
	CITY MANAGER
	TRAVIS BISHOP, ASST. TO CITY MGR.
	CODE COMPLIANCE
	INTERGOVERNMENTAL RELATIONS
	INTERNATIONAL RELATIONS
	YOUTH INITIATIVES
	CITY PUBLIC SERVICE-GENERAL MANAGER
	CITY PUBLIC SERVICE-MAPS & RECORDS
	COMMERCIAL RECORDER (PUBLISH)
	COMMUNITY INITIATIVES
	CONVENTION & VISITORS BUREAU
	CONVENTION FACILITIES
	DOME DEVELOPMENT OFFICE
	ECONOMIC DEVELOPMENT
	FINANCE DIRECTOR
	ASSESSOR
	CONTROLLER
	GRANTS
	RISK MANAGEMENT
	TREASURY
	FIRE DEPARTMENT
	HOUSING & COMMUNITY DEVELOPMENT
	INFORMATION SERVICES
	INTERNAL REVIEW
	LIBRARY
/	MANAGEMENT SERVICES (BUDGET)
	MANAGEMENT SERVICES (PERSONNEL)
	MARKET SQUARE
	METROPOLITAN HEALTH DISTRICT
	MUNICIPAL COURTS
	PARKS & RECREATION
/	PLANNING
	DISABILITY ACCESS OFFICE
/	LAND DEVELOPMENT SERVICES
	POLICE DEPARTMENT
	POLICE DEPARTMENT-GROUND TRANSPORTATION
	PUBLIC INFORMATION OFFICE
	PUBLIC UTILITIES
/	PUBLIC WORKS
	CAPITAL PROJECTS
	CENTRAL MAPPING
	ENGINEERING
	PARKING DIVISION
	REAL ESTATE (BILL TOUDOUZE)
	SOLID WASTE
	TRAFFIC ENGINEERING
	PURCHASING & GENERAL SERVICES
/	SAN ANTONIO WATER SYSTEM (SAWS)
	MUNICIPAL CODE CORPORATION (PUBLISH)

	ROLLCALL	AYE	NAY
ROGER PEREZ DISTRICT 1		✓	
RUTH MC-CLENDON DISTRICT 2		✓	
LYNDA BILLA BURKE DISTRICT 3		✓	
HENRY AVILA DISTRICT 4		✓	
JUAN F. SOLIS III DISTRICT 5		✓	
HELEN AYALA DISTRICT 6	ABSTAIN		
BOB ROSS DISTRICT 7		✓	
BILL THORNTON DISTRICT 8		✓	
HOWARD PEAK DISTRICT 9		✓	
LYLE LARSON DISTRICT 10		✓	
NELSON WOLFF MAYOR		✓	

Amends Ord 71728 (6-14-90)
75686 (4-30-92)

93-44

FILE SAWS - GENERAL

#4

DO NOT TYPE IN THIS SPACE		CITY OF SAN ANTONIO	For CMO use only
Approval			
Finance	Budget	**Request For Ordinance/Resolution**	Date Considered Consent ☐ Individual ☐ Item No. Ord. No.
Legal	Coordinator		

Date:	Department:	Contact Person/Phone #
October 4, 1993	SAWS Planning Group	Dwayne Rathburn/704-7373
Date Council Consideration Requested:	**Deadline for Action:**	**Dept. Head Signature:**
October 14, 1993	October 14, 1993	Rebecca L. Cedillo

SUMMARY OF ORDINANCE

This ordinance is for the adoption of amendments to the Capital Improvements Plan and Maximum Impact Fee for Wastewater Facilities 1990-2000 for the purpose of complying with Chapter 395 of the Local Government Code (Impact Fee Statute).

The amendments, to be adopted following a public hearing to be held at 4:00 p.m. on October 14, 1993, in the City Council Chambers, City Hall, are required under Chapter 395 of the Local Government Code (Impact Fee Statute).

It is recommended that this ordinance be approved.

Council Memorandum Must Be Attached To Original

Other Depts., Boards, Committees Involved (please specify): Capital Improvements Advisory Committee, San Antonio Water System Board of Trustees, Planning Commission

Contract signed by other party

Yes ☐ No ☒

FISCAL DATA (If Applicable)

Not applicable

Fund No. _____ Amt. Expended _____

Activity No. _____ SID No. _____

Index Code _____ Project No. _____

Object Code _____

Budgetary Implications

Not applicable

Funds/Staffing Budgeted Yes ☐ No ☐

Positions Currently Authorized

Impact on future O & M _____

If positions added, specify class and no.

_____

_____

_____

Comments:

Coordinator — White
Legal — Green
Budget — Canary
Finance — Pink
Originator — Gold

4/1/82 Ref. A.D. 1.71

SANITARY SEWER CAPITAL IMPROVEMENTS PLAN

EXHIBIT
of Ordinance No. 78947
DATE OF PASSAGE OCT 21 1993
City Clerk

San Antonio Water System

SSCIP

1990 - 2000

San Antonio Water System

SAN ANTONIO WATER SYSTEM

IMPACT FEES

SANITARY SEWER CAPITAL IMPROVEMENTS PLAN

1990 - 2000

STATE OF TEXAS
ASHOK S. KAJI
52623
REGISTERED PROFESSIONAL ENGINEER

APPROVED: OCTOBER 21, 1993

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Appendix

Land Use Assumptions Plan

APPROVED: OCTOBER 21, 1993

Section 1
Introduction

APPROVED: OCTOBER 21, 1993

SECTION 1
INTRODUCTION

PURPOSE

This document represents the San Antonio Water System's Sanitary Sewer Capital Improvements Plan developed to comply with the State of Texas impact fees statute. It contains data in the capital project costs necessitated by and attributable to the wastewater collection and treatment infrastructure needs of new development and sets the maximum impact fee rates which may be assessed and collected by the San Antonio Water System.

The goal of this proposed impact fees program is to develop a more comprehensive wastewater capital improvements plan which reflects the costs of sewer service provision.

BACKGROUND

In May, 1987, the Texas Legislature enacted Senate Bill 336, codified as Chapter 395 of the Local Government Code, Vernon's Texas Codes Annotated, which relates to the financing of capital improvements required by new development in political subdivisions. Specifically, this statute set forth a process which political subdivisions must follow in order to impose legally authorized impact fees as a means to fund, or recoup the costs of, capital improvements necessitated by and attributable to new development. In addition to wastewater infrastructure, the statute permits the establishment of impact fees for infrastructure associated with

water systems, drainage facilities, and roadways. The City of San Antonio, through it San Antonio Water System Board of Trustees (previously the City Water Board and the City of San Antonio Wastewater Management Department), is proceeding only to develop impact fees for water and wastewater capital improvements. This Capital Improvements Plan address the wastewater capital improvements only. Water capital improvements are addressed under a separate capital improvements plan for water service.

To oversee the impact fees establishment process as required by the statute, the City Council appointed a Capital Improvements Advisory Committee. This committee has worked closely with the San Antonio Water System staff in preparation of all impact fee documentation required by the statute.

On August 10, 1989, the San Antonio City Council approved a set of Land Use Assumptions which was amended on May 10, 1990. This was the impact fee statute's required first step toward compliance. The Land Use Assumptions represent a description of changes in projected water and wastewater demand over a 10 year period (1988-1998) within the corporate limits and extraterritorial jurisdiction (ETJ) of the City of San Antonio. The Land Use Assumptions include projections of changes in land uses, densities, intensities and population over the 10 year period (1988-1998).

On June 14, 1990, the City adopted a new Sanitary Sewer Capital

Improvements Plan (SSCIP) and Impact Fee Ordinance based on the May 10, 1990 amended Land Use Assumptions.

On May 16, 1991, a new Land Use Assumptions was developed for the period of 1990 thru the year 2000.

On October 3, 1991, the San Antonio Water System (thru its predecessor, the City of San Antonio Wastewater Management Department), acquire the collection and treatment systems from the Lackland City Water Company.

On May 19, 1992, the City of San Antonio City Council, by Ordinance No. 75686, consolidated the City's Wastewater Management Department, the City Water Board and the Alamo Conservation and Reuse District, creating an agency known as the San Antonio Water System, hereinafter referred to as "SAWS".

As a results of the October 3, 1991 acquisition of the Lackland City Water Company's collection and treatment system, and in conjunction with this capital improvements plan, an amended Land Use Assumptions was developed to include the projected growth within the Lackland City Water Company's wastewater service area.

As required by the statute, this Sanitary Sewer Capital Improvements Plan has been prepared based directly on the planning data and wastewater demand projections provided in the amended Land

Use Assumptions for the wastewater service areas defined in the same Land Use Assumptions.

