



capital improvement  
**Projects**

# **San Antonio Water System CY 05 Capital Improvement Program**

## **Introduction**

The San Antonio Water System (SAWS) serves approximately 292,424 customers in the San Antonio area. SAWS delivers potable groundwater from the Edwards Aquifer to domestic, commercial, industrial, governmental and agricultural customers. SAWS also collects, conveys and processes recycled water and wastewater generated in the service area. Heating and cooling plants owned and operated by SAWS generate steam and chilled water for customers in the Central Business District, Brooks City Base and Kelly USA.

The Capital Improvement Program (CIP) is the multi-year plan for implementing projects that support water supply and delivery, wastewater collection and treatment and heating and cooling requirements in the SAWS service area. The CIP is a financial planning and management tool that identifies facility and equipment requirements and schedules them for funding and implementation.

The Capital Improvement Program is comprised of four core businesses: Heating and Cooling, Water Delivery, Wastewater and Water Supply.

The Water Delivery and Wastewater components of the 2005 program are funded at \$110 million. The Water Supply Core Business is funded for \$128.7 million and the Heating and Cooling Core Business program totals approximately \$1.2 million. The CY05 CIP program totals \$239.9 million.

The Heating and Cooling Program is self-funded through revenues generated from customers. The Water Supply Program funds the development of long term water supplies from surface and alternative groundwater sources through a fee assessed to ratepayers. The Water Delivery and Wastewater CIP funds the expansion, improvement and replacement of infrastructure required to generate, deliver, collect and treat water and wastewater in the SAWS service area. The water and wastewater components of the annual CIP are funded for 110 million through bonds, revenues and impact fees. Funding for the CY05 water delivery and wastewater collection and treatment program is 52% repairs and replacements and 48% additional capacity to support new growth and development. The CY05 program provides more spending on growth projects than previous programs due to funding for construction of the Medio Water Recycling Center expansion.

CIP projects were generated by Treatment, Planning, Programming and Quality Control and Operations. The Executive Group, consisting of the submitting Vice Presidents, reviewed and prioritized all known requirements for the budget year to insure that the highest priority problems are addressed in a timely manner given funding limitations. Criteria used to prioritize projects also included project coordination, savings to the annual Maintenance and Operations budget, improved customer service, regulatory mandates, criticality, priority in relation to other projects and availability of funds.

## **CY05 Capital Improvement Program Summary**

### **Heating and Cooling Program**

The San Antonio Water System operates and maintains nine heating & cooling facilities located at various locations within the City of San Antonio (COSA). The Central heating & cooling plant located on East Commerce was constructed in 1967. This plant provides chilled water and steam to facilities owned by the City of San Antonio, other governmental agencies and commercial businesses.

In December 2000, SAWS' Heating and Cooling Department acquired six additional heating and cooling facilities at Kelly USA as a result of the base closure/realignment decision made in 1995. In 2001, the construction of a new 4,000-ton plant was completed at South Cherry Street. This plant was connected to the chilled water distribution system to handle any additional loads as a result of the convention center expansion project. In February 2002 an interim agreement was reached between Brooks Development Authority and SAWS to operate the central heating and cooling plants and two other small cooling facilities at Brooks City Base.

Due to the age and condition of the newly acquired plants at the Kelly USA site and the Central Plant on Commerce Street, projects have been initiated to insure safe, dependable and efficient operation of critical equipment. These projects are required to keep equipment operating at optimum performance, to maintain operational efficiency and to insure reliable service to SAWS' heating and cooling customers.

### **Wastewater Collection and Treatment Program**

The SAWS Wastewater Collection and Treatment system consists of approximately 4,790 miles of sanitary sewer mains, 107 lift stations and 4 major wastewater treatment plants. The Wastewater CIP consists of programs and projects which upgrade and rehabilitate the wastewater collection and treatment system and increase capacity to allow for the future growth of the system.

The wastewater collection component of the CIP focuses on the efforts needed to sustain aging collection systems while complying with wet weather regulations and operational demands. Two priority outfall improvements identified in the 1998 Wastewater Master Plan are funded for design. These outfalls in the Central and Eastern sewersheds are in poor condition due to deterioration and lack the capacity to handle the future needs of the sewersheds. These projects will parallel or replace deteriorated sewer outfall main. Flow metering equipment for the Eastern sewershed will be purchased to prioritize repairs and replacements. Projects that accommodate growth and add capacity in the rapidly growing Far West area are also funded.

The sewer main replacement and repair program includes the inspection and repair of any defects in the piping or structures of the SAWS wastewater system located within the Edwards Aquifer Recharge Zone. The current project includes the repair and replacement of over 56 miles of sewer mains and 1,000 manholes. Projects to replace deteriorated sewer mains in the Culebra Park, Los Angeles Heights and San Fernando neighborhoods are also funded.

The wastewater treatment component of the 2005 CIP consists of projects which will replace or upgrade aging components and processes at the treatment plants. The construction of the Medio Water Recycling Center expansion from 8.5 to 16 MGD is the major component of the 2005 Treatment program. The expansion is necessary to accommodate increased flows and handle future needs of the sewershed.

### **Water Delivery Program**

The Water Delivery system delivers ground water to customers through elevated and ground storage tanks, pump stations and transmission and distribution mains. The system consists of approximately 4,000 miles of transmission and distribution mains, 14 primary and 21 secondary pump stations, 25 booster stations and 56 elevated and ground storage tanks.

The Water Delivery CIP includes programs and projects designed to expand and improve water production, storage and transmission facilities in the SAWS service area. The 2005 CIP funds Water Master Plan projects to ensure that potable water is delivered in a timely manner to meet growth within the SAWS service area.

The 2005 CIP Water Delivery program includes the design and construction of projects to address critical low pressure and low flow areas that could potentially lead to loss of property and human life in the event of a fire. Funds are provided to construct two water transmission main projects that will correct low pressure and provide service to pressure zone 2 and the Toyota plant. It also includes the repair and replacement of deteriorated water mains. The 2005 CIP has scheduled the rehabilitation of water mains in the Culebra Park, Los Angeles Heights and San Fernando neighborhoods.

The upgrade, replacement and rehabilitation of production facilities to maintain system integrity and meet TCEQ requirements are also programmed. The focus of the 2005 Production CIP is to address regulatory and code deficiencies within the water production systems. The program is broken out into three major components; water production repair and replacement, waste water lift stations and pump station upgrades and water production growth. The growth portion addresses primarily TCEQ mandates related to lack of sufficient elevated storage capacity in the respective pressure zones. Design is funded for the Applewhite Industrial Park Tank, the Culebra Tank and Pump Station and the Faith Tank.

