SAN ANTONIO
RIVER AUTHORITY

Leaders in Watershed Solutions

PROGRAM BUDGET

Fiscal Year 2017-2018

VISION:

Inspiring Actions for Healthy Creeks and Rivers

MISSION:

Protect and enhance our creeks and rivers through service, leadership and expertise.

SAN ANTONIO
RIVER AUTHORITY

Leaders in Watershed Solutions

SAN ANTONIO RIVER AUTHORITY
TEXAS

PROGRAM BUDGETS

July 1, 2017 - June 30, 2018

Presented to the
Board of Directors

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Name	Title
Suzanne B. Scott	General Manager
Stephen T. Graham, P.E.	Assistant General Manager
Allison Elder	Director of Legal Services
John A. Chisholm III	Director of Operations
Bruce E. Knott, MHR	Director of Human Resources
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John Gomez	Utilities Manager
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RIVER AUTHORITY

Leaders in Watershed Solutions

Overview

The San Antonio River Authority (River Authority) manages and completes projects under a wide range of activities including scientific studies, park improvements, major infrastructure initiatives for flood control, stormwater management and community amenitites. Funding for these projects comes from various sources as well. The River Authority does contribute funding specifically towards projects; however, the majority of funding comes from community partners, notably the City of San Antonio and Bexar County. Funding through state and local grants also helps the River Authority support its mssion.

The objective of this Program Budget book is to provide a comprehensive look at the projects the River Authority has authorized and budgeted for Fiscal Year (FY) 2017/18. Information on established programs, selection of projects during the budget process, and project management processes is contained within this document. In addition, a detailed project sheet has been included for all authorized projects. The detailed project sheets assist in: identifying the project location, describing the objective of the project, listing the various sources of funding, and delineating the progress in prior years, if applicable. The 'Adopted Budget' amount reflected on each page is the total funded project amount. Where staff time is being provided by the River Authority, an estimate of the anticipated labor effort is included in the 'Adopted Budget' amount. This amount for River Authority labor is not specifically included in the project's budget shown in the Annual Budget Detail book for River Authority funded projects.

Because many of the projects managed and budgeted by the River Authority are on behalf of community partners, most of the projects, when completed, do not have an operational cost to the River Authority. The assets and, therefore, the responsibility for operations and maintenance, go to our partners. There are notable exceptions. The Mission Reach improvements along the San Antonio River are maintained by the River Authority. The current operating budget provides sufficient funding for this effort. In the next several years, the River Authority will have responsibility for operations and maintenance of the improvements along the San Pedro Creek. This expansive project could result in an estimated $2 million in costs for operations and maintenance to the River Authority. Absorption of these costs presents a financial challenge that will be met within the existing property tax rate cap of 2 cents per $100 of valuation.

The River Authority places great emphasis on efficient and effective project management. In FY 2015/16, a cross functional team identified as the Project Management Center of Expertise (COE), was established to refine and enhance the River Authority's project management processes,. After extensive review of existing processes and procedures, recommendations were developed to bring greater consistency, clearer understanding, and improved work-flow processes for project management to the River Authority.

The Project Management COE placed its focus on a balance between recognized project management principles and best practices, such as those recognized by The Project Management Institute (PMI), and principles and practices that are easily understandable and executable for staff members with various levels of experience managing projects. The COE took a holistic approach to project management, incorporating: project evaluation and prioritization; partner relationship

management; contract management; financial management; interaction with all River Authority support functions; and reporting. The end result was a revised program, process and project management checklist, along with a recommendation to upgrade the River Authority's project management software application to the latest, web-based version. This upgrade was completed in FY 2016/17. Through the upgrade process, reconfiguration of software occurred, along with additional enhancements available in the software, to support all the Project Management COE recommendations. The appendix to this document includes a full description of the enhanced project management guidelines, processes and procedures that resulted from the COE's work.

In FY 2017/18, the River Authority will focus on human capital management (capacity planning) and work prioritization to establish a means by which funded projects can be prioritized so that staffing resources are targeted in those activities. This process will also help set realistic timelines and expectations for projects' start and completion dates.

Seventy projects are recognized in the FY 2017/18 Adopted Budget. These projects are assigned to one of six programs that are managed by a Program Leader with authority to direct the projects within their portfolio. Program Leaders develop annual objectives, report progress and are accountable to the executive staff for achieving programmatic results. These six programs include:

- Natural Resource Protection
- Nature Based Park
- Sustainable Watersheds Implementation
- Watershed Modeling, Studies and Planning
- Watershed Safety and Response
- Utilities

Great Egret,
Bexar County

Definitions

The River Authority's portfolio of work for FY 2017/18 consists of six programs, seventy projects and numerous efforts. These terms – programs, projects, and efforts – have specific meaning for the River Authority. Below are the definitions for each to provide the reader with a common understanding of how these terms apply.

Program

A program is a group of projects that serve a similar purpose advance the River Authority's strategic goals; they are managed collectively to obtain benefits not available from managing them individually. Program Leaders are assigned to programs to ensure projects are communicated and coordinated through the life of the project. Programs can have an end date or can be ongoing.

Project

A project is an endeavor that has a defined start and end date, and produces a unique product or service. The River Authority's classification of projects is shown in the appendix of this document (see 'Classification Tool'). All programs and projects are entered into the River Authority's project management software system and are managed in a consistent fashion.

Effort

An effort is an activity for which the River Authority tracks costs over a period of time, often but not necessarily for multiple fiscal years. Efforts require expending significant resources, and/or represent an activity that is of broad interest to the River Authority's constituents. The costs related to efforts, including staff time, are tracked in a similar fashion to projects.