SCOPE OF THE SSCIP

This SSCIP is designed to meet the specific requirements of Section 395.014 of the Local Government Code, which set forth the required contents of an Impact Fees Capital Improvements Plan. This plan has been prepared by a qualified professional engineer licensed in the State of Texas. The capital improvements described are necessitated by and attributable to the needs for wastewater service within SAWS's Impact Fee Planning Area (IFPA), which includes the area within City's corporate limits and ETJ, less that area within the jurisdiction of other political subdivisions, other wastewater utilities, and all military installations. Two impact fee service areas are specifically set forth in this plan: Inner Service Area (ISA) and Outer Service Area (OSA).

Section 2 of the SSCIP defines terms associated with the SSCIP.

Section 3 of the SSCIP, "Sewerage Inventory", meets the requirements of Section 395.014 (a)(1) by providing a description of the existing sewerage system within the two service areas.

Section 4 of the SSCIP. "Analysis of Total Capacity", meets the requirements of Section 395.014 (a)(2) by providing a description

of the total wastewater collection and treatment system capacity and level of current usage.

Section 5 describes the Impact Fee methodology and calculation for the Inner Service Area (ISA) and Outer Service Area (OSA).

Section 6 indicates the ISA and OSA maximum impact fees.

Section 2
Definitions

APPROVED: OCTOBER 21, 1993

SECTION 2
DEFINITIONS

1. EQUIVALENT DWELLING UNIT (EDU) - the service unit used within this division is equal to seven hundred fifty (750) gallons per day of peak wastewater flow and three hundred (300) gallons per day of average wastewater flow.

2. NEW DEVELOPMENT - any new demand which increases the number of equivalent dwelling units; including, but not limited to the subdivision and/or resubdivision of land; the construction, reconstruction, redevelopment, conversion, structural alteration, relocation, or enlargement of any structure; or any use or extension of the use of land; any of which increases the number of equivalent dwelling units.

   Commentary: The subdivision and/or resubdivision of land; the construction, reconstruction, redevelopment, conversion, structural alteration, relocation, or enlargement of any structure; or any use or extension of the use of land which does not increase the number of equivalent dwelling units is not considered new development and is not subject to payment of additional impact fees; however, the previous applicable impact fees must have been paid.

3. SERVICE AREA - one of two areas in the planning area designated by the Capital Improvements Plan in which SAWS shall assess impact fees under the provisions of this article for the extension of sanitary sewer service. The two service

areas are the Inner Service Area (ISA) and the Outer Service Area (OSA).

4. ISA CONTRACT - contract between SAWS and a developer for the construction of off-site sanitary sewerage facilities constructed by the developer when services are not available to serve the property, pursuant to V.T.C.A., Local Government Code Section 395.019 (2).

5. OSA CONTRACT - contract between SAWS and a developer for the provision of sewer service and/or the construction of off-site sanitary sewerage facilites constructed by the developer when services are not available to serve the property, pursuant to V.T.C.A., Local Government Code Section 395.001 (4)(C).

6. SYSTEM NET VALUE (ISA) - the value of SAWS sewerage system in the ISA is based on the following formula: Value of Net Property and Plant, plus Investments (Construction Accounts) less OSA Net Property, Plants and Investments.

7. SYSTEM COST PER EDU (ISA) - the cost per EDU in the ISA is based on the following formula: System Net Value (ISA) divided by the Total EDU's Required (Existing EDU's plus New EDU's required).

8. SAWS SYSTEM EQUITY (ISA) - the San Antonio Water System Equity in the ISA is based on the following formula: The System Net Value (ISA) less the following: (1) Long Term Bond Debt, (2) Contributed Capital from Federal Grants, and (3) Contributed Capital from the Developer Customer (DC) Fund.

9. SAWS SYSTEM EQUITY RATIO (ISA) - the San Antonio Water System Equity Ratio in the ISA is based on the following formula: SAWS System Equity (ISA) divided by the System Net Value (ISA).

10. ISA IMPACT FEE - the Cost per EDU which may be assessed in the ISA is based on the following formula: SAWS Equity Ratio (ISA) times the System Cost per EDU (ISA).

11. OSA SYSTEM EQUITY COSTS/EDU - the Cost per EDU for SAWS Equity is based on the following formula: Total Cost of Existing Off-site Projects divided by the Total EDU Capacity of those projects.

12. OSA NEW PROJECT COSTS/EDU - the Cost per EDU for new projects required to serve the 10 years demand is based on the following formula: Costs of New Projects required divided by 10 years EDU projections.

13. OSA COLLECTION IMPACT FEE - the Cost per EDU for all facilities necessary to transport sewerage generated by new demand in the Outer Service Area and based on the following: OSA System Equity Cost/EDU plus OSA New project Costs/EDU.

14. OSA TREATMENT IMPACT FEE - the Cost per EDU for all facilities necessary to treat sewage generated by new demand in the Outer Service Area. The treatment system includes treatment plants and appurtenances thereto.

15. OSA IMPACT FEE - the Cost per EDU which may be assessed in the OSA is based on the following formula: System Equity Costs/EDU + New Project Costs/EDU = OSA Collection Component Impact Fee + OSA Treatment Impact Fee.

Section 3
Sewerage System Inventory

APPROVED: OCTOBER 21, 1993

SECTION 3
SEWERAGE SYSTEM INVENTORY

This section provides the sewerage inventory portion of the Sanitary Sewer Capital Improvements Plan. The existing sewerage system of San Antonio is depicted on the map shown in Figure 1.

The existing system consists of the following component:

* Approximately 4,000 miles of pipe
* Approximately 50,000 manholes
* 105 pump stations
* The Dos Rios Wastewater Treatment Plant - 83 mgd
* The Leon Creek Wastewater Treatment Plant - 36 mgd
* The Salado Creek Wastewater Treatment Plant - 35 mgd
* The Medio Creek Wastewater Treatment Plant - 6.5 mgd

A major portion of the system is in the Inner Service Area, however, a portion of the system is in the Outer Service Area.

SAN ANTONIO SEWERAGE INVENTORY

AS OF JAN. 1990

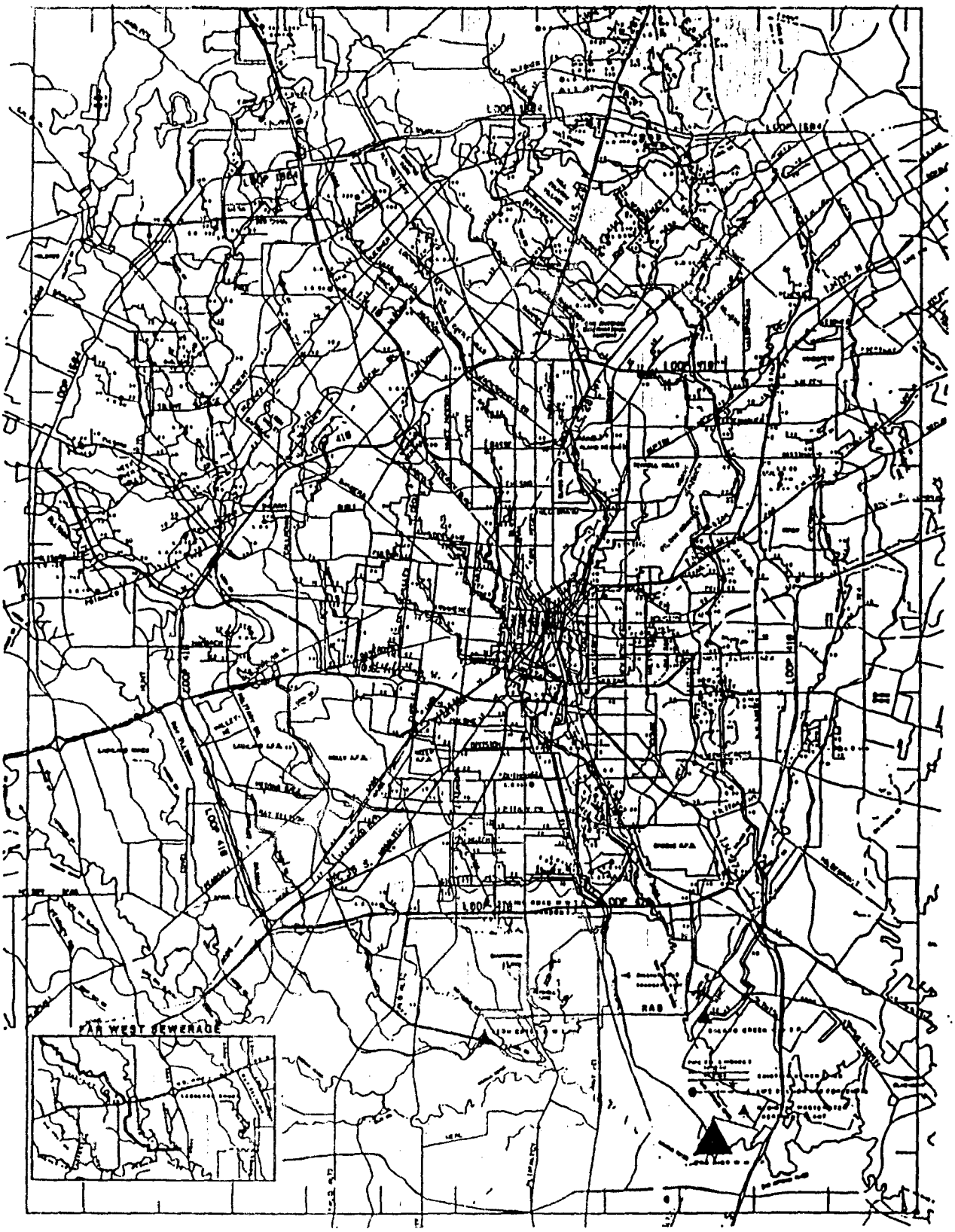

FIGURE NO. 1

Section 4
Analysis of Total Capacity - ISA & OSA

APPROVED: OCTOBER 21, 1993

SECTION 4
ANALYSIS OF TOTAL CAPACITY - ISA & OSA

This section provides the analysis of total capacity of existing capital improvements. In general, the method or approach taken to arrive at a system capacity was based on the assumption that the overall system capacity can service fixed amount of EDUs.