### **Water Supply Program**

An initiative to develop long term water supplies from surface and alternative groundwater sources began in 1998 and has been programmed into a twenty year plan. The Water Supply Core Business includes water supply development, water treatment and water transmission projects. In 2005, funding is provided to continue purchasing or leasing Edwards groundwater rights and water rights from residents in Gonzales County where production facilities will be constructed to take water from the Carrizo Aquifer and integrate it into the SAWS system. Funding from the water supply fee will also be used to construct projects to deliver recycled water to customers in the SAWS service area. Additionally, SAWS will continue to purchase land over the Edwards Aquifer Recharge Zone to preserve geologically sensitive areas.

## Corporate Program

The 2005 CIP is funding the acquisition of an enterprise resource planning program which will provide an integrated data base for SAWS and the promotion of best industry practices.

## Funding

Several sources are used to finance SAWS capital improvements; these sources include: revenues, revenue bonds, tax –exempt commercial paper (TECP), and capital recovery fees (impact fees and others). Funds from these sources are accounted for in the Renewal and Replacement Fund and the Project Fund, two SAWS funds that are described below. In addition, SAWS is actively pursuing grant funds from State and Federal sources.

### Renewal and Replacement Fund:

Rate-based revenues and capital recovery fees collected from customers and developers are recorded in the Renewal and Replacement Fund. This fund is primarily used to finance property, plant and equipment construction, and system improvements.

### Revenues:

All revenues of the System are used to meet requirements according to a specific schedule of priorities as dictated by Ordinance No. 75686, which created the San Antonio Water System. After covering maintenance and operations expenses and debt service, revenues are available for distribution to the City of San Antonio’s General Fund and the SAWS Renewal and Replacement Fund. Any revenues in excess of those obligated to the City of San Antonio are available for SAWS Renewal and Replacement Fund.

### Capital Recovery Fees:

The System fees are designed to recoup the costs of capital expenditures to meet the needs of new customers. These include impact fees that are collected in accordance with Chapter 395 of the Local Government Code and connection fees. Expenditure of impact fees can only fund projects attributable to development.

### Project Fund:

This fund accounts for proceeds from the System’s capital debt of both tax-exempt commercial paper and revenue bonds.

### Revenue Bonds and Tax-Exempt Commercial Paper (TECP):

Revenue bonds and TECP are primarily used to finance construction projects. SAWS established a tax-exempt commercial paper program in November 1996 at an authorized amount of \$175 million. SAWS expects to expand the TECP program during 2002-2005 utilizing up to approximately 350 million to finance capital projects.

Table 1 shows the CY05 CIP budget and sources of funding for the CY05 program.

**Table 1.**

### **San Antonio Water System CY05 Funding Sources**

<u>2005 CIP</u>	<u>Water Supply</u>	<u>Water Delivery</u>	<u>Wastewater</u>	<u>Heating/Cooling</u>	<u>Total</u>
Revenue	\$5,988,111	\$5,000,000	\$7,000,000	\$0	\$17,988,111
Impact Fees	\$0	\$5,586,743	\$20,022,588	\$0	\$25,609,331
Bonds	\$88,372,517	\$25,671,726	\$46,718,943	\$1,206,150	\$161,969,336
TECP	\$34,392,172	\$0	\$0	\$0	\$34,392,172
TWDB	\$0	\$0	\$0	\$0	\$0
Total	\$128,752,800	\$36,258,469	\$73,741,531	\$1,206,150	\$239,958,950

**San Antonio Water System  
2005 Capital Improvement Program**

<b>Project Title</b>	<b>Cost Element</b>	<b>Cost Estimate</b>
<b>HEATING AND COOLING CORE BUSINESS</b>		
Central Plant - Data Acquisition System	Construction	\$ 50,490
Central Plant - Steam and Condensation Line Replacement	Construction	\$ 224,400
Central Plant- Install Meters for Data Acquisition System	Construction	\$ 84,150
Central Plant- Replace Variable Frequency Drives	Construction	\$ 140,250
Central Plant -Tower Piping and Fill Up-grade	Construction	\$ 168,300
Kelly USA - Replace Variable Frequency Drives	Construction	\$ 213,180
Kelly USA - Boiler Controls Upgrade	Construction	\$ 11,220
Kelly USA - Install Meters for Data Acquisition System	Construction	\$ 50,490
Kelly USA - Replace Fill Material in Cooling Tower # 3 Building 356	Construction	\$ 196,350
Kelly USA -Install Variable Frequency Drive on 3 Cooling Towers Bldg 356	Construction	\$ 67,320
<b>Total</b>		<b>\$ 1,206,150</b>
<b>WASTEWATER CORE BUSINESS</b>		
<b>Corporate</b>		
Enterprise Resource Plan	Acquisition	<b>\$ 3,333,333</b>
<b>Collection System</b>		
Central Watershed Sewer Relief Line Project (C-02)	Design	\$ 471,240
Eastern Watershed Sewer Relief Line Project (E-03)	Design	\$ 2,187,900
Far West Lift Station Upgrade #187	Design	\$ 56,100
Long Term Flow Monitoring Network Phase 1	Construction	\$ 214,302
Oversize Sewer Mains	Construction	\$ 2,192,949
<b>Total</b>		<b>\$ 5,122,491</b>
<b>Main Replacements-Sewer</b>		
Culebra Park Sewer Replacement	Design	\$ 258,060
EARZ Televising, Testing & Repairs Program	Construction	\$ 112,200
EARZ Televising, Testing & Repairs Program	Design	\$ 11,220
East Hart Junction Box Replacement	Construction	\$ 858,330
Emergency Replacements and Repairs- Sewer	Construction	\$ 7,560,696
Governmental Relocations/Replacements - Sewer	Construction	\$ 16,830,000
Lift Stations Rehabilitation Phase 1	Design	\$ 112,200
Los Angeles Heights Sewer Main Replacement Phase I	Design	\$ 56,100
Main Replacements Sewer - Operations	Construction	\$ 2,244,000
Olmos Dam Sewer Replacement	Construction	\$ 295,131
San Fernando Sewer Replacement Phase III	Design	\$ 93,070
<b>Total</b>		<b>\$ 28,431,007</b>
<b>Treatment</b>		
Dos Rios Water Recycling Center Wastehauler Dump Station	Construction	\$ 953,700
Emergency Treatment Plant Repairs	Construction	\$ 1,680,000
Medio Creek Water Recycling Center Phase II (16 MGD)	Construction	\$ 33,660,000
WRC Large Equipment Monitoring and Replacement Program	Construction	\$ 561,000
<b>Total</b>		<b>\$ 36,854,700</b>
<b>TOTAL WASTEWATER</b>		<b>\$ 73,741,531</b>