Processes

Consistent and effective project management lends to efficient fiscal stewardship of public funds and excellent service to the constituents. To maintain effective project management, various internal processes and tools are in place that take a project from the first step – the idea stage – to successful completion. These processes are dynamic and reviewed periodically to ensure continued relevance and success. During FY 2015/16, River Authority staff reviewed existing processes and procedures for project management and worked towards improving the project management process. The following describes the current processes.


Caterpillar,
Wilson County

Project Proposal and Evaluation Process

River Authority projects can start in various ways: with a staff developed idea; some result from legal or legislative mandates; while others initiate at the request of a funding partner. Proposed projects are identified throughout the year and documented for consideration in the annual budget development process. These project ideas are scrutinized through the River Authority's Project Evaluation Process.

All project ideas are evaluated against the River Authority's strategic plan, goals and priorities. A comprehensive evaluation questionnaire is used to identify how the idea integrates with the River Authority's strategic goals, priorities and Triple Bottom Line (described in the next paragraph). At the end of the evaluation process, a priority score is established for each idea. This score is used by River Authority staff to assist in prioritizing projects. The projects funded by the River Authority have all undergone this evaluation process. Partner funded projects are not scored in the same way.

Sustainability within a project is optimized through the Triple Bottom Line analysis, which uses an objective accounting matrix to evaluate and seek balance among the economic, environmental, and quality of life project components (the "triple"). A balance of these factors is best achieved when the following are considered:

- *Environmental:* A project recognizes the sustainable outlook and value of environmental features and services.
- *Economic:* The project's immediate and long-term life-cycle costs are considered.
- *Quality of Life:* The project's deliverables result in improved quality of jobs, education, health, safety, recreation and social interaction within the community.

Program Leaders and River Authority managers meet to prioritize projects as part of the annual budget development process. They use the analytical tools' (described above) results as well as their knowledge of the needs and desires of the River Authority and its constituents to make recommendations regarding which projects to fund. These recommendations are presented to the executive staff that determines which projects and at what funding level are included in the proposed budget for the River Authority's Board of Directors' consideration and adoption.

Project Management Process

The River Authority's portfolio of projects involve engineering, utilities, watershed management, parks, water resources, environmental and technical studies, and support projects.

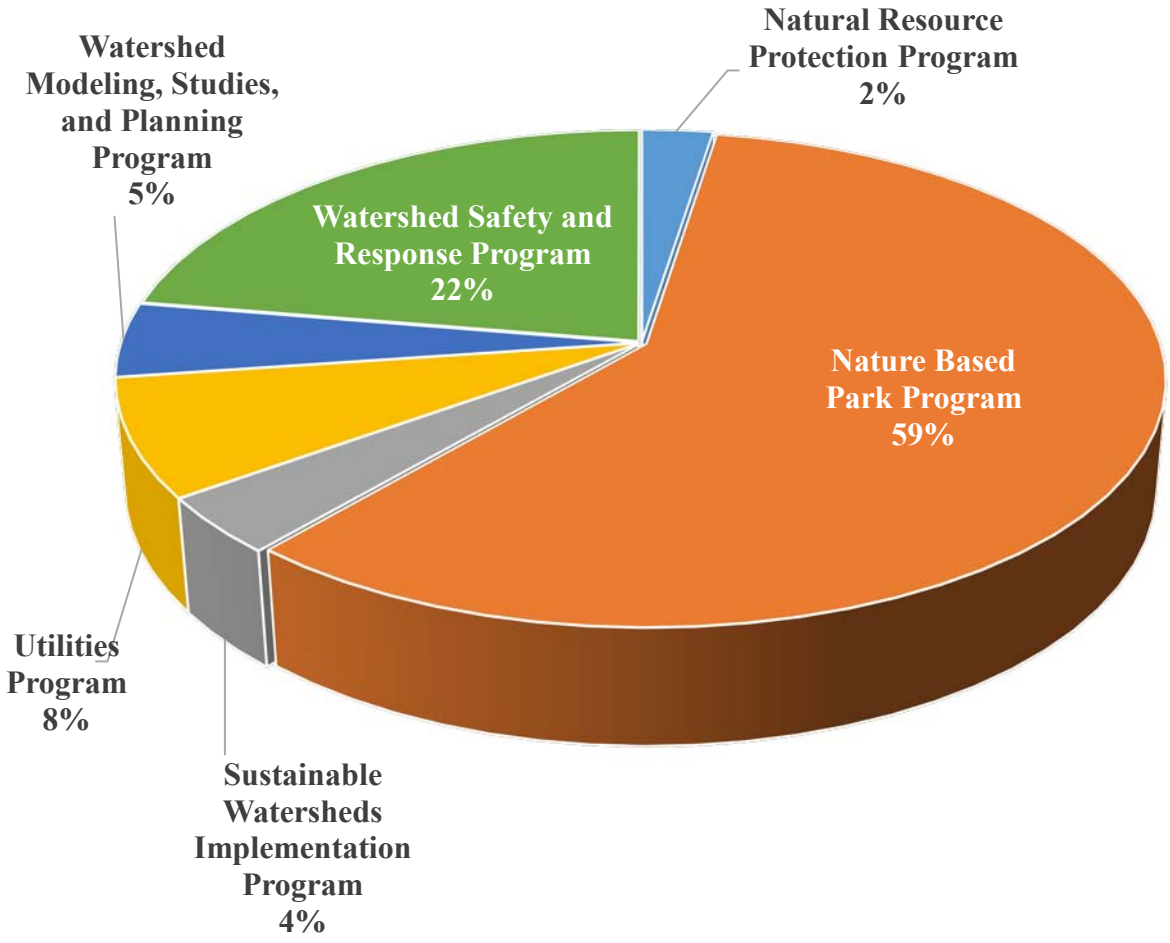
In 2002, the River Authority initiated a formal Project Management Program based upon best practices and a disciplined approach to project management. In 2016, the Project Management COE recommended improved processes and tools that have been in place since early FY 2016/17. The section gives a brief overview description of these updated processes and procedures. Appendix 1 to this document provides much greater detail regarding the refined and enhanced project management process for the River Authority.