EXISTING CAPACITY

The existing average capacity of the San Antonio Water System treatment plants is given below:

* Dos Rios Wastewater Treatment Plant - 83 mgd
* Leon Creek Wastewater Treatment Plant - 36 mgd
* Salado Creek Wastewater Treatment Plant - 35 mgd
* Medio Creek Wastewater Treatment Plant - 6.5 mgd

The total system capacity is therefore 160.5 mgd, however, the Texas Water Commission requires new treatment capacity construction to begin at 90 percent of the capacity. Hence, available capacity is 138.6 mgd or at 300 gallons/EDU, it is 462,000 EDUs for the ISA and 5.85 mgd, or 19,500 EDUs for the OSA, for a total of 144.45 mgd or 481,500 EDUs.

CURRENT LEVEL OF USAGE

The current level of usage, or current flow of the existing system was determined as the arithmetic mean of the average monthly flows for the period from March 1989 to March 1990. The current flow for the four treatment plants in the system are given below.

* Dos Rios Wastewater Treatment Plant - 72.0 mgd
* Leon creek Wastewater Treatment Plant - 22.0 mgd
* Salado Creek Wastewater Treatment Plant - 29.0 mgd
* Medio Creek Wastewater Treatment Plant - 3.5 mgd

The total current flow therefore is 123 mgd, or 410,000 EDUs for the ISA and 3.5 mgd, or 11,667 EDUs for the OSA, for a total of 126.5 mgd, or 421,667 EDUs that are currently being served by the system. The remaining capacity in the OSA Medio Creek Wastewater Treatment Plant has been committed to third parties and therefore, unavailable for new development.

ANALYSIS OF OSA COLLECTION SYSTEM

	Project Name	Peak Flow Capacity
*	Mud Creek Outfall, Phase I & II	23,000,000 gpd
*	Panther Springs, Phase I	12,932,000 gpd
*	Afton Oaks/Midway/Stone Oak Outfall	1,705,158 gpd
*	Cedar Creek	1,183,000 gpd
*	La Cantera Oversizing	13,180,000 gpd
*	Huesta Creek Outfall	4,671,000 gpd
*	Victoria Outfall	428,000 gpd
*	Leon Springs Elementary	491,000 gpd
*	Far West Outfall, Seg. I & II	20,460,000 gpd
*	Big Country Outfall	6,537,669 gpd
*	Caracol Outfall	11,666,907 gpd
*	Lackland City #132A	3,594,157 gpd
*	Lackland City #140A	1,152,303 gpd
*	Lackland City #150A	3,037,617 gpd
*	Lackland City #192	1,750,771 gpd
*	Medio Creek Outfall	19,266,192 gpd
*	Westlake Outfall	12,331,243 gpd
	Total	137,387,007 gpd
	Peak Flow/EDU	750 gpd
	Total Peak Flow EDUs	183,183

The total gallons are divided by peak EDU flows to derive at the number of EDUs that can be serviced by these projects. OSA flows will require construction of new wastewater treatment plants.

Section 5
Impact Fee Methodology and Calculations - ISA & OSA

APPROVED: OCTOBER 21, 1993

SECTION 5
METHODOLOGY AND CALCULATIONS

San Antonio Water System has two (2) service areas, the Inner Service Area (ISA) and the Outer Service Area (OSA). The ISA infrastructure is designed to handle only the wastewater generated in that area. In order to accommodate growth in the OSA, it has been necessary to borrow some capacity from the ISA infrastructure.

SB336 specifies that the maximum impact fee be calculated by dividing the cost of the projects needed to serve new development over the next ten (10) years, by the number of EDUs projected in the Land Use Assumptions Plan.

ISA METHODOLOGY

The ISA impact fee calculations (page 5-3) shows the method used to determine the maximum impact fee using a modified approach. This modified approach for the ISA can be considered similar to joining a club where one pays the equity that is owned by all the other members, and then joins in the system to help pay for the debt that is accumulated on the system. Impact fees will only cover the off-site cost, and the developer will still be required to pay for the on-site construction. The ISA will have only one component fee.

The methodology used to calculate the ISA Impact Fee included identifying total EDUs requiring service. These EDUs were existing and projected in the Land Use Assumptions Plan. The net value of property, plant and investments were assessed and totaled for the ISA. The OSA property, plants and investments were subtracted from the ISA to derive a total property, plants and investments which was then divided by the total ISA EDUs to derive a system Impact Fee. Long term debt and contributed capital were subtracted from the ISA property, plants and investments to arrive at the total equity. A ratio is developed from the equity and ISA property, plants and investments, this ratio is applied against the system impact fee which gives a maximum impact fee of $488.64.

ISA CALCULATIONS

EXISTING FLOW FROM THE THREE TREATMENT PLANTS (GPD)		123,000,000
GPD/EDU	/	300
EXISTING EDUs		410,000
NEW EDUs REQUIRED	+	63,000
TOTAL EDUs REQUIRED		473,000
NET PROPERTY & PLANT *		$ 714,159,078.00
INVESTMENTS: CONSTRUCTION ACCTS. *	+	$ 86,403,241.00
SAWS PROP., PLANTS & INVESTMENTS		$ 800,562,319.00
LESS: OSA-PROP., PLANTS & INVESTMENTS	-	$ 19,277,129.04
ISA - PROPERTY, PLANTS & INVESTMENTS		$ 781,285,189.96
TOTAL EDUs	/	473,000
SYSTEM IMPACT FEE		$ 1,651.77
ISA - PROP., PLANTS & INVESTMENTS		$ 781,285,189.96
LESS: LONG TERM DEBT *	-	$ 327,531,815.85
CONTRIBUTED CAPITAL		
FEDERAL *	-	$ 149,095,307.00
DC FUND	-	$ 73,529,781.11
SAWS EQUITY		$ 231,128,286.00
RATIO:		
SAWS EQUITY		$ 231,128,286.00
SAWS PROP., PLANTS & INVEST.	/	$ 781,285,189.96
		0.295831
RATIO APPLIED TO SYSTEM IMPACT FEE		
SYSTEM IMPACT FEE		$ 1,651.77
RATIO	/	0.295831
MAXIMUM IMPACT FEE		$ **488.64**

* Taken from the City of San Antonio Comprehensive Annual Report Fiscal Year Ended September 30, 1990.

OSA METHODOLOGY

Projects located in the OSA will require sewer service contract. There will be a two (2) tier impact fee in the OSA, one for the collection system component and one for the treatment system component. Procedures for individual situations, such as reimbursements, credits and transfer of credits will be part of the extension policies developed by SAWS under separate document, but in conjunction with this SSCIP.

The methodology used to calculate the OSA Impact Fee included identifying existing equity in the system and future projects necessary to serve new EDUs. The existing system is sized to accommodate approximately 183,183 EDUs (total mgd / 750 peak gallons/EDU). To calculate the equity portion of the impact fee, the total costs of the existing OSA system is divided by 183,183 EDUs giving the System Equity Cost of $44.41 per EDU.

New projects required to serve the 10 year projected growth were developed based on pipe sizes of 15 inches and cost were developed for these projects. The total costs of new projects, $4,144,092, (see page 5-5) was then divided by the projected EDUs (34,426) to develop a New Projects Impact Fee of $120.40 per EDU. The System Equity Cost ($44.41) and New Project Impact Fee were then added to arrive with the OSA Collection Component Impact Fee of $164.81. The OSA Collection Component Impact Fee was combined with the Treatment Component Impact Fee of $750.00 per EDU (300 gpd x $2.50 per

gallon) to arrive with the OSA Maximum Impact Fee of $914.81 per EDU (see page 5-6 for detailed calculations).