<b>Project Title</b>	<b>Cost Element</b>	<b>Cost Estimate</b>
<b>WATER DELIVERY CORE BUSINESS</b>		
<b>Corporate</b>		
Enterprise Resource Plan	Acquisition	\$ 3,333,333
<b>Distribution System</b>		
FM 1937 Water Main Extension	Construction	\$ 6,002,700
Lincoln Heights Main Improvements and Pressure Zone Change	Construction	\$ 2,805,000
Oversize Water Mains	Construction	\$ 1,631,949
<b>Total</b>		<b>\$ 10,439,649</b>
<b>Main Replacements - Water</b>		
Brooks 16" Water Main Relocation	Construction	\$ 1,446,328
Culebra Park Water Main Replacement	Design	\$ 213,180
Emergency Replacements and Repairs- Water	Construction	\$ 280,500
Governmental Relocations/Replacements - Water	Construction	\$ 16,830,000
Los Angeles Heights Water Main Replacement Phase I	Design	\$ 39,270
Main Replacements Water - Operations	Construction	\$ 2,244,000
San Fernando Water Main Replacement Phase III	Design	\$ 93,070
<b>Total</b>		<b>\$21,146,347</b>
<b>Production (Repair-Replacement)</b>		
Emergency Production Replacements	Construction	\$ 561,000
Real Estate Easement Acquisition	Acquisition	\$ 168,300
Water Facilities Upgrades -Pump Station Rehabilitation Phase 1	Design	\$ 224,400
<b>Total</b>		<b>\$ 953,700</b>
<b>Production (Growth)</b>		
Applewhite Industrial Park Elevated Storage Tank	Design	\$ 138,600
Culebra Tank and Pump Station (Permanent)	Design	\$ 134,640
Faith Tank	Design	\$ 112,200
<b>Total</b>		<b>\$ 385,440</b>
<b>TOTAL WATER DELIVERY</b>		<b>\$ 36,258,469</b>
<b>GRAND TOTAL WATER and WASTEWATER INFRASTRUCTURE</b>		<b>\$ 110,000,000</b>
<b>WATER SUPPLY CORE BUSINESS</b>		
Edwards Groundwater Purchase	Acquisitions	\$ 3,300,000
Lower Guadalupe Water Supply Project (GBRA)	Construction	\$ 1,936,000
Recycle Program	Construction	\$ 6,380,000
Regional Carrizo Phase I	Construction	\$ 114,936,800
Watershed Protection Sensitive Land	Acquisitions	\$ 2,200,000
<b>Total</b>		<b>\$ 128,752,800</b>
<b>Grand Total 2005 Capital Improvement Program</b>		<b>\$ 239,958,950</b>

**Heating and Cooling Core Business**

<b>Repair/Replacement Project:</b> Central Plant –Data Acquisition System <b>Contact:</b> Dana Ulanoff	<b>Description:</b> Install and purchase data acquisition system for steam and chilled water metered consumption data.				<b>Justification:</b> Existing system is over loaded due to the increase in steam, chilled water and water meters.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$50,490				\$61,710	<b>\$112,200</b>
<b>Total Allocations</b>	<b>\$50,490</b>				<b>\$61,710</b>	<b>\$112,200</b>
<b>Repair/Replacement Project:</b> Central Plant -Steam and Condensation Line Replacement <b>Contact:</b> Dana Ulanoff	<b>Description:</b> Repair or replace existing steam and condensate line which was installed in 1967.				<b>Justification:</b> Failure of the pipe is causing more downtime due to age and condition	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$224,400	\$112,200			\$224,400	\$561,000
<b>Total Allocations</b>	<b>\$224,400</b>	<b>\$112,200</b>			<b>\$224,400</b>	<b>\$561,000</b>

<b>Repair/Replacement Project:</b> Central Plant-Install Meters for Data Acquisition System <b>Contact:</b> Dana Ulanoff	<b>Description:</b> Install/replace steam and chilled water meters at the downtown distribution system.				<b>Justification:</b> The meters are over 15 years old and are beginning to fail causing inaccurate data and excessive maintenance.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$84,150	\$67,320				\$151,470
<b>Total Allocations</b>	<b>\$84,150</b>	<b>\$67,320</b>				<b>\$151,470</b>

<b>Repair/Replacement Project:</b> Central Plant –Replace Variable Frequency Drives <b>Contact:</b> Dana Ulanoff	<b>Description:</b> Replace three variable frequency drive units on chilled water pumps at the Central Plant.				<b>Justification:</b> Existing drives are no longer dependable due to age and lack of availability of parts.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$140,250					\$140,250
<b>Total Allocations</b>	<b>\$140,250</b>					<b>\$140,250</b>

<b>Repair/Replacement Project:</b> Central Plant –Tower Piping & Fill Upgrade. <b>Contact:</b> Dana Ulanoff	<b>Description:</b> Replace fill material and piping on the cooling tower at the Central Plant.				<b>Justification:</b> Fill material replacement is required to improve cooling tower performance. Condenser water piping inside tower is worn out.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$168,300	\$89,760				\$258,060
<b>Total Allocations</b>	<b>\$168,300</b>	<b>\$89,760</b>				<b>\$258,060</b>

<b>Repair/Replacement Project:</b> Kelly USA- Replace Variable Frequency Drives <b>Contact:</b> Dana Ulanoff	<b>Description:</b> Install variable frequency drives on three 850-ton electric chillers in building 1625.				<b>Justification:</b> Installation of the drives will improve the energy efficiency of each of the chillers during part load conditions.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$213,180					\$213,180
<b>Total Allocations</b>	<b>\$213,180</b>					<b>\$213,180</b>

<b>Repair/Replacement Project:</b> Kelly USA- Boiler Controls Upgrade <b>Contact:</b> Dana Ulanoff	<b>Description:</b> Upgrade boiler controls located at the Kelly Central Steam Plant in building 376.				<b>Justification:</b> Upgrade of the boiler controls is required to improve the boiler's efficiency.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$11,220	\$31,416				\$42,636
<b>Total Allocations</b>	<b>\$11,220</b>	<b>\$31,416</b>				<b>\$42,636</b>

<b>Repair/Replacement Project:</b> Kelly USA-Install Meters for Data Acquisition System  <b>Contact:</b> Dana Ulanoff	<b>Description:</b> Install steam/chilled water and water meters including the flow processors at the Kelly USA distribution system.				<b>Justification:</b> Additional meters are required to accurately measure utility usage for customer billing.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$50,490	\$56,100				\$106,590
<b>Total Allocations</b>	<b>\$50,490</b>	<b>\$56,100</b>				<b>\$106,590</b>

