SAN ANTONIO WATER SYSTEM

Guide to Development

Updated 2011

2800 U.S. Highway 281 North
San Antonio, Texas 78212

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This document is an abbreviated description of the SAWS review process. It is designed as an easy to follow guide for developers and their consulting engineering firms to help them understand the process and what they need to do to assure timely processing of their submissions.

Service Availability (This step is Optional, Not Required)
If you would like to know what water and wastewater mains are near your tract you may request a Service Availability Report. Your request must include:

- Complete contact information (please include your email address if available)
- A detailed map of the location (a copy of Ferguson Map page with tract boundaries clearly and accurately outlined is best).
- Submit this to SAWS via one of the following methods:

Email (preferred):
serviceavailability@saws.org

Mail:
San Antonio Water System
Attn: Service Availability Department
PO Box 2449
San Antonio, TX 78298

Fax:
210-233-5456

Counter services:
You may also request maps of existing pipe locations in person at Counter Services, 2nd floor of SAWS Headquarters, Customer Service Building, Tower 2 located at 2800 U.S. Hwy 281 North (Map to SAWS, Customer Service Building located in appendix).

SAWS will process your request and return to you a description of the service area in which the tract exists along with maps showing locations of pipes which are nearest the tract.

Design Review: Step 1 – Request a Permit or a Utility Service Agreement
The consulting engineer, having designed for the needs of the tract, must submit a request to SAWS for either a Permit or a Utility Service Agreement (often referred to as a USA). Please refer to page 5 for a list of factors to determine if a USA is required. If none of the listed factors apply to the tract then no USA is needed and you should:

- Obtain a permit from SAWS via the Mains and Services department. (Available at Counter Services located on the 2nd floor of Tower 2 of SAWS Headquarters).
- In this case, once your plat is approved and you receive your permit you can move on to construction.

If the tract does require a USA then the consulting engineer needs to assemble all of the items listed under "Minimum Submittal Requirements to Request a USA" as stated on page 5 of this guide. The

consulting engineer should then submit that package as a USA Request to SAWS via one of the following methods:

Mail:
San Antonio Water System
Attn: USA Requests
PO Box 2449
San Antonio, TX 78298

Counter services:
Located on 2nd floor of SAWS Headquarters, Customer Service Building, Tower 2 located at 2800 U.S. Hwy 281 North. (Map to SAWS, Customer Service Building located in appendix).

Design Review: Step 2 – Submittal of Engineering Plans
For those who have tracts that require a USA and have begun the process by submitting a USA Request the next step is:

- Provide detailed Engineering plans to SAWS' for entry review and entry into the plats & plans database.
- As noted on the USA details section of this document the Draft USA will soon be provided to you to submit with your plans.
- Once the consulting engineer receives the Draft USA from SAWS then they need to assemble a package containing hard copies of:

CHECK LIST	ENGINEERING PLANS SUBMITTAL
☐	Cover Sheet clearly stating "Plats & Plans package" and the Project Name
☐	Plat (no preliminary or handwritten ID numbers will be accepted) – 4 copies
☐	SAWS Application for Subdivision Plat Review – 1 copy
☐	Completeness Review for L.O.C. – 1 copy
☐	Utility Service Agreement (Draft is acceptable) – 1 copy
☐	Utility Layout – 2 copies
☐	Master Plan – 2 copies
☐	Water Plans – 3 copies
☐	Sewer Plans – 3 copies
☐	Water cost estimate – 2 copies
☐	Sewer cost estimate – 2 copies
☐	Equivalent Dwelling Units (EDU's) Calculations – 1 copy
☐	Water Well Letter (signed & Sealed by Engineer) – 1 copy
☐	SAWS Aquifer Protection approval or copy of category letter (if applicable) – 1 copy
☐	Purveyor Letter (if applicable) - 1 copy
☐	Septic Letter (if applicable) – 1 copy
☐	Local Sewer Authority (if applicable) – 1 copy
☐	No Flow Letter (if applicable) – 1 copy
☐	Private Sewer System Letter (if applicable) – 1 copy
☐	**ALL EXHIBITS MUST BE 24"x 36" FOLDED, NOT ROLLED**
☐	**Provide duplicate CD's containing plans and USA in digital format**
☐	**Plans must be in DGN or DWG format. USA document must be in PDF format**
☐	**Submit USA Request package at Counter Services located on 2nd floor, Tower 2**