OSA NEW PROJECTS SUMMARY SHEET
MINIMUM TRUNK MAIN SIZE OF 15"

EDU PLUS EQUITY APPROACH

L.F.	Gravity Main	Force Main	Lift Station	Total Costs
19,300	$1,368,512			$1,368,512
11,100	$ 686,400			$ 686,400
84,000		$1,260,000		$1,260,000
			$ 830,000	$ 830,000
TOTAL	$2,054,912	$1,260,000	$ 830,000	$4,144,912

Total Cost including R.O.W. and Engineering.

OSA CALCULATIONS

Name of Project	Peak Flow Capacity	Total Cost
Mud Creek Outfall, Phase I & II	23,000,000	$ 1,948,666
Panther Springs, Ph. I	12,932,000	$ 927,276
Afton Oak/Midway/ Stone Oak Outfall	1,705,158	$ 801,593
Cedar Creek	1,183,000	$ 24,961
La Cantera Oversizing	13,180,000	$ 260,622
Huesta Creek Outfall	4,671,000	$ 795,221
Victoria Outfall	428,000	$ 182,332
Leon Springs Elementary	491,000	$ 43,669
Far West Outfall, Segment I & II	20,460,000	$ 1,996,553
Big Country Outfall	6,537,669	
Caracol Outfall	11,666,907	
Lackland City #132A	3,594,157	
Lackland City #140A	1,152,303	$ 1,154,306
Lackland City #150A	3,037,617	
Lackland City #192	1,750,771	
Medio Creek Outfall	19,266,182	
Westlake Outfall	12,331,243	
GPD Peak Flow:	137,387,007	System Costs: $ 8,135,199
GPD Peak Flow/EDU: /	750	
		Peak EDUs: 183,183
Total Peak Flow EDUs:	183,183	
		System Cost/EDU: 44.41

New Project Cost (see page 5-5): $ 4,144,912

Total EDUs in 1990: 34,860
10 Year Projected EDUs Increase: 34,426

Total EDUs in 2000: 69,286

New Projects Cost/EDU: $ 120.40

OSA Impact Fee/EDU = System Equity Cost/EDU + New Project Cost/EDU + Treatment Impact Fee/EDU or $44.41 + $120.40 + $750.00 = $914.81

Section 6
ISA & OSA Maximum & Recommended Impact Fees

APPROVED: OCTOBER 21, 1993

MAXIMUM IMPACT FEE

INNER SERVICE AREA (ISA) MAXIMUM IMPACT FEE

$488.64

OUTER SERVICE AREA (OSA) MAXIMUM IMPACT FEE

COLLECTION COMPONENT
$164.81

TREATMENT COMPONENT
$750.00

TOTAL OSA IMPACT FEE
$914.81

RECOMMENDED IMPACT FEE

ISA
$489

OSA

COLLECTION COMPONENT
$165

TREATMENT COMPONENT
$750

TOTAL OSA
$915

Appendix
Land Use Assumptions Plan

APPROVED: OCTOBER 21, 1993

LAND USE ASSUMPTIONS PLAN

San Antonio Water System

LUAP

1990 - 2000

San Antonio Water System

SAN ANTONIO WATER SYSTEM

IMPACT FEES

LAND USE ASSUMPTIONS PLAN

1990 - 2000

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SAN ANTONIO WATER SYSTEM

IMPACT FEES

LAND USE ASSUMPTIONS PLAN

1990 - 2000

Section 1
Introduction/Overview

INTRODUCTION/OVERVIEW

In May, 1987, the Texas Legislature enacted Chapter 395 of the Local Government Code (commonly known as Senate Bill 336), relating to the financing of capital improvements by political subdivisions. Chapter 395 establishes a procedure which must be followed in order for a political subdivision to impose a charge or impact fee against new development. Such charge or impact fee can only be used to fund capital improvements which are necessary or required to service such new development.

In order for the San Antonio Water System to charge an impact fee for capital improvements to its water and wastewater systems, the procedures established in Chapter 395 must be followed. Basically, these procedures require the City to adopt both Land Use Assumptions (LUA) and Capital Improvements Plan (CIP) in order to charge impact fee. The Capital Improvements Plan and the maximum allowable impact fees established therein must be based upon the adopted Land Use Assumptions.

The Land Use Assumptions establish an area or areas (known as service areas) in which a municipality intents to supply a utility service. The Land Use Assumptions must also eatablish the level of demand for that utility service within the area over a ten (10) year period.

By Ordinances approved on August 10, 1989 and May 10, 1990, the City of San Antonio adopted and amended the Land Use Assumptions in accordance with the procedures set out in Chapter 395 of the Local Government Code. These Land Use Assumptions served as the basis for the adoption of the City's water and sanitary sewer Capital Improvements Plans in June of 1990.

On May 16, 1991, the City further amended and updated the Land Use Assumptions as the basis for comprehensive amendments to the City's water and sanitary sewer capital improvements plans.

On October 3, 1991, the San Antonio Water System (thru its predecessor, the City of San Antonio Wastewater Management Department), acquire the collection and treatment systems from the Lackland City Water Company.

On May 19, 1992, the City of San Antonio City Council, by Ordinance No. 75686, consolidated the City's Wastewater Management Department, the City Water Board and the Alamo Conservation and Reuse District, creating an agency known as the San Antonio Water System.

The San Antonio Water System have prepared this document which further amends and updates the City's Land Use Assumptions to include the wastewater service area of the Lackland City Water Company, also known as the Medio Creek Wastewater Treatment Plant, as the basis for comprehensive amendments to the City's water and sanitary sewer Capital Improvements Plans adopted in June, 1990.

Section 2
Methodology/Definitions

METHODOLOGY/DEFINITIONS

The updated Land Use Assumptions contained herein start with a county-wide projection of service units by census tract.

A Service Unit (SU) or Equivalent Dwelling Unit (EDU) is a standardized measure of consumption or demand expressed as water or wastewater flow.

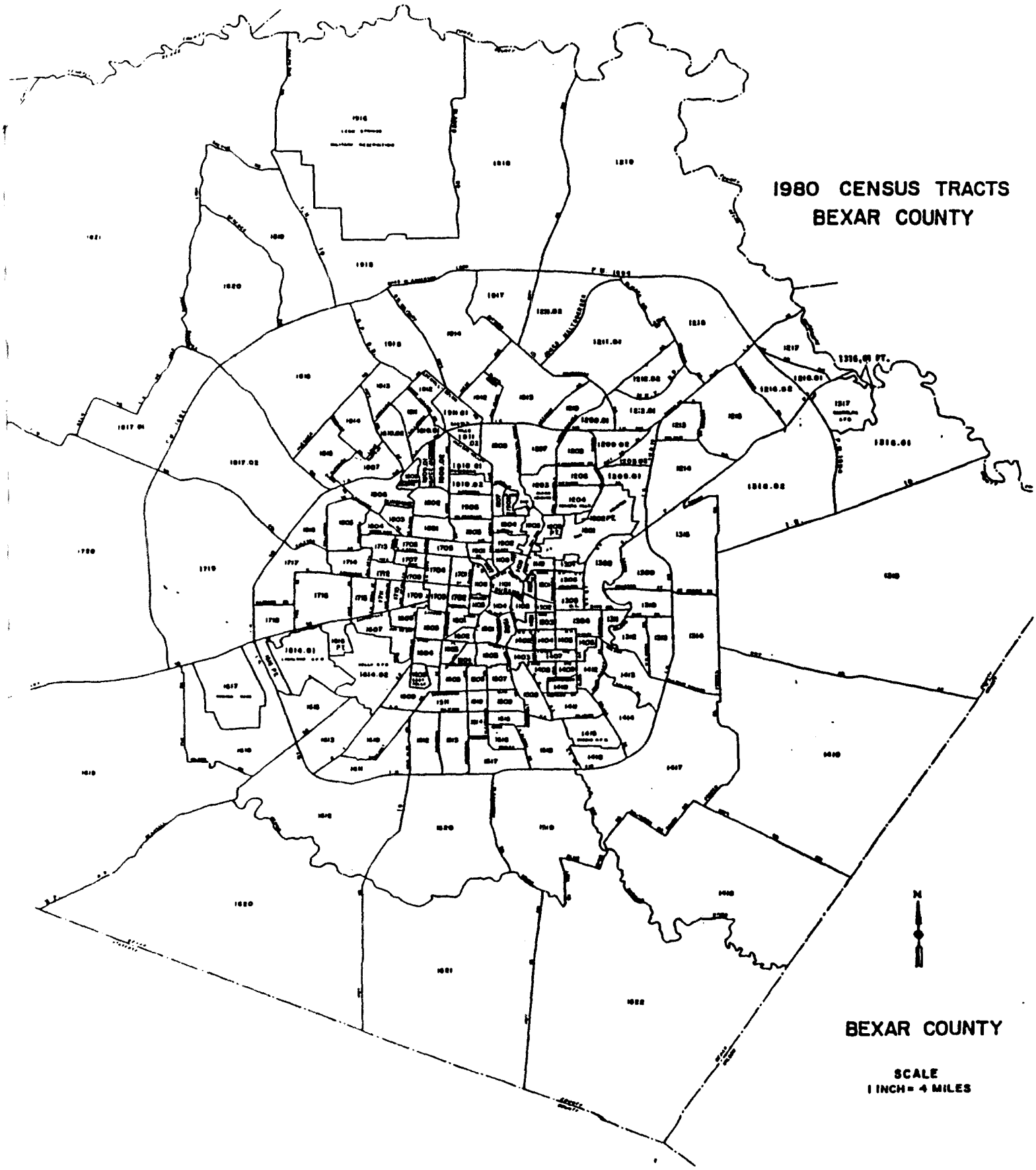
For water service, one (1) EDU = 1.5 gallons per minute; this is equivalent to the water used by a 5/8" or 3/4" single family residence water meter.