<b>Repair/Replacement Project:</b> Kelly USA-Replace Fill Material in Cooling Tower #3 Building 356 <b>Contact:</b> Dana Ulanoff	<b>Description:</b> Replace fill material inside 1,300 ton cooling tower #3, building 356 at Kelley USA.				<b>Justification:</b> Existing cooling tower fill material is deteriorated and no longer provides adequate heat exchange during peak loads. Tower cooling capacity is reduced and prevents fully loading chillers.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$196,350					\$196,350
<b>Total Allocations</b>	<b>\$196,350</b>					<b>\$196,350</b>

<p><b>Repair/Replacement Project:</b> Kelly USA- Install Variable Frequency Drives on 3 Cooling Towers Building 356.</p> <p><b>Contact:</b> Dana Ulanoff</p>	<p><b>Description:</b> Install variable frequency drives on three cooling tower fan motors Building 356.</p>				<p><b>Justification:</b> Installation of the drives will reduce the energy usage of the electric motors and reduce the driveline stress normally associated with starting and stopping inductive motors.</p>	
<p><b>Project Allocation</b></p>	<p><b>2005</b></p>	<p><b>2006</b></p>	<p><b>2007</b></p>	<p><b>2008</b></p>	<p><b>2009</b></p>	<p><b>Project Cost</b></p>
<p>Acquisition</p>						
<p>Design</p>						
<p>Construction</p>	<p>\$67,320</p>					<p>\$67,320</p>
<p><b>Total Allocations</b></p>	<p><b>\$67,320</b></p>					<p><b>\$67,320</b></p>

**Wastewater Core Business**

<b>CORPORATE</b> <b>Project:</b> Enterprise Resource Planning Project <b>Contact:</b> Bob Reeves		<b>Description:</b> SAWS will adopt an Enterprise Resource Plan (ERP) to satisfy computing and information needs.			<b>Justification:</b> Products include standard business processes, a clean sharable integrated data base, speedy information retrieval, timely management reports, and promotion of best industry practices.		
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>	
Acquisition	\$3,333,333					\$3,333,333	
Design							
Construction							
<b>Total Allocations</b>	<b>\$3,333,333</b>					<b>\$3,333,333</b>	

<b>COLLECTION SYSTEM</b> <b>Growth</b> <b>Project:</b> Central Watershed Sewer Relief Line Project (C-02) <b>Contact:</b> Cindy Kovacic		<b>Description:</b> This project will assess and upgrade approximately 21,150 linear feet of sewer outfall main in the Central sewershed. The 42-inch and 48-inch dual outfall mains are bounded North and South by Dorsey Dr. and Baetz Blvd. and West and East by Garnett Rd. and Roosevelt Ave  <b>See Map-M1</b>			<b>Justification:</b> This Central Watershed project is a priority outfall improvement in the 1998 Wastewater Master Plan. The current outfall is in poor condition due to deterioration and will lack the capacity to handle the future needs of the sewershed.		
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>	
Acquisition							
Design	\$471,240					\$471,240	
Construction		\$5,040,000				\$5,040,000	
<b>Total Allocations</b>	<b>\$471,240</b>	<b>\$5,040,000</b>				<b>\$5,511,240</b>	

<b>COLLECTION SYSTEM</b> <b>Growth</b> <b>Project:</b> Eastern Watershed Sewer Relief Line Project (E03) <b>Contact:</b> Cindy Kovacic		<b>Description:</b> This project will parallel or replace approximately 13,723 linear feet of sewer outfall main in the Eastern sewershed that extends from Gembler Road to Rigsby Road. <b>See Map-M2</b>			<b>Justification:</b> This Eastern Watershed project is a priority improvement in the 1998 Wastewater Master Plan. The current outfall is in poor condition due to deterioration and is lacking capacity to handle the future needs of the sewershed		
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>	
Acquisition							
Design	\$2,187,900					\$2,187,900	
Construction		\$11,466,000	\$11,466,000			\$22,932,000	
<b>Total Allocations</b>	<b>\$2,187,900</b>	<b>\$11,466,000</b>	<b>\$11,466,000</b>			<b>\$25,119,900</b>	

<b>COLLECTION SYSTEM</b> <b>Growth</b> <b>Project:</b> Far West Lift Station Upgrade #187 <b>Contact:</b> Cindy Kovacic	<b>Description:</b> This project will assess and build the upgrade/reconstruction of Lift Station #187 at 9520 Kriewald and approximately 3,300 linear feet of force main along Hwy 90 from Kriewald to Hunt lane. <b>See Map M3</b>				<b>Justification:</b> The additional capacity is necessary to accommodate increased flows in the Potranca Creek Watershed in the Far West area.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design	\$56,100					\$56,100
Construction		\$336,000				\$336,000
<b>Total Allocations</b>	<b>\$56,100</b>	<b>\$336,000</b>				<b>\$392,100</b>

<b>COLLECTION SYSTEM</b> <b>Repair/Replacement</b> <b>Project:</b> Long Term Flow Monitoring Network <b>Contact:</b> Jerome Iltis	<b>Description:</b> Purchase and installation of flow metering equipment for the Eastern sewershed's permanent flow meter network.				<b>Justification:</b> The meters will aid in assessing the system and allow SAWS to prioritize repairs/replacements within the system	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$214,302	\$408,800	\$385,280			\$1,008,382
<b>Total Allocations</b>	<b>\$214,302</b>	<b>\$408,800</b>	<b>\$385,280</b>			<b>\$1,008,382</b>

<b>COLLECTION SYSTEM</b> <b>Growth</b> <b>Project:</b> Oversize Sewer Mains Annual Fund <b>Contact:</b> Sam Mills	<b>Description:</b> This project provides funds to oversize various sewer main installations throughout the service area.				<b>Justification:</b> These funds are used to finance SAWS' proportionate share of the cost of mains installed within the service area which are necessary to serve anticipated growth and development but are larger than the size main required by a developer customer or single customer.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$2,192,949	\$2,240,000	\$2,240,000	\$2,240,000	\$2,240,000	\$11,152,949
<b>Total Allocations</b>	<b>\$2,192,949</b>	<b>\$2,240,000</b>	<b>\$2,240,000</b>	<b>\$2,240,000</b>	<b>\$2,240,000</b>	<b>\$11,152,949</b>

<b>MAIN REPLACEMENTS-SEWER Repair/Replacement</b> <b>Project:</b> Culebra Park Sewer Main Replacement  <b>Contact:</b> Cindy Kovacic	<b>Description:</b> This project requires the installation of approximately 33,948 linear feet of 6 and 8-inch water mains along with 27,988 linear feet of 8-inch sanitary sewer mains in the northwest quadrant of the city. The project is bounded by Culebra Road to the south, Benrus to the east, Hemphill to the north and Mira Vista to the west. <b>See Map – M4</b>				<b>Justification:</b> The existing sewer mains have deterioration and offset joints which require replacement. The existing water mains are in poor condition due to age.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design	\$258,060					\$258,060
Construction		\$2,576,000				\$2,576,000
<b>Total Allocations</b>	<b>\$258,060</b>	<b>\$2,576,000</b>				<b>\$2,834,060</b>