The River Authority's processes take projects from the idea stage, prioritizes them, and then implements those that are consistent with the strategic goals and priorities upon the award of funding through the budget process. The River Authority benefits from utilizing a consistent and disciplined approach focused on efficient use of resources, operational synergy, and productivity. Project management processes and notifications are configured in a collaborative enterprise Project Portfolio Management (PPM) software application that has enabled transparency and efficiency. The PPM software was upgraded in FY 2016/17 to capture the latest product enhancements and implement the recommendations of the Project Management COE.

Within the PPM software, programs and projects are accessible by all stakeholders and are documented and managed consistently. As new project managers and project team members are assigned to a project or transitioned from one project to another, there is a common understanding of how the project will work through its life-cycle, which in turn minimizes the learning curve related to "handoffs." Also, with the common project management processes and tools, informed decisions are being made, thereby eliminating guesswork at all levels of the organization. Involvement from all the River Authority's support departments also enhances the overall project deliverable. The River Authority has attempted to comprehensively document and inform staff of: the roles and responsibilities each stakeholder possesses; critical tasks to be completed; and reporting capabilities that make useful project information readily available.

The River Authority continuously reviews its programs and projects and, when there is a need, programs, projects and efforts are rearranged or consolidated. Currently projects are consolidated under six programs. Program Leaders are assigned to a program and are responsible for managing the program.

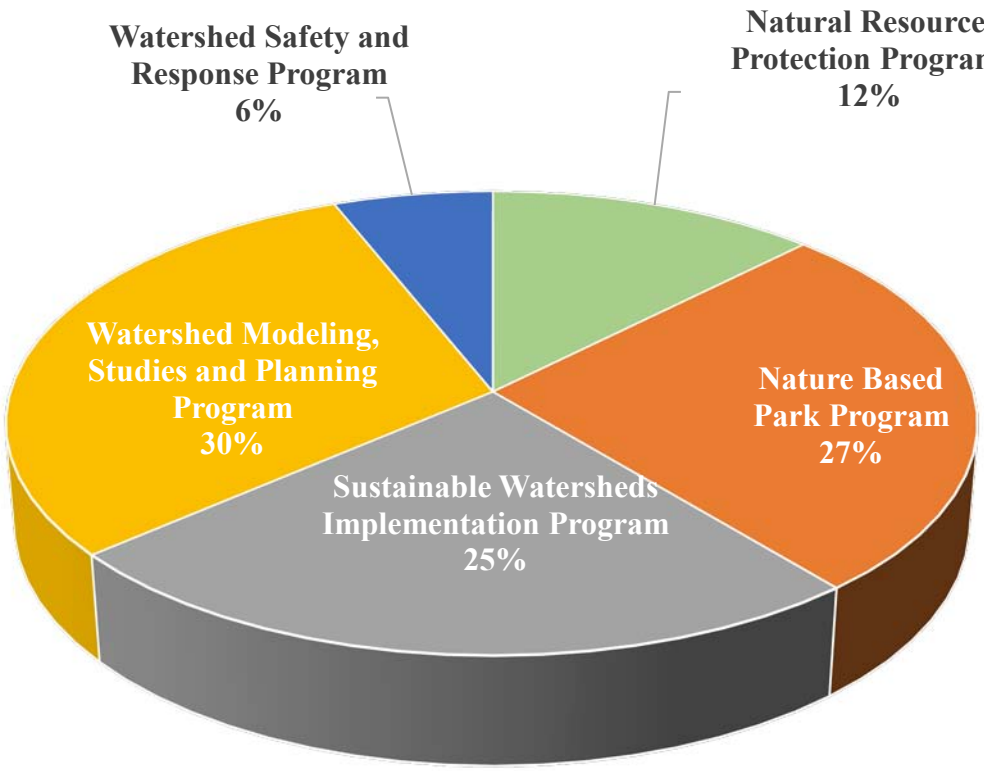
River Authority Program Funding - All Funds



Natural Resource Protection Program	$ 3,752,982
Nature Based Park Program	87,700,440
Sustainable Watersheds Implementation Program	5,599,953
Utilities Program	11,493,796
Watershed Modeling, Studies and Planning Program	7,204,425
Watershed Safety and Response Program	33,366,564
Total	**$ 149,118,160**

Note: The Nature Based Park Program funding does not included $264,395,747 from Mission Reach reflected on project sheet.

River Authority Program Funding - General Fund and Park Resource Development Fund



Natural Resource Protection Program	$	496,100
Nature Based Park Program		1,057,000
Sustainable Watersheds Implementation Program		981,424
Watershed Modeling, Studies and Planning Program		1,206,182
Watershed Safety and Response Program		240,350
Total	**$**	**3,981,056**

Note: The Nature Based Park Program funding includes $317,000 from the Park Resources Development Fund.

Programs

Natural Resource Protection Program

This program includes projects that are designed to identify concerns and communicate information about water quality, sediment pollutants, environmental flows, aquatic and riparian habitats (defined below) and organisms, so they may be protected, conserved and/or restored. The information gathered is used to preserve and protect the aquatic health in the San Antonio River watershed, estuaries and bays and creeks and to influence management decisions.