If you have questions about Plats & Plans submittal requirements please contact:

- SAWS' Development Engineering Department at (210) 233-2009 and ask for Plats & Plans review or;
- Visit Counter Services located on the 2nd floor of the Customer Service Building, Tower 2 at SAWS headquarters.

While your plans are being reviewed for entry in the Plats & Plans database your USA is being reviewed by several departments at SAWS. There are many design factors specific to each individual tract that are addressed in detail as the USA is processed, but in simplest terms the USA process involves:

- Calculating the needs of the tract and how to properly connect SAWS infrastructure
- Drafting the USA document itself
- SAWS Master Planning approval of the USA
- SAWS Legal department approval of the USA
- Providing a DRAFT USA to the consulting engineer for review
- Revising the USA based on input from Master Planning and Legal departments
- In some cases the USA must be approved by SAWS Board of Trustees
- Providing a final USA to the consulting engineer to have the developer sign
- Once signed by the developer, the appropriate persons at SAWS must sign the USA
- The signed, finalized USA is filed in the SAWS archive and marked complete
- The duplicate original of the signed, finalized USA is returned to the developer

Depending on the completeness of your original USA request, changes made to the original design, and whether Board approval of the USA is needed, the processing time for a USA is usually 30 to 90 days.

Design Review: Step 3 – Complete, Approve, and Review of Utility Service Agreement
Once your USA is complete and approved by all the appropriate divisions at SAWS then we will send duplicate originals of the USA to the Consulting Engineer who will review the USA with their Developer client and have the Developer sign both originals of the USA. The Consulting Engineer will then return both copies to SAWS where we will finalize the USA and update our records so that other departments at SAWS will know the USA is complete and final. The Finalization process takes approximately 10 days from the time that the Developer signed originals are returned to SAWS until the USA is final.

Design Review: Step 4 – Release of General Construction Permit or Tri-Lateral Contract
Once your Plats & Plans package is reviewed SAWS will send back "redlines" which specify needed revisions before you resubmit them for final review. Once the USA (being processed concurrently) is signed by both the developer and SAWS and the Plats & Plans package is approved then the General Construction Permit (or Tri-Lateral Contract if over sizing is involved) will be released and construction on the tract can begin.

SAWS GUIDE TO DEVELOPMENT

Tips: SAWS is focused on providing a quality product in a timely fashion and we are often asked about ways to speed the USA process along. The single greatest factor in the smooth processing of USA's and Plats & Plans requests is an accurate and complete package. As part of that same concept, the value of a good location map with accurate boundary lines cannot be overstated. Also, consistent use of the same project name to refer to the tract is essential in avoiding confusion and delays.

Appendix: To aid consulting engineers in preparing USA Requests as well as in estimating Equivalent Dwelling Units (EDU's) requirements and impact fees the following pages include:

- Utility Service Agreement Requirements:
- Impact Fee Charts, and;
- Wastewater EDU Empirical Estimates.

Also included is a map to SAWS Headquarter, Customer Service Building, where staff can assist you with your requests.

You may also find additional useful information and forms in the Business Center – Developer Resources sections of the www.saws.org website.