<b>MAIN REPLACEMENTS-SEWER Repair/Replacement</b> <b>Project:</b> EARZ Televising, Testing & Repairs Program  <b>Contact:</b> Cindy Kovacic	<b>Description:</b> Wastewater collection system mains over the Edwards Aquifer Recharge Zone (EARZ) will be inspected, recommendations will be made for eliminating deficiencies and projects initiated to correct these deficiencies. <b>See Map – M5</b>				<b>Justification:</b> The TCEQ mandates the Wastewater Collection System Evaluation and Maintenance Program over the EARZ. SAWS must be in compliance no later than July 2009.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design	\$11,220	\$11,220	\$11,220	\$11,220	\$11,220	\$56,100
Construction	\$112,200	\$112,200	\$112,200	\$112,200	\$112,200	\$561,000
<b>Total Allocations</b>	<b>\$123,420</b>	<b>\$123,420</b>	<b>\$123,420</b>	<b>\$123,420</b>	<b>\$123,420</b>	<b>\$617,100</b>

<b>MAIN REPLACEMENTS-SEWER Repair/Replacement</b> <b>Project:</b> East Hart Junction Box Replacement  <b>Contact:</b> Cindy Kovacic	<b>Description:</b> The existing sanitary sewer structure, located in south San Antonio on Hart Ave. between Mission Rd. and Sierra will be replaced. <b>See Map –M6</b>				<b>Justification:</b> The existing concrete sanitary sewer structure has deteriorated because of significant corrosion.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design						
Construction	\$858,330					\$858,330
<b>Total Allocations</b>	<b>\$858,330</b>					<b>\$858,330</b>

<b>MAIN REPLACEMENTS-SEWER Repair/Replacement Project:</b> Emergency Sewer Replacements and Repairs <b>Contact:</b> Jerome Iltis	<b>Description:</b> This annual project will fund the repair and/or replacement of sewer mains that have experienced cave-ins and overflows. These projects vary in size and location, and may require the solicitation of contractor construction services on a rushed or non-advertised urgent basis.				<b>Justification:</b> These projects will be constructed on an emergency basis to correct unsanitary and potentially hazardous conditions that may pose a threat to public health and safety.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$7,560,696	\$8,400,000	\$8,400,000	\$8,400,000	\$8,400,000	\$41,160,696
<b>Total Allocations</b>	<b>\$7,560,696</b>	<b>\$8,400,000</b>	<b>\$8,400,000</b>	<b>\$8,400,000</b>	<b>\$8,400,000</b>	<b>\$41,160,696</b>

<b>MAIN REPLACEMENTS-SEWER Repair/Replacement Project:</b> Governmental Sewer Main Replacements <b>Contact:</b> Tom Carrasco	<b>Description:</b> The Governmental program consists of projects implemented in conjunction with other governmental entities such as the City of San Antonio, Bexar County and TxDOT. When other governmental entities implement maintenance or expansion projects, SAWS may participate in the relocation/replacement of its facilities when appropriate.				<b>Justification:</b> Coordination with other governmental entities provides an opportunity to improve SAWS systems in a cost-effective manner while minimizing disruption to neighborhoods.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$16,830,000	\$16,830,000	\$16,830,000	\$16,830,000	\$16,830,000	\$84,150,000
<b>Total Allocations</b>	<b>\$16,830,000</b>	<b>\$16,830,000</b>	<b>\$16,830,000</b>	<b>\$16,830,000</b>	<b>\$16,830,000</b>	<b>\$84,150,000</b>

<b>MAIN REPLACEMENTS-SEWER Repair/Replacement Project:</b> Lift Stations Rehabilitation Phase 1 <b>Contact:</b> Jorge Monserrate	<b>Description:</b> This project will address the first group of lift stations to be rehabilitated according to the recommendations of the Lift Station Assessment.				<b>Justification:</b> This assessment evaluated 49 lift stations, including all 39 lift stations located over the Edwards Aquifer Recharge Zone (EARZ) and 10 lift stations outside of the EARZ.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design	\$112,200	\$112,200	\$112,200	\$112,200	\$112,200	\$561,000
Construction		\$448,000	\$448,000	\$448,000	\$448,000	\$1,792,000
<b>Total Allocations</b>	<b>\$112,200</b>	<b>\$560,000</b>	<b>\$560,000</b>	<b>\$560,000</b>	<b>\$560,000</b>	<b>\$2,353,000</b>

<b>MAIN REPLACEMENTS-SEWER Repair/Replacement Project:</b> Los Angeles Heights Sewer Main Replacement Phase I <b>Contact:</b> Cindy Kovacic	<b>Description:</b> This project will replace the water mains and sewer collection system in the neighborhood. The project includes replacing approximately 28,306 linear feet of 8, 10 & 12-inch piping. The project boundary is Fresno, Fredericksburg, and West Avenue. <b>See Map- M7</b>				<b>Justification:</b> The existing mains have deterioration and offset joints creating a need for replacement. The existing sewer and water mains are in poor condition due to age.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design	\$56,100					\$56,100
Construction		\$1,724,800				\$1,724,800
<b>Total Allocations</b>	<b>\$56,100</b>	<b>\$1,724,800</b>				<b>\$1,780,900</b>

<b>MAIN REPLACEMENTS-SEWER Repair/Replacement Project:</b> Main Replacements Sewer – Operations <b>Contact:</b> Jerome Iltis	<b>Description:</b> This project funds sewer repair and replacement construction projects performed by SAWS crews.				<b>Justification:</b> These projects will be constructed on an emergency basis to correct unsanitary and potentially hazardous conditions that may pose a threat to public safety.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design						
Construction	\$2,244,000	\$2,244,000	\$2,244,000	\$2,244,000	\$2,244,000	\$11,220,000
<b>Total Allocations</b>	<b>\$2,244,000</b>	<b>\$2,244,000</b>	<b>\$2,244,000</b>	<b>\$2,244,000</b>	<b>\$2,244,000</b>	<b>\$11,220,000</b>

<b>MAIN REPLACEMENTS-SEWER Repair/Replacement Project:</b> Olmos Dam Sewer Replacement <b>Contact:</b> Cindy Kovacic	<b>Description:</b> This project requires the installation of approximately 250 linear feet of 48-inch sanitary sewer pipe along with 2 structures and 2 manholes. <b>See Map – M8</b>				<b>Justification:</b> The existing sewer main needs to be replaced due to deterioration and offset joints.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design						
Construction	\$295,131					\$295,131
<b>Total Allocations</b>	<b>\$295,131</b>					<b>\$295,131</b>