Clean Rivers Program 2015
Clean Rivers Program 2017
Environmental Flows Validation
Feral Hog Management
Holistic Freshwater Mussel Project
Laboratory Management Software Replacement
Lower Leon Creek Use Attainability Analysis (UAA)
Mid/Lower Cibolo Creek Watershed Protection Plan (WPP)
Mission Reach Avian Study
US Geological Survey (USGS) Oil and Gas Production Constituents
Water Quality Data Analytics
Watershed Wise River Discovery

This program supports the following Agency Goals and Fiscal Year Objectives from the FY 2017/18 San Antonio River Authority Strategic Plan.

Agency Goals and Strategic Opportunities:
Goal: Generate recognized and sustainable improvements to the health and safety of our creeks, rivers, estuaries and bays.

Goal: Enhance community engagement and appreciation for and recreational use of our creeks and rivers.

Goal: Advance and apply our expertise to influence, develop and implement watershed solutions that balance the environmental, economic and quality of life needs of our communities.

Goal: Diversify and leverage funding, technology, and people (employees, partners, community) to strengthen business processes and SARA service delivery.

Opportunity: Capitalize on SARA's water quality data expertise and tools to influence and prepare for future changes to federal, state and local regulations as they relate to water quality and quantity management.

Fiscal Year Annual Objectives and Actions:

3. Ensure actionable measures are included in the Lower San Antonio River (LSAR) implementation plan and the Cibolo Creek Watershed Protection Plan to reduce E.coli pollution.
6. Promote healthy ecosystem dynamics of the Mission Reach and Westside Creeks by assessing native freshwater mussel survivability and aquatic toxicology.
10. Develop and launch interactive modules and activities for the Watershed Wise River Discovery Project.

Nature Based Park Program

This program oversees and maintains all San Antonio River Authority parks projects, paddling trails, programming, and efforts to enhance community appreciation for, and access to, the environmental resources of the San Antonio River Watershed for enjoyment and to enhance quality of life.

Brooks City Base – Mission Reach Linkage Project
Concepcion Creek Outfall Repair
Escondido Creek Parkway
Graytown Park on the San Antonio River
John William Helton San Antonio River Nature Park
Mann's Crossing Park on the Medina River
Mission Reach
Mission Reach Erosion Repairs
Museum Reach Electrical Infrastructure Upgrade
Nature Park Signage Development
River Crossing Park River Access Reconstruction
Trueheart Park
Westside Creeks Linear Creekways and Elmendorf Lake Park
Westside Creeks San Pedro Creek

This program supports the following Agency Goals and Fiscal Year Objectives from the FY 2017/18 San Antonio River Authority Strategic Plan.

Agency Goals and Strategic Opportunities:

Goal: Enhance community engagement and appreciation for and recreational use of our creeks and rivers.

Goal: Advance and apply our expertise to influence, develop and implement watershed solutions that balance the environmental, economic and quality of life needs of our communities.

Goal: Diversify and leverage funding, technology, and people (employees, partners, community) to strengthen business processes and SARA service delivery.

Fiscal Year Annual Objectives and Actions:

7. Increase the use of our parks by community groups.
8. Extend paddling trails and advance improvements at Escondido Creek Linear Parkway, Mann's Crossing and San Pedro Creek.

Sustainable Watersheds Implementation Program

This program improves the San Antonio River basin's sustainability by influencing changes in land-use development practices, expanding expertise and maximizing the sustainability of the San Antonio River Authority's services.

Broadway Underpass
Bexar Regional Watershed Management (BRWM) Stream Mitigation Bank
Edwards Aquifer Watershed Protection
Facilities Acquisition/Improvements
Guenther/Euclid Stormwater Retrofit
Olmos Creek Aquatic Ecosystem Restoration
River Road Stream Restoration
Trash and Floatables Mitigation
Watershed Wise Rebate Program
Watershed Wise School Grant

This program supports the following Agency Goals and Fiscal Year Objectives from the FY 2017/18 San Antonio River Authority Strategic Plan.

Agency Goals and Strategic Opportunities:

Goal: Generate recognized and sustainable improvements to the health and safety of our creeks, rivers, estuaries and bays.

Goal: Advance and apply our expertise to influence, develop and implement watershed solutions that balance the environmental, economic and quality of life needs of our communities.

Opportunity: Capitalize on SARA's water quality data expertise and tools to influence and prepare for future changes to federal, state and local regulations as they relate to water quality and quantity management.

Opportunity: Achieve trash-free waters through education, advocacy and mitigation projects.

Opportunity: Pursue implementation of the facilities expansion plan.

Fiscal Year Annual Objectives and Actions:

12. Integrate the watershed master plans and enhance their use in regional policy development and project decisions through the SA Tomorrow Regional Masterplans.
13. Secure approval for expansion of the Resource Conservation Partnership Program (RCPP) to restore and protect wetlands and marshes in the San Antonio Bay.

Utilities Program

This program manages, markets and develops water, wastewater, reuse and collection system-related projects and efforts.

IH 10 Martinez II Wastewater Line Relocation Project
Martinez II Wastewater Treatment Plant Screw Pump Replacement
Martinez IV Wastewater Treatment Plant and Phase IV Collection Line
Randolph Air Force Base Years 11-15
Salatrillo and Martinez Sewershed Models
Salatrillo Collection System Inflow and Infiltration
Salatrillo Wastewater Treatment Plant Capital Improvements
San Antonio River Authority Wastewater Collection System Inflow and Infiltration
Utilities Supervisory Control and Data Acquisition (SCADA) System
Wastewater Treatment Plant Roadwork Improvements
Wastewater Treatment Plant (WWTP) Subsurface Utility Exploration and Mapping

This program supports the following Agency Goals and Fiscal Year Objectives from the FY 2017/18 San Antonio River Authority Strategic Plan.