SAN ANTONIO WATER SYSTEM
REQUIREMENTS FOR REQUESTING
USA FOR WATER AND/OR WASTEWATER SERVICE

A Utility Service Agreement (USA) may be required if the Tract:

- is over or involved with Edwards Aquifer Recharge Zone (EARZ) or Contributing Zone
- is within the Camp Bullis Awareness Zone
- is over 50 acres
- involves SAWS reimbursing the developer to oversize water or wastewater facilities
- is outside SAWS currently certified service area
- requires over 50 EDU's
- requires a main extension of 300 linear feet or more
- involves impact fee credits
- involves pro-rata refund
- involves phased development
- involves special considerations for a USA as deemed necessary by SAWS

Minimum Submittal Requirements to Request a USA:

1. Cover Sheet clearly stating "USA Request" and the Project Name
2. Engineering Report
   a) Project Name: Consistent use of this name in communications with SAWS will be very important to avoid confusion and delays. Please select a project name which does not begin with numbers
   b) Consultant Engineer's name, address, and contact person with email address
   c) Developer's name, address, and contact person (who will be the signor of the USA document)
   d) Location map displaying site location with tract boundaries clearly outlined
   e) Site map with elevation contours
   f) Total Acreage
   g) Projected Flow stated in Equivalent Dwelling Units (EDU's)
   h) Statement of fire flow required (average house <3600 sq ft=1000 gpm, >3600 sq ft=1500 gpm, commercial=2000 gpm)
   i) Proposed source of service (point(s) of connection, size of main, slope)
   j) Total linear feet of on-site and/or off-site mains
3. Proof of ownership such as a warranty deed, contract for Purchase, or earnest money contract
4. Legal description of tract

Additional Information that May be Required:

- Master Plan (existing or proposed)
- Hydraulic Model and/or Fire Flow Test (or sewer analysis in the case of wastewater)
- Number of acres & EDU's as part of an existing water commitment and/or wastewater contract
- Computer modeling for subdivisions: where pressure is not within regulations; greater than 125 EDU's with a single feed main; served or bounded by different service levels; or large tracts.
- Purveyor Letter from other water/wastewater providers if some portion of service to the tract will be from entities other than SAWS. For example, letter from Cibolo Creek Municipal Authority (CCMA) approving treatment of flows (if in CCMA's jurisdiction).

SAN ANTONIO WATER SYSTEM
REQUIREMENTS FOR REQUESTING
USA FOR WATER AND/OR WASTEWATER SERVICE

All Subdivisions Greater than 125 EDU's:

1. Must have or make provisions for a dual feed system.
2. If a dual system is not possible, provide engineering documentation, computer modeling, and certification for SAWS review and approval of a single feed system.

SAWS Board Approval is Required on USA's for tracts:

- Located over the EARZ or Contributing Zone
- Within the 5-mile Awareness Zone of Camp Bullis
- Greater than 50 acre
- For which SAWS will provide oversize reimbursement

Estimated Time to Issue USA's Once SAWS Receives a Complete USA submittal:

- Draft USA's issued: 30 business days
- Final USA completed: 90 business days
- Additional time may be required for complex areas (such as multiple service levels, existing pressure or service issues, requiring production facilities, etc.). SAWS will accept plat & plan packages once a draft USA is issued. Plat & plan approval is conditionally based on final approval of the USA.