For sewer service, one (1) EDU = 300 gallons per day average wastewater flows; this is equivalent to the wastewater discharged by a single family residence (based upon water billing records).

Since the San Antonio Water System does not serve all of Bexar County and because the water and wastewater service areas are not identical, the proposed Land Use Assumptions document present separate projections for each utility based on the service areas of the county each serves.

The projections were developed based upon existing commitments, commitments for future development made by the San Antonio Water System, population estimates made by the Texas Water Development Board, and census tract projections prepared by the Planning Department.

Section 3
Bexar County Census Tract Map

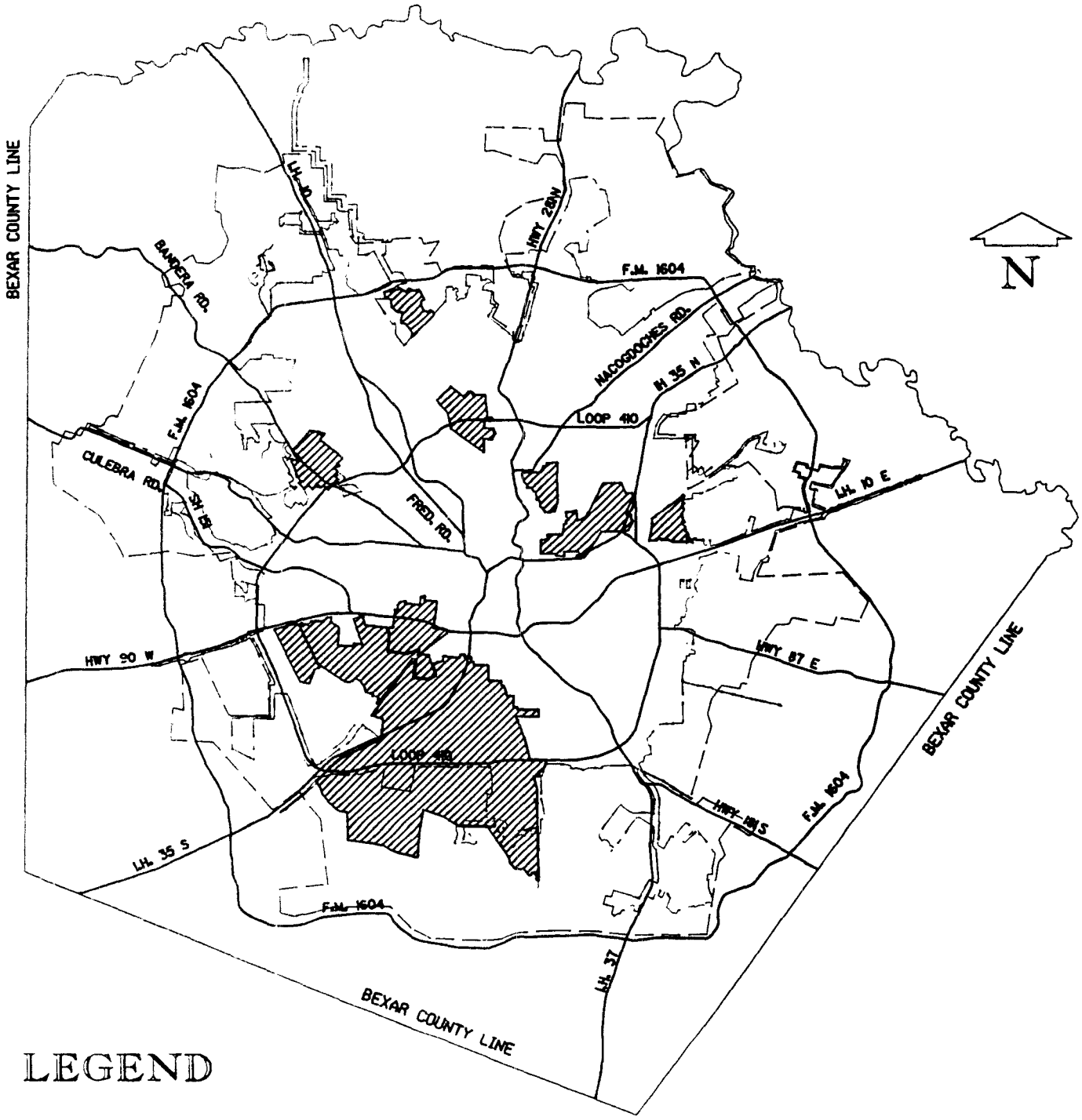


ıp Source: Alamo Area Council of Governments

.REPARED BY: DEPARTMENT OF PLANNING, CITY OF SAN ANTONIO – JANUARY 1980

Section 4
San Antonio Water System
Water Service Areas Map

SAN ANTONIO WATER SYSTEM
WATER SERVICE AREA



LEGEND

- PRIMARY HIGHWAYS
- OUTER BOUNDARY OF CITY WATER BOARD SERVICE AREA
- CITY LIMIT LINE
- AREAS SERVED BY OTHER WATER PURVEYORS

Section 5
San Antonio Water System
Water Service Areas
Land Use Assumption Projections
1990 - 2000

LAND USE ASSUMPTION PLAN COMBINED AGENCIES CENSUS TRACT LISTING
FOR YEAR 1990-2000
IN EQUIVALENT DWELLING UNITS
NOVEMBER 20, 1990

Partial/ Non CWB Area	Census Tract	1989 County	1989 CWB	1990 County	1990 CWB	Projected (2000) County	Projected (2000) CWB	<-----Increase (1990-2000)----> County	CWB Total	CWB Commit. EDU's	CWB Addition Proj.
	1101	9,900	9,900	10,009	10,009	10,400	10,400	391	391		391
	1102	682	682	690	690	900	900	210	210		210
	1103	2,785	2,785	2,816	2,816	2,839	2,839	23	23		23
	1104	2,539	2,539	2,567	2,567	2,588	2,588	21	21		21
	1105	1,143	1,143	1,156	1,156	1,165	1,165	9	9		9
	1106	2,228	2,228	2,253	2,253	2,271	2,271	18	18		18
	1107	923	923	933	933	941	941	8	8		8
	1108	1,831	1,831	1,851	1,851	1,866	1,866	15	15		15
	1109	1,103	1,103	1,115	1,115	1,124	1,124	9	9		9
	1110	1,767	1,767	1,786	1,786	1,801	1,801	15	15		15
*	1201	3,586	74	3,587	75	3,587	75	1	1		1
	1202	2,985	2,985	3,018	3,018	3,042	3,042	25	25		25
*	1203	2,918	0	2,918	0	2,918	0	0	0		0
	1204	4,437	4,437	4,486	4,486	4,522	4,522	36	36		36
	1205.01	2,575	2,575	2,603	2,603	2,625	2,625	21	21		21
	1205.02	2,500	2,500	2,528	2,528	2,548	2,548	21	21		21
	1206	3,605	3,605	3,645	3,645	3,674	3,674	30	30		30
	1207	4,530	4,530	4,580	4,580	5,529	5,529	949	949	949	0
	1208	4,140	4,140	4,186	4,186	4,220	4,220	34	34		34
	1209.01	2,608	2,608	2,637	2,637	2,658	2,658	21	21		21
	1209.02	1,738	1,738	1,757	1,757	2,370	2,370	613	613	107	505
	1210	3,560	3,560	3,599	3,599	3,620	3,620	21	21	21	0
	1211.01	10,077	10,077	10,188	10,188	15,000	15,000	4,812	4,812	1,007	3,805
	1211.02	8,737	8,737	8,833	8,833	10,380	10,380	1,547	1,547	1,028	519
	1212.01	4,481	4,481	4,530	4,530	4,691	4,691	161	161	161	0
	1212.02	4,207	4,207	4,253	4,253	5,228	5,228	975	975	107	868
*	1213	2,743	99	2,744	100	2,911	100	167	0		0
*	1214	5,527	4,345	5,575	4,393	7,257	6,075	1,682	1,682		1,682
*	1215	10,802	2,186	10,826	2,210	15,401	3,000	4,575	790	298	492
*	1216.01	2,318	0	2,318	0	2,791	0	473	0		0
*	1216.02	6,137	0	6,137	0	7,666	0	1,529	0		0
*	1217	3,519	0	3,519	0	4,958	0	1,439	0		0
	1218	8,710	8,710	8,806	8,806	13,000	13,000	4,194	4,194	2,006	2,188
	1219	1,299	1,299	1,313	1,313	8,000	8,000	6,687	6,687	5,165	1,522
	1301	2,018	2,018	2,040	2,040	2,057	2,057	17	17		17
	1302	798	798	807	807	813	813	7	7		7
	1303	1,307	1,307	1,321	1,321	1,332	1,332	11	11		11
	1304	3,076	3,076	3,110	3,110	3,135	3,135	25	25		25
	1305	2,141	2,141	2,165	2,165	2,182	2,182	18	18		18
	1306	1,889	1,889	1,910	1,910	1,925	1,925	16	16		16
	1307	1,227	1,227	1,241	1,241	1,251	1,251	10	10		10
	1308	3,822	3,822	3,864	3,864	3,896	3,896	31	31		31
	1309	2,896	2,896	2,928	2,928	3,089	3,089	161	161	161	0
	1310	2,181	2,181	2,205	2,205	2,223	2,223	18	18		18
	1311	1,209	1,209	1,222	1,222	1,245	1,245	23	23	23	0
	1312	1,056	1,056	1,068	1,068	1,076	1,076	9	9		9