<b>MAIN REPLACEMENTS-SEWER Repair/Replacement Project:</b> San Fernando Sewer Replacement Phase III <b>Contact:</b> Cindy Kovacic	<b>Description:</b> Approximately 9,000 linear feet of 4-inch sewer main will be replaced with 8-inch main on Barrett and Thompson Place. <b>See Map-M9</b>				<b>Justification:</b> These sewer mains are approximately 80 years old. This upgrade is necessary to replace deteriorated sewer main and bring the sewer system up to the current SAWS standards.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design	\$93,070					\$93,070
Construction		\$1,042,948				\$1,042,948
<b>Total Allocations</b>	<b>\$93,070</b>	<b>\$1,042,948</b>				<b>\$1,136,018</b>

<b>TREATMENT Repair/Replacement Project:</b> Dos Rios WRC Wastehauler Dump Station <b>Contact:</b> Steve Clouse	<b>Description:</b> Grit screenings from the Wastehauler Station at Dos Rios WRC will be cleaned and the grit will be removed and disposed of. The contractor may also be required to remove grit and digested sludge from 11 digesters at the Leon Creek WRC.				<b>Justification:</b> Large pumps are used to drain the Wastehauler Station at Dos Rios WRC. The station has accumulated grit and large debris which clogs and damages the pumps. This project will reduce the cost of pump repairs.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design						
Construction	\$953,700					\$953,700
<b>Total Allocations</b>	<b>\$953,700</b>					<b>\$953,700</b>

<b>TREATMENT Repair/Replacement Project:</b> Emergency Treatment Plant Repairs <b>Contact:</b> Steve Clouse	<b>Description:</b> This annual fund is used to replace and/or repair deteriorated infrastructure or fund specialized services involving treatment processes and related responsibilities.				<b>Justification:</b> This annual fund will insure funding for emergency conditions to correct potentially hazardous conditions. Funds will also be used to insure that the treatment process continues in an efficient manner.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design						
Construction	\$1,680,000	\$1,680,000	\$1,680,000	\$1,680,000	\$1,680,000	\$8,400,000
<b>Total Allocations</b>	<b>\$1,680,000</b>	<b>\$1,680,000</b>	<b>\$1,680,000</b>	<b>\$1,680,000</b>	<b>\$1,680,000</b>	<b>\$8,400,000</b>

<b>TREATMENT</b> <b>Growth</b> <b>Project:</b> Medio Creek WRC Expansion Phase II (16MGD) <b>Contact:</b> Jesse Guerra	<b>Description:</b> Expand the Medio Creek WRC from the existing 8.5 million gallons a day to at least 15 million gallons a day.				<b>Justification:</b> The Medio Creek WRC expansion will meet increased treatment capacity requirements, accommodate increased flows and handle future needs of the sewer shed.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$33,660,000					\$33,660,000
<b>Total Allocations</b>	<b>\$33,660,000</b>					<b>\$33,660,000</b>

<b>TREATMENT</b> <b>Repair/Replacement</b> <b>Project:</b> WRC Large Equipment Monitoring and Replacement Program <b>Contact:</b> Steve Clouse	<b>Description:</b> This project will use technical sub-consultants to observe, monitor, test and track performance of large equipment.				<b>Justification:</b> This project will insure that equipment meets or exceeds manufacturers' life cycle projections.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$561,000	\$561,000	\$561,000	\$561,000	\$561,000	\$2,805,000
<b>Total Allocations</b>	<b>\$561,000</b>	<b>\$561,000</b>	<b>\$561,000</b>	<b>\$561,000</b>	<b>\$561,000</b>	<b>\$2,805,000</b>

**Water Delivery Core Business**

<b>CORPORATE</b> <b>Project:</b> <b>Enterprise Resource Planning</b> <b>Contact:</b> Bob Reeves	<b>Description:</b> SAWS will adopt an Enterprise Resource Plan (ERP) to satisfy information needs.				<b>Justification:</b> Products include standard business processes, a clean sharable integrated data base, speedy information retrieval, timely management reports, and promotion of best industry practices.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition	\$3,333,333					\$3,333,333
Design						
Construction						
<b>Total Allocations</b>	<b>\$3,333,333</b>					<b>\$3,333,333</b>

<b>DISTRIBUTION SYSTEM</b> <b>Growth</b> <b>Project:</b> FM 1937 Water Main Extension <b>Contact:</b> Ashok Kaji	<b>Description:</b> Construct 23,900 feet of 20" and 7,400 feet of 16" water main on FM 1937 from Loop 410 to Pleasanton Road. <b>See Map-M10</b>				<b>Justification:</b> This distribution main will serve Service Level 2 and will assist in serving the Toyota Plant	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$6,002,700					\$6,002,700
<b>Total Allocations</b>	<b>\$6,002,700</b>					<b>\$6,002,700</b>

<b>DISTRIBUTION SYSTEM</b> <b>Growth</b> <b>Project:</b> Lincoln Heights Main Improvements and Pressure Zone Change <b>Contact:</b> Ashok Kaji	<b>Description:</b> Construct main improvements in an area bounded by Peter Basque, Austin Highway, North Vandiver and Burnside. Construct a 30" main from Maltsberger Pump Station to north of Loop 410. <b>See Map-M11</b>				<b>Justification:</b> This Service Level 4 project was scheduled for implementation by 2001 in the 1998 Water Master Plan. These mains are part of a system modification to change a neighborhood with low water pressure from Service Level 4 to Service Level 5a.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$2,805,000					\$2,805,000
<b>Total Allocations</b>	<b>\$2,805,000</b>					<b>\$2,805,000</b>

<b>DISTRIBUTION SYSTEM</b> <b>Growth Project:</b> Oversize Water Mains <b>Contact:</b> Sam Mills	<b>Description:</b> This annual project provides funds to oversize various water main installations throughout the service area.			<b>Justification:</b> These funds are used to pay for SAWS' proportionate share of the cost of mains which are necessary to serve anticipated growth but are larger than the size main required by a developer customer or single customer.		
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$1,631,949	\$1,683,000	\$1,683,000	\$1,683,000	\$1,683,000	\$8,363,949
<b>Total Allocations</b>	<b>\$1,631,949</b>	<b>\$1,683,000</b>	<b>\$1,683,000</b>	<b>\$1,683,000</b>	<b>\$1,683,000</b>	<b>\$8,363,949</b>