SAN ANTONIO WATER SYSTEM
WATER IMPACT FEES

EFFECTIVE MAY 31, 2011 – APPLIES TO ALL PROPERTIES RECORDED AFTER THIS DATE

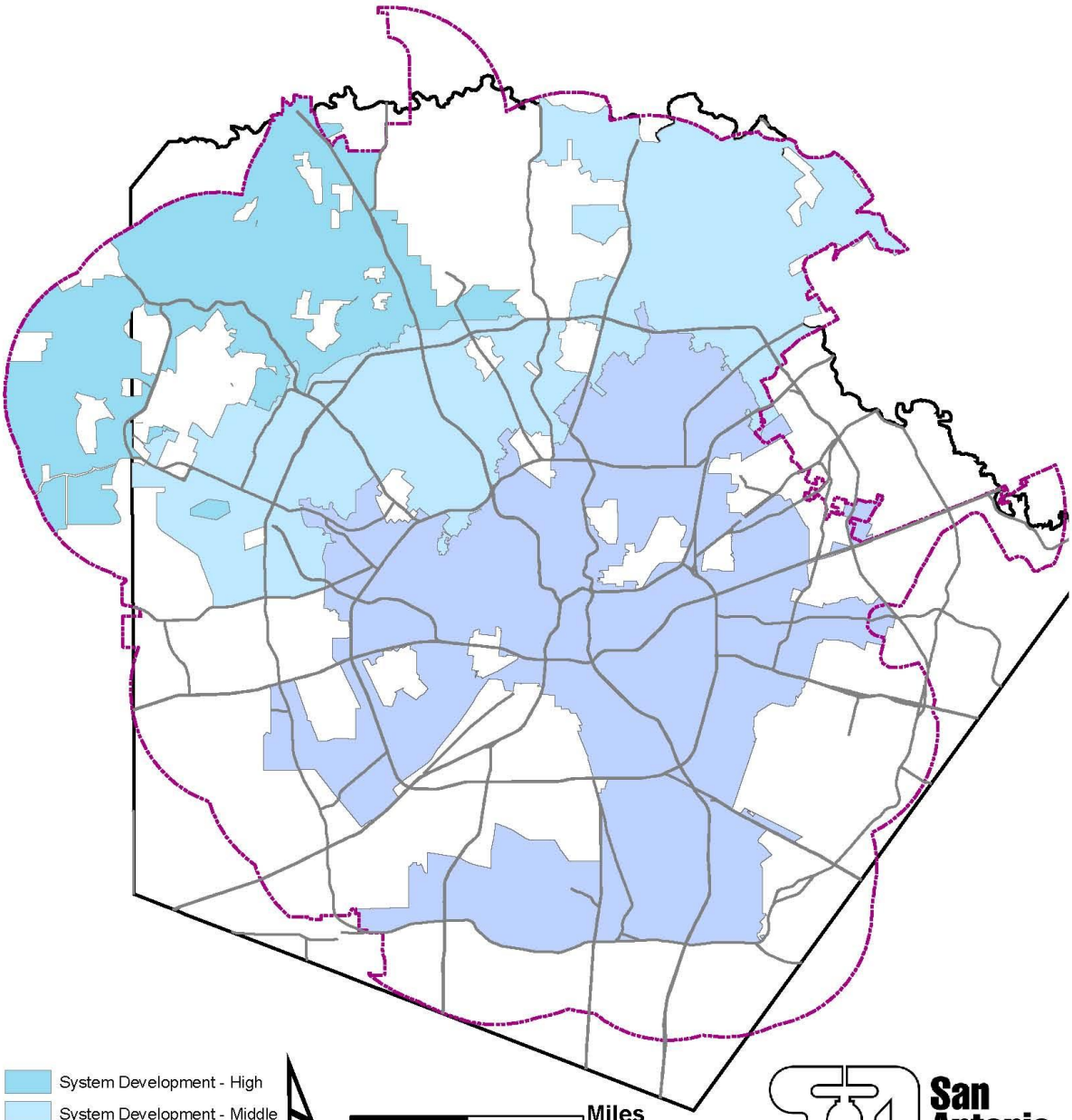
Apartments, duplexes, townhomes, and condominiums served via a master meter will be charged on a basis of 1/2 EDU per unit for all impact fees.