LAND USE ASSUMPTION PLAN COMBINED AGENCIES CENSUS TRACT LISTING
FOR YEAR 1990-2000
IN EQUIVALENT DWELLING UNITS
NOVEMBER 20, 1990

Partial/ Non CWB Area	Census Tract	1989 County	1989 CWB	1990 County	1990 CWB	Projected (2000) County	Projected (2000) CWB	<-----Increase (1990-2000)----- County	CWB Total	CWB Commit. EDU's	CWB Additio Proj.
	1313	2,114	2,114	2,137	2,137	2.400	2,400	263	263		263
	1314	2,091	2,091	2,114	2,114	3,358	3,358	1,244	1,244	341	903
*	1315	5,992	2,712	6,022	2,742	8,101	3,759	2,079	1,017	566	451
*	1316.01	601	0	601	0	1,042	0	441	0		0
*	1316.02	4,008	2,071	4,031	2,094	9,958	4,071	5,927	1,977	1,041	936
*	1317	1,888	0	1,888	0	1,888	0	0	0		0
*	1318	2,489	1,014	2,500	1,025	3,376	2,576	876	1,551	1,057	493
	1401	962	962	973	973	981	981	8	8		8
	1402	2,138	2,138	2,162	2,162	2,179	2,179	18	18		18
	1403	1,397	1,397	1,412	1,412	1,424	1,424	11	11		11
	1404	1,478	1,478	1,494	1,494	1,506	1,506	12	12		12
	1405	1,531	1,531	1,548	1,548	1,560	1,560	13	13		13
	1406	775	775	784	784	790	790	6	6		6
	1407	1,993	1,993	2,015	2,015	2,031	2,031	16	16		16
	1408	2,367	2,367	2,393	2,393	2,413	2,413	19	19		19
	1409	1,146	1,146	1,159	1,159	1,168	1,168	9	9		9
	1410	1,433	1,433	1,449	1,449	1,461	1,461	12	12		12
	1411	2,884	2,884	2,916	2,916	2,928	2,928	12	12	12	0
	1412	2,597	2,597	2,626	2,626	2,647	2,647	21	21		21
	1413	2,110	2,110	2,133	2,133	2,530	2,530	397	397		397
	1414	3,477	3,477	3,515	3,515	4,387	4,387	872	872	0	872
*	1415	380	136	381	137	383	139	1	1		1
	1416	318	318	322	322	1,516	1,516	1,194	1,194	275	919
	1417	988	988	999	999	1,388	1,388	389	389		389
*	1418	1,266	418	1,271	423	1,519	541	248	118	117	1
*	1419	1,899	255	1,899	255	2,447	255	548	0		0
	1501	2,987	2,987	3,020	3,020	3,044	3,044	25	25		25
	1502	1,497	1,497	1,513	1,513	1,526	1,526	12	12		12
	1503	1,660	1,660	1,678	1,678	1,702	1,702	24	24		24
	1504	1,526	1,526	1,543	1,543	1,555	1,555	13	13		13
*	1505	3,586	505	3,592	511	3,600	515	8	4		4
*	1506	2,110	690	2,118	698	2,123	703	6	6		6
	1507	2,010	2,010	2,032	2,032	2,049	2,049	17	17		17
	1508	1,507	1,507	1,524	1,524	1,680	1,680	156	156		156
*	1509	2,616	1,139	2,616	1,152	2,638	1,161	22	9		9
*	1510	1,459	0	1,459	0	1,459	0	0	0		0
*	1511	3,348	0	3,348	0	3,348	0	0	0		0
*	1512	3,219	0	3,219	0	3,291	0	72	0		0
*	1513	3,777	0	3,777	0	3,777	0	0	0		0
*	1514	1,845	0	1,845	0	1,845	0	0	0		0
*	1515	1,055	104	1,056	105	1,057	106	1	1		1
*	1516	2,790	0	2,790	0	2,833	0	43	0		0
*	1517	3,133	0	3,133	0	3,133	0	0	0		0
	1518	1,246	1,246	1,260	1,260	1,296	1,296	36	36		36
*	1519	1,181	265	1,184	268	1,266	365	82	97		97
*	1520	253	107	254	108	338	207	84	99		99

LAND USE ASSUMPTION PLAN COMBINED AGENCIES CENSUS TRACT LISTING
FOR YEAR 1990-2000
IN EQUIVALENT DWELLING UNITS
NOVEMBER 20, 1990