<b>MAIN REPLACEMENTS-WATER Repair/Replacement</b> <b>Project:</b> Brooks 16" Water Main Relocation <b>Contact:</b> Cindy Kovacic	<b>Description:</b> This project is located in the Brooks City-Base. The improvements include the installation of approximately 6900 LF of water main along Sidney Brooks, 2020 LF of water main along Aeromedical Rd., 2350 LF of water main along Josue Sanchez, Dr., 955 LF of water main along Ord Rd., and 275 LF of water main along Outer Circle. <b>See Map - M12</b>			<b>Justification:</b> The project will improve the capacity of the system for fire protection and system operation.		
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$1,446,328					\$1,446,328
<b>Total Allocations</b>	<b>\$1,446,328</b>					<b>\$1,446,328</b>

<b>MAIN REPLACEMENTS-WATER Repair/Replacement</b> <b>Project:</b> Culebra Park Water Main Replacement <b>Contact:</b> Cindy Kovacic	<b>Description:</b> This project requires the installation of approximately 33,948 linear feet of 6 and 8-inch water mains along with 27,988 linear feet of 8-inch sanitary sewer mains in the northwest quadrant of the city. The project is bounded by Culebra Road to the south, Benrus to the east, Hemphill to the north and Mira Vista to the west. <b>See Map-M4</b>			<b>Justification:</b> The existing water mains are in poor condition due to age. The existing sewer mains have deterioration and offset joints which require replacement.		
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design	\$213,180					\$213,180
Construction		\$2,128,000				\$2,128,000
<b>Total Allocations</b>	<b>\$213,180</b>	<b>\$2,128,000</b>				<b>\$2,341,180</b>

<b>MAIN REPLACEMENTS-WATER Repair/Replacement Project:</b> Emergency Water Main Replacements and Repairs  <b>Contact:</b> Jerome Iltis	<b>Description:</b> This annual project will fund the repair and/or replacement of water mains that have deteriorated. These projects vary in size and location, and may require the solicitation of contractor construction services on a rushed or non-advertised urgent basis.				<b>Justification:</b> Projects will replace sub-standard or deteriorated water mains requiring immediate replacement.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design						
Construction	\$280,500	\$280,500	\$280,500	\$280,500	\$280,500	\$1,402,500
<b>Total Allocations</b>	<b>\$280,500</b>	<b>\$280,500</b>	<b>\$280,500</b>	<b>\$280,500</b>	<b>\$280,500</b>	<b>\$1,402,500</b>

<b>MAIN REPLACEMENTS-WATER Repair/Replacement Project:</b> Governmental Relocations/ Replacements - Water <b>Contact:</b> Tom Carrasco	<b>Description:</b> The Governmental program consists of projects implemented in conjunction with other governmental entities. When other governmental entities implement maintenance or expansion projects, SAWS may participate in the relocation/replacement of its facilities when appropriate.				<b>Justification:</b> Coordination with other governmental entities provides an opportunity to improve SAWS' systems in a cost-effective manner while minimizing disruption to neighborhoods.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design						
Construction	\$16,830,000	\$16,830,000	\$16,830,000	\$16,830,000	\$16,830,000	\$84,150,000
<b>Total Allocations</b>	<b>\$16,830,000</b>	<b>\$16,830,000</b>	<b>\$16,830,000</b>	<b>\$16,830,000</b>	<b>\$16,830,000</b>	<b>\$84,150,000</b>

<b>MAIN REPLACEMENTS-WATER Repair/Replacement Project:</b> Los Angeles Heights Water Main Replacement Phase 1 <b>Contact:</b> Cindy Kovacic	<b>Description:</b> This project will replace the water mains and sewer collection system in the neighborhood. The project includes replacing approximately 28,306 linear feet of 8, 10 & 12-inch piping. The project boundary is Fresno, Fredericksburg, and West Avenue <b>Map- M7</b>				<b>Justification:</b> The existing mains have deterioration and offset joints creating a need for replacement. The existing sewer and water mains are in poor condition due to age.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design	\$39,270					\$39,270
Construction		\$1,344,000				\$1,344,000
<b>Total Allocations</b>	<b>\$39,270</b>	<b>\$1,344,000</b>				<b>\$1,383,270</b>

<b>MAIN REPLACEMENTS-WATER</b> <b>Repair/Replacement</b> <b>Project:</b> Main Replacements – Water – Operations <b>Contact:</b> Jerome Iltis	<b>Description:</b> This project funds water main repair and replacement construction projects performed by SAWS crews.				<b>Justification:</b> These projects will be constructed on an emergency basis to correct unsanitary and potentially hazardous conditions that may pose a threat to public safety.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design						
Construction	\$2,244,000	\$2,244,000	\$2,244,000	\$2,244,000	\$2,244,000	\$11,220,000
<b>Total Allocations</b>	<b>\$2,244,000</b>	<b>\$2,244,000</b>	<b>\$2,244,000</b>	<b>\$2,244,000</b>	<b>\$2,244,000</b>	<b>\$11,220,000</b>

<b>MAIN REPLACEMENTS-WATER</b> <b>Repair/Replacement</b> <b>Project:</b> San Fernando Water Main Replacement Phase III <b>Contact:</b> Cindy Kovacic	<b>Description:</b> Approximately 9,000 linear feet of 4-inch water main will be replaced with 8-inch main on Barrett and Thompson Place.  <b>See Map-M9</b>				<b>Justification</b> These water mains are approximately 80 years old. This upgrade is necessary to replace deteriorated water main and bring the system up to the current SAWS standards	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design	\$93,070					\$93,070
Construction		\$1,042,948				\$1,042,948
<b>Total Allocations</b>	<b>\$93,070</b>	<b>\$1,042,948</b>				<b>\$1,136,018</b>

<b>PRODUCTION SYSTEM</b> <b>Repair/Replacement</b> <b>Project:</b> Emergency Production Replacements <b>Contact:</b> Phil Cook	<b>Description:</b> Emergency replacements of capital assets in the potable water stations. Typical requirements include repair or replacement of large, permanently installed, pumps and/or motors.				<b>Justification:</b> The funding set aside through this project allows the Production Department to effect immediate repairs or replacements of critical assets with the smallest possible downtime, minimizing impact on our operations, and thus on our customers.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design						
Construction	\$561,000	\$561,000	\$561,000	\$561,000	\$561,000	\$2,805,000
<b>Total Allocations</b>	<b>\$561,000</b>	<b>\$561,000</b>	<b>\$561,000</b>	<b>\$561,000</b>	<b>\$561,000</b>	<b>\$2,805,000</b>

<b>PRODUCTION: Repair/Replacement Project:</b> Real Estate/Easement Aquisition <b>Contact:</b> Jorge Monserrate	<b>Description:</b> Funds are provided to acquire property for sanitary control easements.				<b>Justification:</b> Sanitary control easements are mandated by TCEQ.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition	\$168,300	\$168,300	\$168,300	\$168,300	\$168,300	\$841,500
Design						
Construction						
<b>Total Allocations</b>	<b>\$168,300</b>	<b>\$168,300</b>	<b>\$168,300</b>	<b>\$168,300</b>	<b>\$168,300</b>	<b>\$841,500</b>