313gpd per EDU

	Meter Size	EDU	Service Cost	Flow Impact Fee	System Development Impact Fee	Water Supply Impact Fee	Total Water Impact Fees
Low	5/8	1	PERMIT	$1,247.00	$579.00	$1,297.00	$3,123.00
The following Pressure Zones are within the Low area:**2, 3, 4, 4A, 5, 6, and Wholesale**	3/4"	1.5	PERMIT	$1,870.50	$868.50	$1,945.50	$4,684.50
	1"	2	PERMIT	$2,494.00	$1,158.00	$2,594.00	$6,246.00
	1 1/2"	5	PERMIT	$6,235.00	$2,895.00	$6,485.00	$15,615.00
	2"	14	PERMIT	$17,458.00	$8,106.00	$18,158.00	$43,722.00
	4" X 3"	30	PERMIT	$37,410.00	$17,370.00	$38,910.00	$93,690.00
	4" X 4"	50	PERMIT	$62,350.00	$28,950.00	$64,850.00	$156,150.00
	6"	105	PERMIT	$130,935.00	$60,795.00	$136,185.00	$327,915.00
	8"	135	PERMIT	$168,345.00	$78,165.00	$175,095.00	$421,605.00
	12" X 10"	190	PERMIT	$236,930.00	$110,010.00	$246,430.00	$593,370.00
Middle	5/8”	1	PERMIT	$1,247.00	$774.00	$1,297.00	$3,318.00
The following Pressure Zones are within the Middle area: **7, 8, 9, 10, and 11A**	3/4"	1.5	PERMIT	$1,870.50	$1,161.00	$1,945.50	$4,977.00
	1"	2	PERMIT	$2,494.00	$1,548.00	$2,594.00	$6,636.00
	1 1/2"	5	PERMIT	$6,235.00	$3,870.00	$6,485.00	$16,590.00
	2"	14	PERMIT	$17,458.00	$10,836.00	$18,158.00	$46,452.00
	4" X 3"	30	PERMIT	$37,410.00	$23,220.00	$38,910.00	$99,540.00
	4" X 4"	50	PERMIT	$62,350.00	$38,700.00	$64,850.00	$165,900.00
	6"	105	PERMIT	$130,935.00	$81,270.00	$136,185.00	$348,390.00
	8"	135	PERMIT	$168,345.00	$104,490.00	$175,095.00	$447,930.00
	12” X 10”	190	PERMIT	$236,930.00	$147,060.00	$246,430.00	$630,420.00
High	5/8”	1	PERMIT	$1,247.00	$966.00	$1,297.00	$3,510.00
The following Pressure Zones are within the High area**: 10A, 11, and 12**	3/4"	1.5	PERMIT	$1,870.50	$1,449.00	$1,945.50	$5,265.00
	1"	2	PERMIT	$2,494.00	$1,932.00	$2,594.00	$7,020.00
	1 1/2"	5	PERMIT	$6,235.00	$4,830.00	$6,485.00	$17,550.00
	2"	14	PERMIT	$17,458.00	$13,524.00	$18,158.00	$49,140.00
	4" X 3"	30	PERMIT	$37,410.00	$28,980.00	$38,910.00	$105,300.00
	4" X 4"	50	PERMIT	$62,350.00	$48,300.00	$64,850.00	$175,500.00
	6"	105	PERMIT	$130,935.00	$101,430.00	$136,185.00	$368,550.00
	8"	135	PERMIT	$168,345.00	$130,410.00	$175,095.00	$473,850.00
	12” X 10”	190	PERMIT	$236,930.00	$183,540.00	$246,430.00	$666,900.00

See Section 20.1.2 of the “Regulations for Water Service” for service line costs.

Water Impact Fee Service Areas 2011 - 2020



System Development - High
System Development - Middle
System Development - Low
Major Roads
COSA ETJ

N

0 5 10 Miles

Final determination of the service area is dependent on the location of the connection to a specific pressure zone. The location must be approved by SAWS staff.