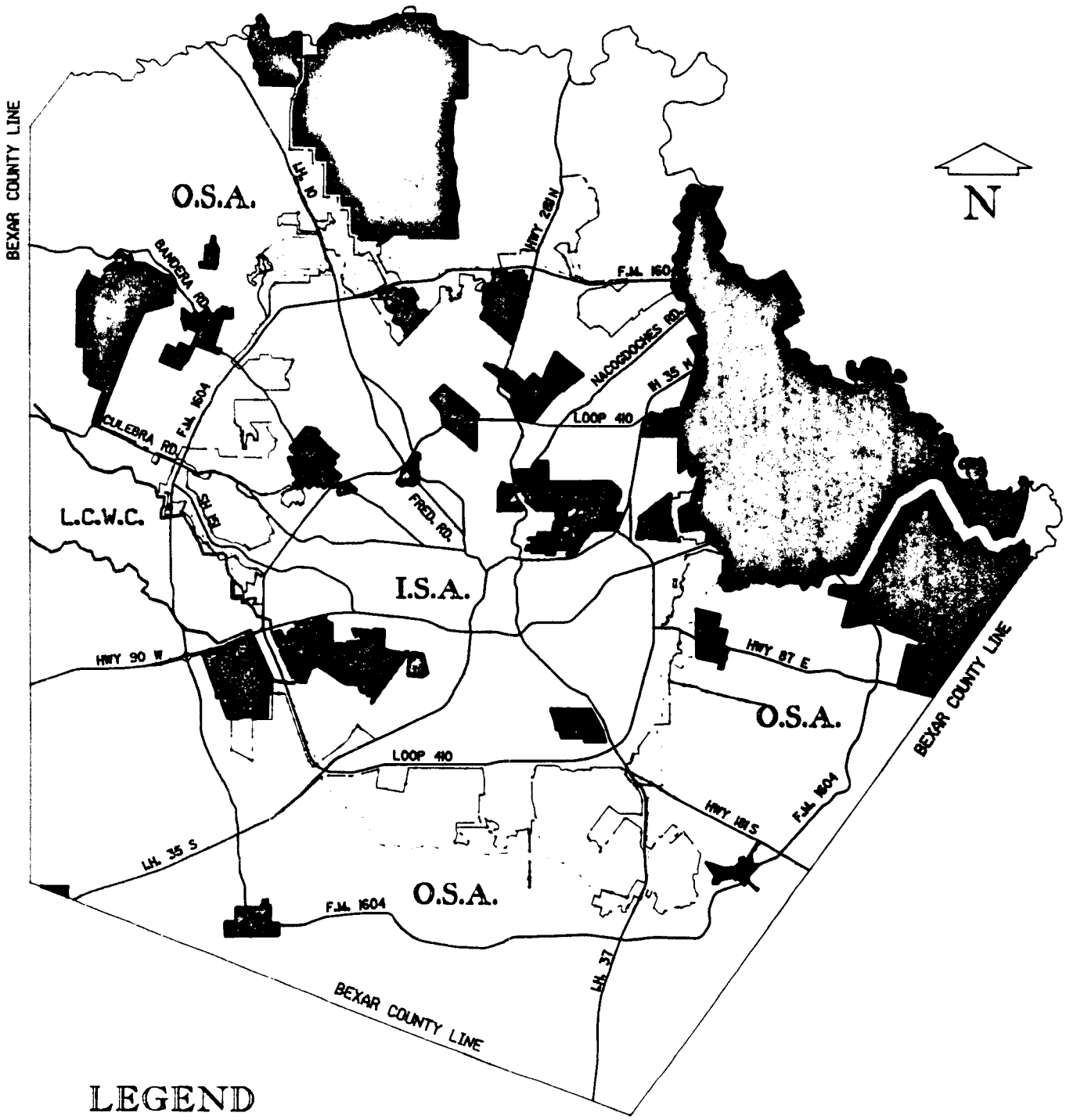
Partial/ Non CWB Area	Census Tract	1989 County	1989 CWB	1990 County	1990 CWB	Projected (2000) County	Projected (2000) CWB	<-----Increase (1990-2000)---- County	CWB Total	CWB Commit. EDU's	CWB Additic Proj.
*	1521	1,181	8	1,181	8	1,266	108	85	100		100
*	1522	1,646	683	1,654	691	2,068	1,083	414	392		392
	1601	2,413	2,413	2,440	2,440	2,459	2,459	20	20		20
	1602	1,048	1,048	1,060	1,060	1,068	1,068	9	9		9
	1603	1,335	1,335	1,350	1,350	1,361	1,361	11	11		11
*	1604	1,983	891	1,993	901	2,000	908	7	7		7
*	1605	3,502	1,795	3,522	1,815	3,537	1,830	15	15		15
*	1606	2,616	242	2,619	245	2,621	247	2	2		2
*	1607	4,051	830	4,060	839	4,093	880	33	41		41
*	1608	43	0	43	0	43	0	0	0		0
*	1609	3,691	0	3,691	0	3,691	0	0	0		0
*	1610	1,288	0	1,288	0	1,288	0	0	0		0
*	1611	3,348	0	3,348	0	3,348	0	0	0		0
*	1612	759	0	759	0	1,055	1,055	296	1,055	386	669
	1613	3,232	3,232	3,268	3,268	3,800	3,800	532	532		532
*	1614.01	6,118	0	6,118	0	6,118	31	0	31	30	1
*	1614.02	1,159	0	1,159	0	1,159	0	0	0		0
	1615	4,349	4,349	4,397	4,397	4,433	4,433	36	36		36
	1616	1,706	1,706	1,725	1,725	1,725	1,725	0	0	0	0
*	1617	601	0	601	0	601	0	0	0		0
	1618	1,319	1,319	1,334	1,334	3,110	3,110	1,776	1,776	841	935
*	1619	1,845	0	1,845	0	3,333	0	1,488	0		0
*	1620	3,390	0	3,390	0	4,041	0	651	0		0
	1701	2,862	2,862	2,894	2,894	2,917	2,917	24	24		24
	1702	2,078	2,078	2,101	2,101	2,118	2,118	17	17		17
	1703	2,469	2,469	2,496	2,496	2,517	2,517	20	20		20
	1704	3,308	3,308	3,344	3,344	3,372	3,372	27	27		27
	1705	1,993	1,993	2,015	2,015	2,031	2,031	16	16		16
	1706	1,761	1,761	1,780	1,780	1,795	1,795	14	14		14
	1707	1,683	1,683	1,702	1,702	1,715	1,715	14	14		14
	1708	649	649	656	656	661	661	5	5		5
	1709	1,863	1,863	1,884	1,884	1,899	1,899	15	15		15
	1710	1,745	1,745	1,764	1,764	1,779	1,779	14	14		14
	1711	1,416	1,416	1,432	1,432	1,443	1,443	12	12		12
	1712	1,219	1,219	1,232	1,232	1,242	1,242	10	10		10
	1713	2,472	2,472	2,499	2,499	2,520	2,520	20	20		20
	1714	1,745	1,745	1,764	1,764	2,000	2,000	236	236		236
	1715	2,265	2,265	2,290	2,290	2,309	2,309	19	19		19
	1716	2,221	2,221	2,245	2,245	2,264	2,264	18	18		18
	1717	2,407	2,407	2,434	2,434	2,862	2,862	428	428	0	428
	1718	3,465	3,465	3,503	3,503	3,532	3,532	28	28		28
*	1719	15,316	3,433	15,354	3,471	23,713	13,533	8,359	10,062	9,048	1,015
	1720	1,497	1,497	1,513	1,513	4,179	4,179	2,666	2,666	1,692	973
	1801	3,189	3,189	3,224	3,224	3,250	3,250	26	26		26
	1802	4,172	4,172	4,218	4,218	4,300	4,300	82	82		82
	1803	1,833	1,833	1,853	1,853	1,868	1,868	15	15		15

LAND USE ASSUMPTION PLAN COMBINED AGENCIES CENSUS TRACT LISTING
FOR YEAR 1990-2000
IN EQUIVALENT DWELLING UNITS
NOVEMBER 20, 1990

Partial/ Non CWB Area	Census Tract	1989 County	1989 CWB	1990 County	1990 CWB	Projected (2000) County	Projected (2000) CWB	<-----Increase (1990-2000)----> County	CWB Total	CWB Commit. EDU's	CWB Additior Proj.
	1804	1,220	1,220	1,233	1,233	1,700	1,700	467	467		467
	1805	4,095	4,095	4,140	4,140	4,174	4,174	34	34		34
	1806	4,789	4,789	4,842	4,842	4,900	4,900	58	58		58
	1807	5,028	5,028	5,083	5,083	5,110	5,110	27	27		27
	1808	1,407	1,407	1,423	1,423	1,554	1,554	131	131	131	0
	1809.01	2,069	2,069	2,092	2,092	2,109	2,109	17	17		17
	1809.02	2,913	2,913	2,945	2,945	2,969	2,969	24	24		24
	1810.01	2,030	2,030	2,052	2,052	2,069	2,069	17	17		17
	1810.02	4,337	4,337	4,385	4,385	5,000	5,000	615	615	43	572
	1811	2,498	2,498	2,526	2,526	2,546	2,546	21	21		21
	1812	2,379	2,379	2,405	2,405	2,425	2,425	20	20		20
	1813	5,229	5,229	5,287	5,287	5,492	5,492	205	205	205	0
	1814	6,454	6,454	6,525	6,525	9,700	9,700	3,175	3,175	737	2,438
*	1815	7,131	3,768	7,173	3,810	7,975	4,055	802	245	245	0
	1816	3,945	3,945	3,988	3,988	3,999	3,999	11	11	11	0
	1817.01	2,025	618	2,025	625	5,612	4,200	3,587	3,575	953	2,622
*	1817.02	20,000	19,048	20,210	19,258	28,481	25,648	8,271	6,390	2,232	4,158
	1818	10,689	10,689	10,807	10,807	17,500	17,500	6,693	6,693	2,128	4,565
	1819	980	980	991	991	5,000	5,000	4,009	4,009	3,554	455
	1820	1,389	1,389	1,404	1,404	3,500	3,500	2,096	2,096	1,323	773
*	1821	3,249	323	3,253	327	8,354	523	5,101	196		196
	1901	1,685	1,685	1,704	1,704	1,717	1,717	14	14		14
	1902	2,515	2,515	2,543	2,543	2,563	2,563	21	21		21
	1903	1,367	1,367	1,382	1,382	1,393	1,393	11	11		11
	1904	2,864	2,864	2,896	2,896	2,919	2,919	24	24		24
	1905	3,661	3,661	3,701	3,701	3,731	3,731	30	30		30
	1906	3,972	3,972	4,016	4,016	4,048	4,048	33	33		33
	1907	1,333	1,333	1,348	1,348	1,359	1,359	11	11		11
	1908	2,613	2,613	2,642	2,642	2,663	2,663	21	21		21
	1909	5,882	5,882	5,947	5,947	5,995	5,995	48	48		48
	1910.01	3,786	3,786	3,828	3,828	3,866	3,866	38	38	38	0
	1910.02	3,434	3,434	3,472	3,472	3,500	3,500	28	28		28
*	1911.01	717	39	717	39	717	39	0	0		0
*	1911.02	1,097	39	1,097	39	1,098	40	1	0		0
*	1912	4,304	3,211	4,339	3,246	4,366	3,273	26	26		26
	1913	7,036	7,036	7,114	7,114	7,472	7,472	358	358	358	0
*	1914	12,363	8,262	12,454	8,353	21,603	15,500	9,149	7,147	1,721	5,425
*	1915	4,810	4,671	4,861	4,722	7,679	6,398	2,818	1,676	781	895
*	1916	129	0	129	0	129	0	0	0	0	0
*	1917	3,460	1,323	3,475	1,338	3,475	1,504	0	166	166	0
*	1918	7,089	125	7,090	126	17,595	3,125	10,505	2,999	2,117	882
	TOTAL:	533,611	393,684	537,925	398,018	660,218	489,876	122,293	91,858	43,185	48,673