Agency Goals and Strategic Opportunities:

Goal: Generate recognized and sustainable improvements to the health and safety of our creeks, rivers, estuaries and bays.

Goal: Advance and apply our expertise to influence, develop and implement watershed solutions that balance the environmental, economic and quality of life needs of our communities.

Fiscal Year Annual Objectives and Actions:

4. Implement incentives to reduce the infiltration and inflow treated at SARA's wastewater facilities.
20. Build a business plan for growth and service delivery for the utility enterprise.

Watershed Modeling, Studies, and Planning Program

This program oversees, coordinates and manages projects that relate to data management, development of tools and techniques for assessing watershed conditions, and proposing feasible mitigation solutions. This program assimilates water quality, flood, and physical watershed studies and modeling data to assist in informed decision making.

Basin Assessment Mapping and Analysis Tool
Bexar County LiDAR Collection
Cibolo Creek Watershed Master Plan
Ecosystem Dynamic Simulation (EDYS) San Antonio Bay Model Development
Impervious Cover Mitigation
Resource Conservation Partnership Program
South Central Texas Regional Water Planning Group – 2021 Regional Water Plan Fifth Cycle
Tributary Modeling
US Geological Survey (USGS) Lower San Antonio River (LSAR) Groundwater Surface Water Interaction Modeling
Watershed Master Plans Integration

This program supports the following Agency Goals and Fiscal Year Objectives from the FY 2017/18 San Antonio River Authority Strategic Plan.

Agency Goals and Strategic Opportunities:

Goal: Generate recognized and sustainable improvements to the health and safety of our creeks, rivers, estuaries and bays.

Goal: Advance and apply our expertise to influence, develop and implement watershed solutions that balance the environmental, economic and quality of life needs of our communities.

Goal: Diversify and leverage funding, technology, and people (employees, partners, community) to strengthen business processes and SARA service delivery.

Opportunity: Capitalize on SARA's water quality data expertise and tools to influence and prepare for future changes to federal, state and local regulations as they relate to water quality and quantity management.

Opportunity: Make SARA's data more accessible and usable (expanding the basin assessment strategy) with the ultimate goal of all data being accessed from a single entry point.

Opportunity: Advocate for the creation of the national estuary program for the San Antonio Bay.

Fiscal Year Annual Objectives and Actions:

1. Update and expand existing flood control and water quality models, and develop additional data for unstudied areas.
3. Ensure actionable measures are included in the Lower San Antonio River (LSAR) implementation plan and the Cibolo Creek Watershed Protection Plan to reduce E.coli pollution.
5. Utilize San Antonio Bay EDYS model to evaluation the feasibility of marsh restoration on the Aransas National Wildlife Refuge and strategies for increasing bay and estuary inflow.
12. Lead the technical analysis of impervious cover impacts and stormwater runoff to influence mitigation and policy decisions.
13. Integrate the watershed master plans and enhance their use in regional policy development and project decisions through the SA Tomorrow Regional Masterplans.
14. Secure approval for expansion of the Resource Conservation Partnership Program (RCPP) to restore and protect wetlands and marshes in the San Antonio Bay.

Watershed Safety and Response Program

This program supports public and environmental safety preparedness related to flood risks and emergencies associated with point and non-point sources of pollution such as spills and other negative impacts to water quality and aquatic life. This program also includes the operations and maintenance of River Authority dams and the assessments and improvements to stream conveyance. This program utilizes mapping, modeling, and stakeholder engagement to assess, prepare and act.

Bexar County Capital Improvements Program – Real Estate Acquisitions
Binz-Engleman, Martinez Creek and Escondido Creek Dams (Martinez 1, 2 and 3) Rehabilitations
Cooperating Technical Partners (CTP) Risk MAP Business Plan Update
Cooperating Technical Partners Development
Cooperating Technical Partner Risk MAP Cibolo Creek
Cooperating Technical Partners Risk MAP Lower San Antonio River
Cooperating Technical Partner Risk MAP Upper San Antonio River
Cooperating Technical Partner Risk MAP Upper San Antonio River Phase II
Digital Data and Model Repository (D2MR) - Redevelopment
Downstream Flood Inundation Library
Flood Gate 4 Replacement
FloodWorks Website Enhancement
Stone Oak Park Dam (Salado 8) Spillway Repair

This program supports the following Agency Goals and Fiscal Year Objectives from the FY 2017/18 San Antonio River Authority Strategic Plan.

Agency Goals and Strategic Opportunities:

Goal: Generate recognized and sustainable improvements to the health and safety of our creeks, rivers, estuaries and bays.

Goal: Advance and apply our expertise to influence, develop and implement watershed solutions that balance the environmental, economic and quality of life needs of our communities.

Goal: Diversify and leverage funding, technology, and people (employees, partners, community) to strengthen business processes and SARA service delivery.