San Antonio Water System

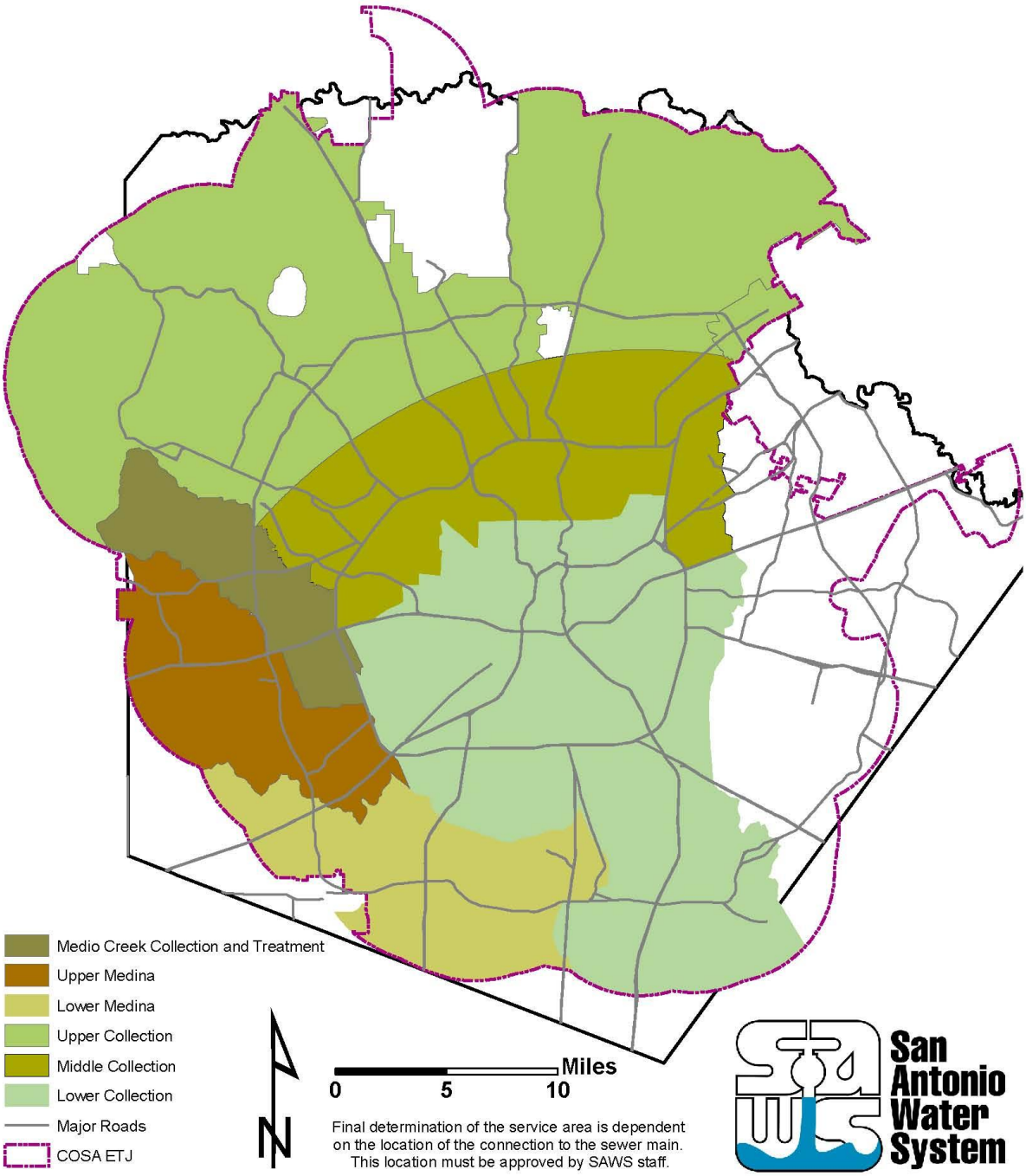
SAN ANTONIO WATER SYSTEM
SEWER IMPACT FEES

EFFECTIVE May 31, 2011 – APPLIES TO ALL PROPERTIES RECORDED AFTER THIS DATE
Apartments, duplexes, townhomes, and condominiums served via a master meter will be charged on a basis of 1/2 EDU per unit for all impact fees.