Section 6
San Antonio Water System
Wastewater Service Areas Map

SAN ANTONIO WATER SYSTEM
WASTEWATER SERVICE AREA



LEGEND

- INNER SERVICE AREA (I.S.A.)
- OUTER SERVICE AREA (O.S.A.)
- AREAS NOT SERVED
- SAN ANTONIO CITY LIMITS
- PRIMARY HIGHWAYS

Section 7
San Antonio Water System
Wastewater Service Areas
Land Use Assumption Projections
1990 - 2000

PROPOSED WASTEWATER LAND USE ASSUMPTIONS
INNER AND OUTER SERVICE AREA
1990 - 2000
3/18/93

CENSUS TRACT	SUB-TRACT IDENTIFIER	WASTEWATER JURISDICTION EDU'S 1990	2000	DIFFERENCE
1101	x	10,009	10,400	391
1102	x	690	900	210
1103	x	2,816	2,839	23
1104	x	2,567	2,588	21
1105	x	1,156	1,165	9
1106	x	2,253	2,271	18
1107	x	933	941	8
1108	x	1,851	1,866	15
1109	x	1,115	1,124	9
1110	x	1,786	1,801	15
1202	x	3,018	3,042	24
1205.01	x	2,603	2,625	22
1205.02	x	2,528	2,548	20
1206	x	3,645	3,674	29
1207	x	4,580	5,529	949
1208	x	4,186	4,220	34
1209.01	A	2,268	2,286	18
1209.01	B	369	372	3
1209.02	x	1,757	2,370	613
1210	x	3,599	3,620	21
1211.01	x	10,188	15,000	4,812
1211.02	A	7,331	8,615	1,284
1211.02	B	1,502	1,765	263
1212.01	A	3,896	4,034	138
1212.01	B	634	657	23
1212.02	x	4,253	5,228	975
1214	A	5,464	7,112	1,648
1218	A	7,925	11,700	3,775
1219	C	762	4,640	3,878
1301	x	2,040	2,057	17
1302	x	807	813	6
1303	x	1,321	1,332	11
1304	x	3,110	3,135	25
1305	x	2,165	2,182	17
1306	x	1,910	1,925	15
1307	x	1,241	1,251	10
1308	x	3,864	3,896	32
1309	x	2,928	3,089	161
1310	A	2,183	2,201	18
1310	B	22	22	0
1311	x	1,222	1,245	23
1312	A	630	635	5
1312	B	384	387	3
1312	C	21	22	0
1312	D	32	32	0
1313	A	1,453	1,632	179
1313	B	406	456	50
1313	C	278	312	34
1314	A	1,776	2,821	1,045

CENSUS TRACT	SUB-TRACT IDENTIFIER	WASTEWATER JU SDICTION EDU'S 1990	2000	DIFFERENCE
1314	B	296	470	174
1315	A	3,071	4,132	1,060
1316.02	B	81	199	119
1318	F	75	101	26
1401	x	973	981	8
1402	x	2,162	2,179	17
1403	x	1,412	1,424	12
1404	x	1,494	1,506	12
1405	x	1,548	1,560	12
1406	x	784	790	6
1407	x	2,015	2,031	16
1408	x	2,393	2,413	20
1409	x	1,159	1,168	9
1410	x	1,449	1,461	12
1411	x	2,916	2,928	12
1412	x	2,626	2,647	21
1413	A	2,112	2,505	393
1413	B	21	25	4
1414	A	3,410	4,255	846
1414	B	105	132	26
1416	A	145	682	537
1416	B	177	834	657
1417	B	480	666	187
1417	C	210	291	82
1418	B	114	137	22
1501	x	3,020	3,044	24
1502	x	1,513	1,526	13
1503	x	1,678	1,702	24
1504	x	1,543	1,555	12
1505	x	3,592	3,600	8
1506	x	2,118	2,123	5
1507	x	2,032	2,049	17
1508	A	991	1,092	101
1508	B	533	588	55
1509	x	2,616	2,638	22
1510	x	1,459	1,459	0
1511	x	3,348	3,348	0
1512	x	3,219	3,291	72
1513	x	3,777	3,777	0
1514	x	1,845	1,845	0
1515	x	1,056	1,057	1
1516	x	2,790	2,833	43
1517	A	2,757	2,757	0
1517	B	376	376	0
1518	A	920	946	26
1518	B	340	350	10
1519	C	1,054	1,127	73
1520	A	249	331	82
1522	B	33	41	8
1601	x	2,440	2,459	19
1602	x	1,060	1,068	8
1603	x	1,350	1,361	11
1604	x	1,993	2,000	7
1605	x	3,522	3,537	15

CENSUS TRACT	SUB-TRACT IDENTIFIER	WASTEWATER JURISDICTION EDU'S 1990	2000	DIFFERENCE
1606	x	2,619	2,621	2
1607	x	4,060	4,093	33
1609	x	3,691	3,691	0
1610	x	1,288	1,288	0
1611	x	3,348	3,348	0
1612	A	478	665	186
1613	x	3,268	3,800	532
1615	x	4,397	4,433	36
1616	A	86	86	0
1701	x	2,894	2,917	23
1702	x	2,101	2,118	17
1703	x	2,496	2,517	21
1704	x	3,344	3,372	28
1705	x	2,015	2,031	16
1706	x	1,780	1,795	15
1707	x	1,702	1,715	13
1708	x	656	661	5
1709	x	1,884	1,899	15
1710	x	1,764	1,779	15
1711	x	1,432	1,443	11
1712	x	1,232	1,242	10
1713	x	2,499	2,520	21
1714	x	1,764	2,000	236
1715	x	2,290	2,309	19
1716	x	2,245	2,264	19
1717	x	2,434	2,862	428
1718	x	3,503	3,532	29
1719	A	3,378	5,217	1,839
1801	x	3,224	3,250	26
1802	x	4,218	4,300	82
1803	x	1,853	1,868	15
1804	x	1,233	1,700	467
1805	A	3,643	3,673	30
1805	B	373	376	3
1805	C	124	125	1
1806	x	4,842	4,900	58
1807	x	5,083	5,110	27
1809.01	x	2,092	2,109	17
1809.02	x	2,945	2,969	24
1810.01	x	2,052	2,069	17
1810.02	x	4,385	5,000	615
1811	x	2,526	2,546	20
1812	A	1,924	1,940	16
1812	B	481	485	4
1813	A	3,965	4,119	154
1813	B	1,322	1,373	51
1814	x	6,525	9,700	3,175
1815	A	3,013	3,350	337
1816	A	3,828	3,839	11
1817.02	A	9,701	13,671	3,970
1817.02	C	9,701	13,671	3,970
1818	A	8,862	14,350	5,488
1818	C	0	0	0
1818	D	216	350	134

CENSUS TRACT	SUB-TRACT IDENTIFIER	WASTEWATER JURISDICTION EDU'S 1990	2000	DIFFERENCE
1818	E	1,297	2,100	803
1819	B	119	600	481
1819	C	327	1,650	1,323
1820	E	0	0	0
1820	H	393	980	587
1820	J	84	210	126
1901	x	1,704	1,717	13
1902	x	2,543	2,563	20
1903	x	1,382	1,393	11
1904	x	2,896	2,919	23
1905	x	3,701	3,731	30
1906	x	4,016	4,048	32
1907	x	1,348	1,359	11
1909	x	5,947	5,995	48
1910.01	x	3,828	3,866	38
1910.02	x	3,472	3,500	28
1912	x	4,339	4,366	27
1913	A	6,829	7,173	344
1913	B	285	299	14
1914	A	11,458	19,875	8,417
1914	C	498	864	366
1915	A	4,424	6,988	2,564
1917	B	1,286	1,286	0
1918	B	0	0	0
INNER-SERVICE-AREA		422,883	486,316	63,433
1219	A	420	2,560	2,140
1219	D	13	80	67
1314	C	42	67	25
1318	B	1,175	1,587	412
1417	A	310	430	121
1418	A	686	820	134
1419	A	1,652	2,129	477
1519	A	95	101	7
1520	B	5	7	2
1521	A	756	810	54
1522	A	1,108	1,386	277
1612	B	281	390	110
1618	A	440	1,026	586
1618	B	894	2,084	1,190
1619	A	1,107	2,000	893
1620	A	1,322	1,576	254
1719	B	11,208	17,310	6,102
1719	C	768	1,186	418
1720	A	61	167	107
1720	B	1,044	2,884	1,840
1720	C	409	1,128	720
1817.01	A	1,539	4,265	2,726
1817.01	B	486	1,347	861
1819	A	545	2,750	2,205
1820	B	70	175	105
1821	A	1,334	3,425	2,091
1918	A	7,090	17,595	10,505

CENSUS TRACT	SUB-TRACT IDENTIFIER	WASTEWATER JUI DICTION EDU'S 1990	2000	DIFFERENCE
OUTER-SERVICE-AREA		34,860	69,286	34,426
TOTALS		457,742	555,602	97,859