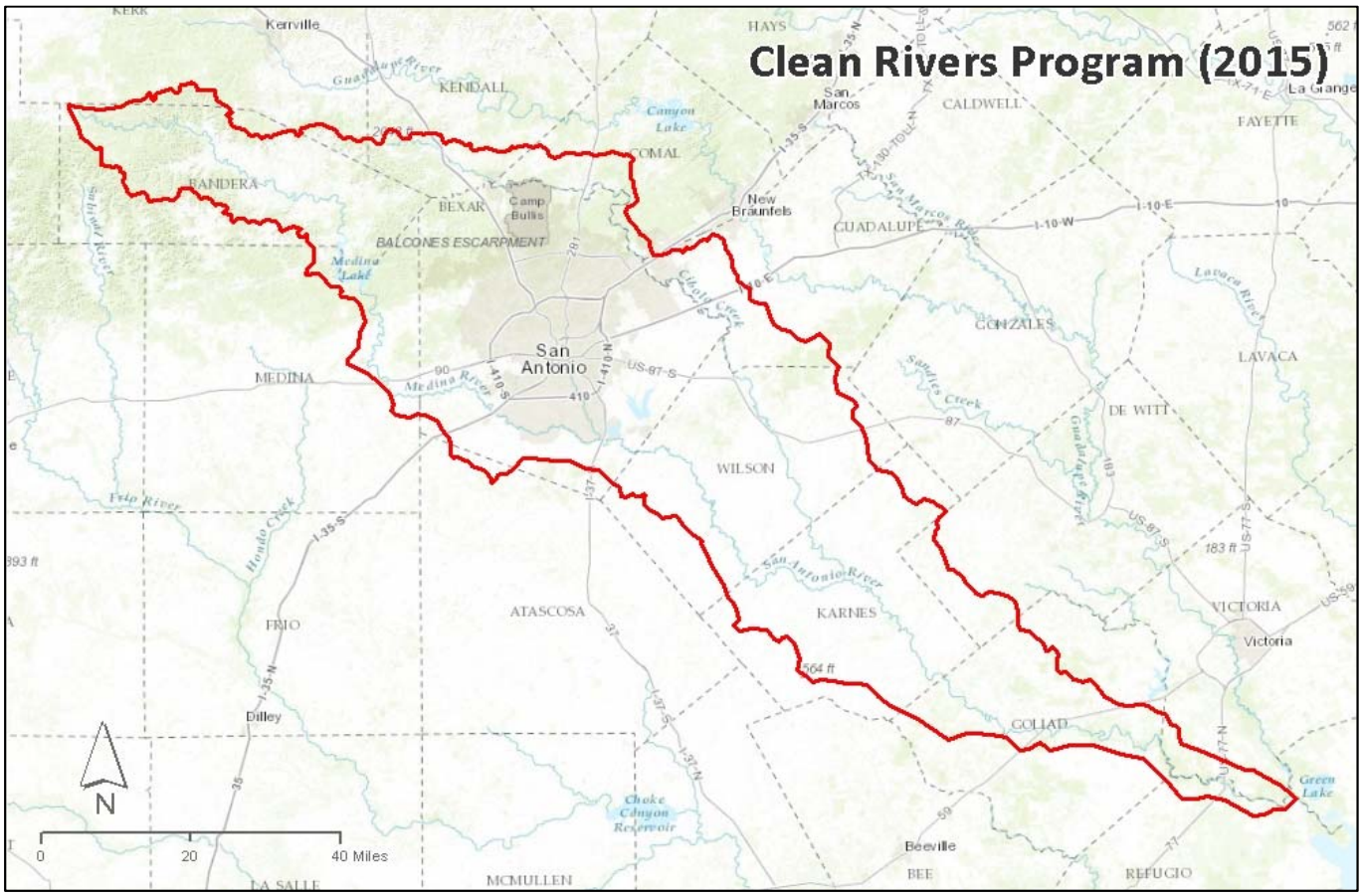
Fiscal Year Annual Objectives and Actions:

2. Advocate for funding to upgrade Escondido Dams in Karnes County
18. Enhance the disaster recovery and business continuity plans.