SEWER IMPACT FEES
240gpd per EDU

Impact Fee Area	Collection Component	Treatment Component	Total Sewer Impact Fees (per 1 EDU)
Upper	$1,795	$552	**$2,347**
Middle	$1,142	$552	**$1,694**
Lower	$552	$552	**$1,104**
Upper Medina	$1,053	$552	**$1,605**
Lower Medina	$594	$552	**$1,146**
Medio Creek	$582	$1,379	**$1,961**

Wastewater Impact Fee Service Areas 2011 - 2020



SAN ANTONIO WATER SYSTEM
SEWER EQUIVALENT DWELLING UNIT ESTIMATES

SEWER EDU ESTIMATES			
GPD = Gallons Per Day ADU = Average Daily Use EDU = Equivalent Dwelling Unit			
Type of Development	**Usage Calculation**	**240 GPD (ADU) per EDU**	**Sewer Impact Fee Calculation**
Residential - Single Family Residence	number of homes x 1 = EDU		EDU's X Service Area Fee Rate = Total Impact Fees
Apartments/Duplexes	number of units x .5 = EDU (Master Meter)		EDU's X Service Area Fee Rate = Total Impact Fees
Condo's/Townhomes	number of units x .5 = EDU (Master Meter)		EDU's X Service Area Fee Rate = Total Impact Fees
Mobile Homes	number of homes x .75 = EDU (Master Meter)		EDU's X Service Area Fee Rate = Total Impact Fees
Auto Paint & Body	number of employees x 25 = GPD + number of daily customers x 5 = GPD	GPD / 240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
Church/Sanctuary	number of seats x 5 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
Day Care (w/kitchen)	number of children x 20 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
Day Care (w/o kitchen)	number of children x 10 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
Dental Office	square footage x 0.15 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
Fire Station	number of employees x 25 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
Hospital	number of beds x 250 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
Hotel	number of rooms x 100 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
Laundry - (Self Laundries)	number of machines x 200 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
Motel	number of rooms X 50 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
Nursing Home	number of beds x 100 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
Office/Warehouse	square footage x .035 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
Restaurant	number of seats x 20 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
Restaurant - Fast Food	4.4 EDU's	-	EDU's X Service Area Fee Rate = Total Impact Fees
Retail	square footage x .07 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
School - Elementary	number of students x 5 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
School - Middle	number of students x 8 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
School - High	number of students x 10 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
School - Other	number of students x 10 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
Service Stations	1 EDU for gas only ADD 2 EDU's for grocery & takeout food ADD 15 EDU's for each car wash		EDU's X Service Area Fee Rate = Total Impact Fees
Theatre	number of seats x 1.5 = GPD	GPD /240 = EDU's	EDU's X Service Area Fee Rate = Total Impact Fees
PLEASE NOTE: Final EDU Calculation for a given tract should be based on engineering judgment. This chart is only a list of empirical averages and is offered merely as a guideline			

San Antonio Water System
Customer Service Building
2800 U.S. Hwy. 281 North
San Antonio, Texas 78212

Directions to SAWS Headquarters, Customer Service Building

From northbound U.S. Hwy. 281

- Exit at St. Mary's Street/Mulberry Avenue.
- Continue on the access road through two traffic lights, crossing St. Mary's and Mulberry.
- After crossing Mulberry, the SAWS Customer Service Building is the third office building on the right.
- Turn right into SAWS parking lot and enter through the main entrance of the building.

From southbound U.S. Hwy. 281

- Exit at the Mulberry Avenue/St. Mary's Street.
- Before crossing Mulberry take the turnaround under U.S. Hwy 281.
- Traveling northbound on the access road, the SAWS Customer Service Building is the third office building on the right.
- Turn right into SAWS parking lot and enter through the main entrance of the building.

Parking

- Please park in front of SAWS Customer Service Building.
- Security staff will be available to direct you to SAWS Counter Services located on the 2nd floor.