<b>PRODUCTION SYSTEM Repair/Replacement Project:</b> Water Facilities Upgrades – Pump Station Rehabilitation Phase 1 <b>Contact:</b> Jorge Monserrate	<b>Description:</b> This project will fund the design for mechanical, electrical, future code, and best practices upgrades at all primary and secondary pump stations.				<b>Justification:</b> This project will address identified potential fire code and regulatory violations, as well as other electrical and mechanical deficiencies in chlorine generation facilities, and primary and secondary stations.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design	\$224,400					\$224,400
Construction			\$4,648,000			\$4,648,000
<b>Total Allocations</b>	<b>\$224,400</b>		<b>\$4,648,000</b>			<b>\$4,872,400</b>

<b>PRODUCTION SYSTEM Growth Project:</b> Applewhite Industrial Park Elevated Storage Tank <b>Contact:</b> Phil Cook	<b>Description:</b> Construction of a 1.5 million gallon elevated storage tank.  <b>See Map – M13</b>				<b>Justification:</b> Additional elevated storage is needed in PZ2 to meet growth requirements.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design	\$138,600					\$138,600
Construction		\$1,552,320				\$1,552,320
<b>Total Allocations</b>	<b>\$138,600</b>	<b>\$1,552,320</b>				<b>\$1,690,920</b>

<b>PRODUCTION SYSTEM</b> <b>Growth</b> <b>Project:</b> Culebra Tank and Pump Station (Permanent) <b>Contact:</b> Phil Cook	<b>Description:</b> Design and construction of a 1.5 million gallon ground storage tank, two 1.5 mgd high service pumps and supervisory control equipment.  <b>See Map – M14</b>				<b>Justification:</b> This project is necessary to meet future demand in the western portion of PZ 8 in far west Bexar County.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design	\$134,640					\$134,640
Construction		\$1,200,000				\$1,200,000
<b>Total Allocations</b>	<b>\$134,640</b>	<b>\$1,200,000</b>				<b>\$1,334,640</b>

<b>PRODUCTION SYSTEM</b> <b>Growth</b> <b>Project:</b> Faith Tank <b>Contact:</b> Phil Cook	<b>Description:</b> Design and construction of a 2.7 million gallon floating storage tank for PZ4.  <b>See Map –M15</b>				<b>Justification:</b> This tank is needed to meet elevated storage requirements for PZ4.	
	<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Acquisition						
Design	\$112,200					\$112,200
Construction		\$4,300,000				\$4,300,000
<b>Total Allocations</b>	<b>\$112,200</b>	<b>\$4,300,000</b>				<b>\$4,412,200</b>

<b>Water Supply Core Business</b>						
<b>WATER RESOURCES</b> <b>Program:</b> Edwards Groundwater Acquisitions <b>Contact:</b> Norene Hutchinson	<b>Description:</b> Acquisition of Edwards Water Rights through permanent acquisitions from agricultural lands in Bexar County and west of San Antonio.				<b>Justification:</b> This project is part of the 50 Year Water Resources Plan.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition	\$3,300,000					\$3,300,000
Design						
Construction						
<b>Total Allocations</b>	<b>\$3,300,000</b>					<b>\$3,300,000</b>

<b>WATER RESOURCES</b> <b>Program:</b> Lower Guadalupe Blanco River Authority Acquisitions <b>Project:</b> Lower Guadalupe Water Supply Project <b>Contact:</b> Gary Guy	<b>Description:</b> The Lower Guadalupe Supply Project (LGSP) captures water below the confluence of the Guadalupe and San Antonio Rivers for pumpage to San Antonio.				<b>Justification:</b> This project is in the approved SP1 Regional Plan and is part of the 50 Year Water Resources Plan.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition	\$1,936,000					\$1,936,000
Design						
Construction						
<b>Total Allocations</b>	<b>\$1,936,000</b>					<b>\$1,936,000</b>

<b>WATER RESOURCES Program:</b> Recycle <b>Contact:</b> Jesse Guerra	<b>Description:</b> Projects will be constructed to deliver recycled water to customers in the SAWS service area.				<b>Justification:</b> The use of recycled water for various purposes such as irrigation is more cost efficient than utilizing potable water and provides for conservation of potable water.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$6,380,000					\$6,380,000
<b>Total Allocations</b>	<b>\$6,380,000</b>					<b>\$6,380,000</b>

<p><b>WATER RESOURCES</b>  <b>Program:</b>                  Regional Carrizo Integration Phase 1  <b>Contact:</b> Gary Guy</p>	<p><b>Description:</b>                  This program will purchase/lease water rights from residents in Gonzales County and construct production facilities to take water from the Carrizo Aquifer and integrate it into the SAWS system.</p>				<p><b>Justification:</b>                  This program is part of the 50 Year Water Resource Plan.</p>	
<p><b>Project Allocation</b></p>	<p><b>2005</b></p>	<p><b>2006</b></p>	<p><b>2007</b></p>	<p><b>2008</b></p>	<p><b>2009</b></p>	<p><b>Project Cost</b></p>
<p>Acquisition</p>						
<p>Design</p>						
<p>Construction</p>	<p>\$114,936,800</p>					<p>\$114,936,800</p>
<p><b>Total Allocations</b></p>	<p><b>\$114,936,800</b></p>					<p><b>\$114,936,800</b></p>

<p><b>WATER RESOURCES</b>  <b>Program:</b>                  Watershed Protection Sensitive Land  <b>Contact:</b> Bruce Haby</p>	<p><b>Description:</b>                  This program provides funds to assist in purchasing land over the Edwards Aquifer Recharge Zone (EARZ) to preserve geologically sensitive areas either through fee simple purchases of lands or through the establishment of Conservation Easements.</p>				<p><b>Justification:</b>                  The purpose of the Sensitive Land Acquisition Program is to protect and preserve the quality and quantity of water entering the EARZ. This program promotes the purchase of lands that will not be developed but retained as greenbelts that will allow rainwater to continue to infiltrate into the EARZ.</p>	
<p><b>Project Allocation</b></p>	<p><b>2005</b></p>	<p><b>2006</b></p>	<p><b>2007</b></p>	<p><b>2008</b></p>	<p><b>2009</b></p>	<p><b>Project Cost</b></p>
<p>Acquisition</p>	<p>\$2,200,000</p>					<p>\$2,200,000</p>
<p>Design</p>						
<p>Construction</p>						
<p><b>Total Allocations</b></p>	<p><b>\$2,200,000</b></p>					<p><b>\$2,200,000</b></p>