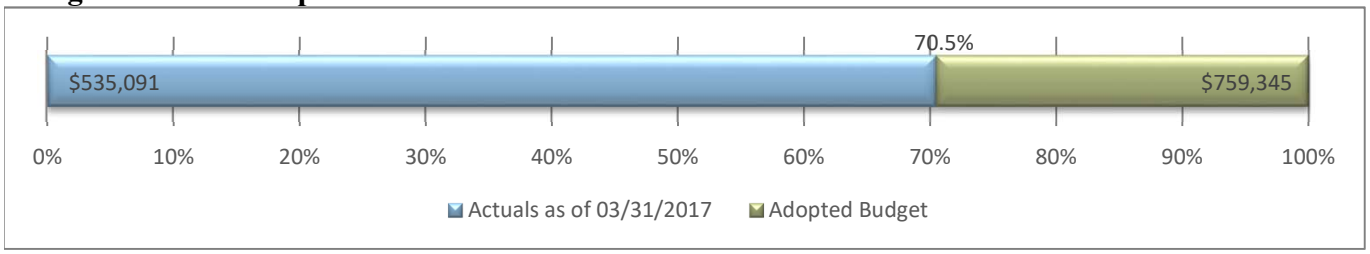
SAN ANTONIO
RIVER AUTHORITY

Leaders in Watershed Solutions

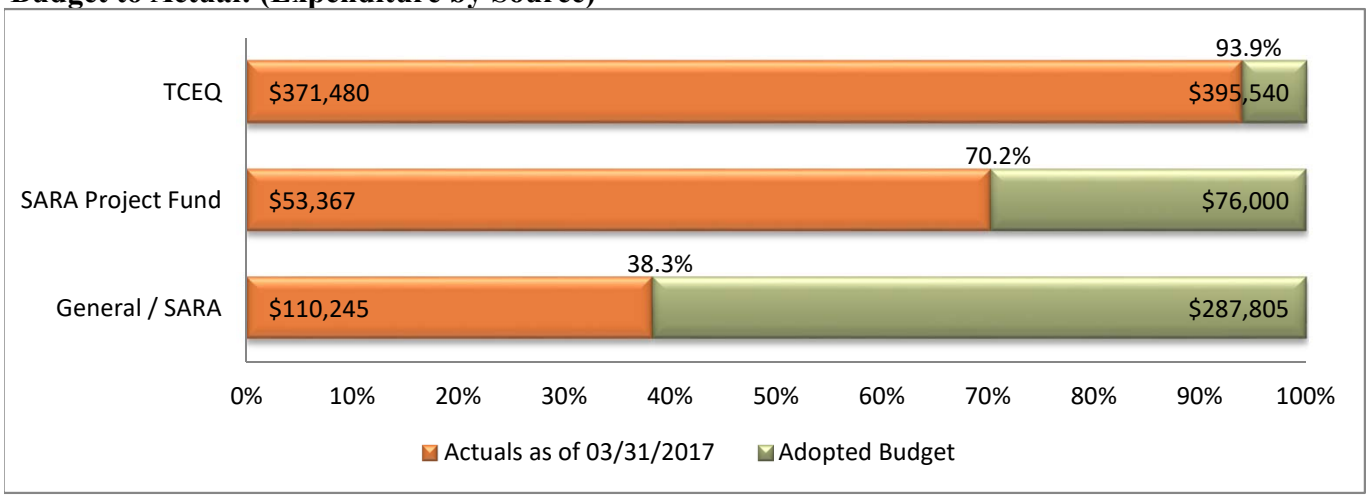
Project Name: **Clean Rivers Program 2015** **Project #** **0490**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Clean Rivers Program 2015**		**Project #**	**0490**
Managing Department:	Environmental Sciences			
		Adopted Budget:	$	759,345
Project Start Date:	08/28/2015	Unfunded Plan:	$	-
Project Finish Date:	12/29/2017	Total Project:	$	759,345

The Texas Clean Rivers Program (CRP) funded by the Texas Commission on Environmental Quality (TCEQ), with additional funding support from the River Authority, serves to protect and develop a greater understanding of water quality conditions in each sub-watershed in the San Antonio River Basin. Data collected under the CRP is used in the Texas Commission on Environmental Quality Integrated Reports to evaluate surface water quality and provide resource managers with tools for making informed water quality decisions, helping to preserve and protect the creeks and rivers.

The CRP and the River Authority's Stream Monitoring activities utilize a watershed approach to analyze and manage data gathered from surface water samples collected throughout the basin. This information is used to assess current water quality conditions and long-term trends and is shared with the community and stakeholders. The CRP has been ongoing since 1992.

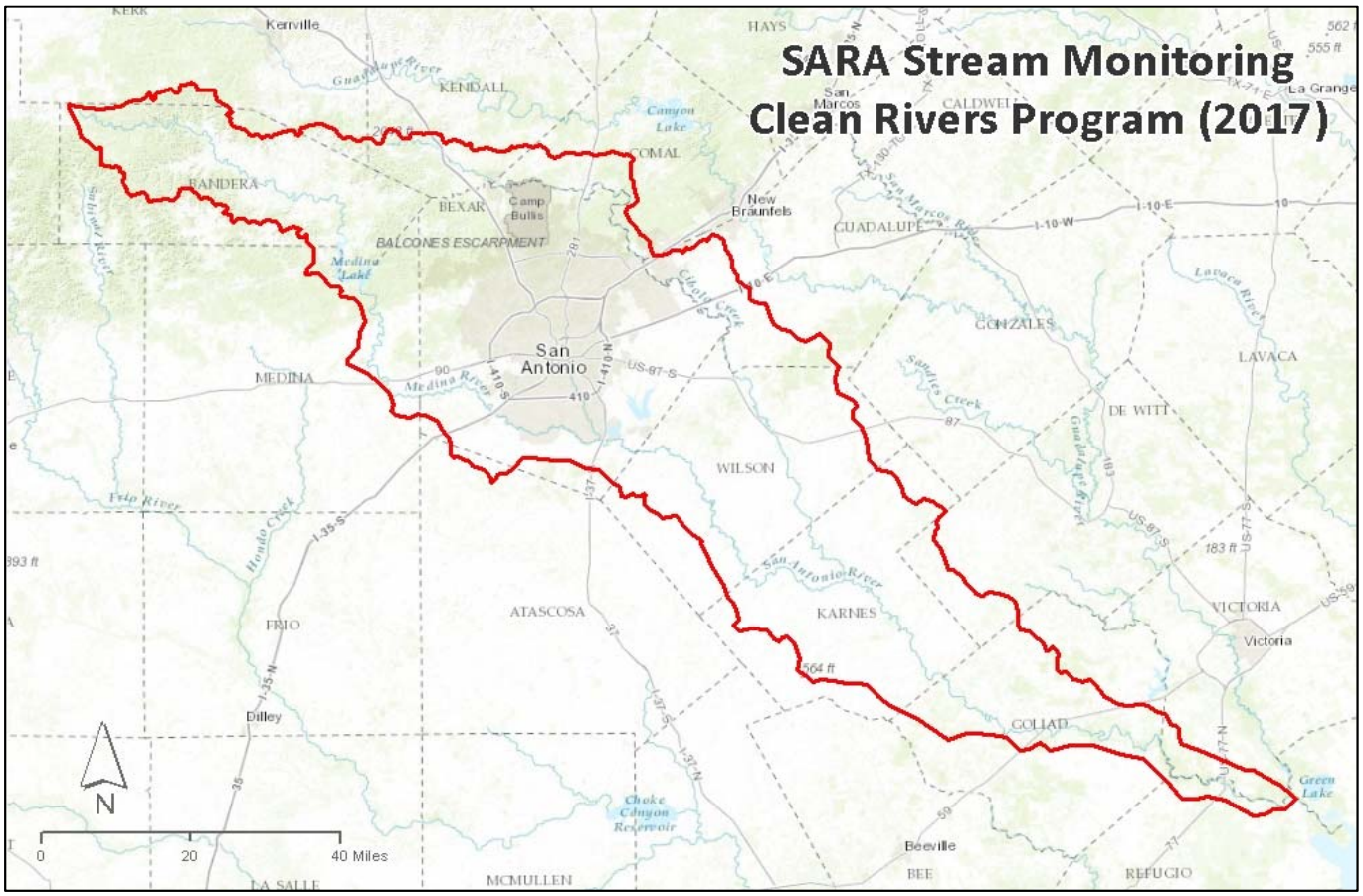
In FY 2015/16, the 2015 Clean Rivers Program was initiated. In FY 2016/17, the CRP collected, analyzed, and managed surface water quality data collected throughout the San Antonio River basin. In FY 2017/18, the 2015 CRP report will be completed. The operating costs related to this program are included in the FY 2017/18 Adopted Budget.

Of the total $759,345 Adopted Budget, $287,805 is estimated labor contribution through the River Authority General Fund.

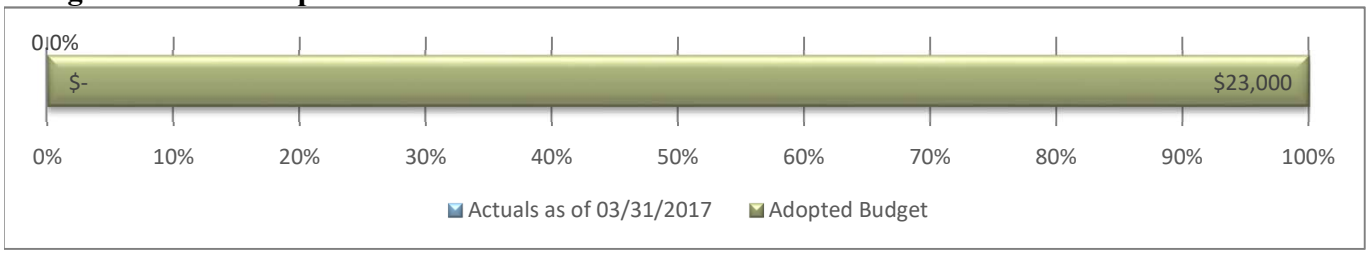
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Labor	$ 440,990	$ 195,347	$ -	$ -	$ 636,337
Other	94,101	28,907	-	-	123,008
Total	$ 535,091	$ 224,254	$ -	$ -	$ 759,345

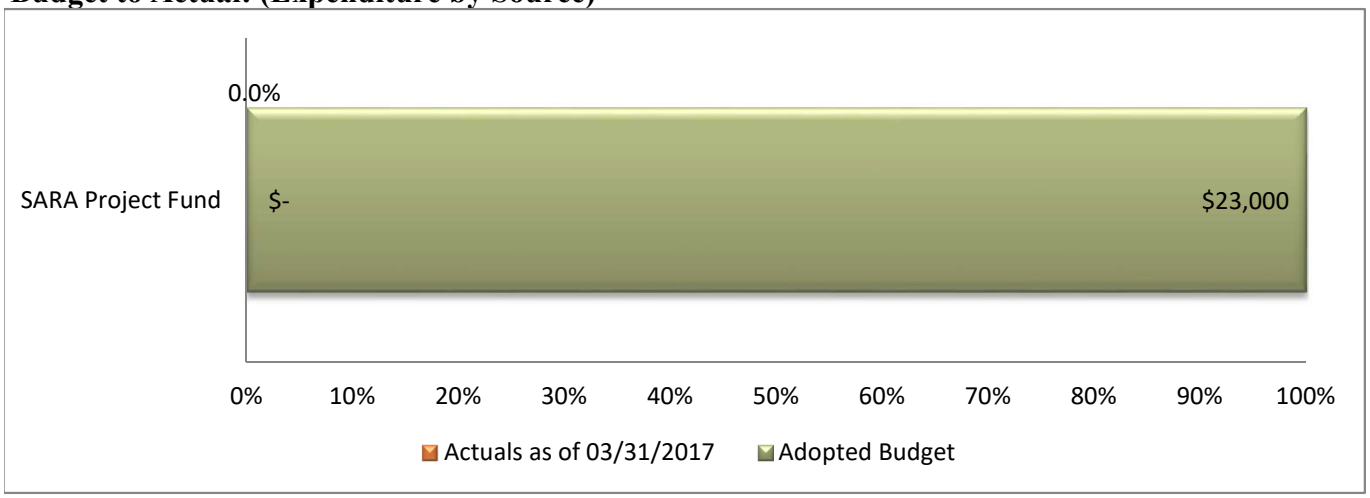
Project Name: **Clean Rivers Program 2017** **Project #** **0569**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Clean Rivers Program 2017**		**Project #**	**0569**
Managing Department:	Environmental Sciences			
		Adopted Budget:	$	23,000
Project Start Date:	09/01/2017	Unfunded Plan:	$	-
Project Finish Date:	08/30/2019	Total Project:	$	23,000

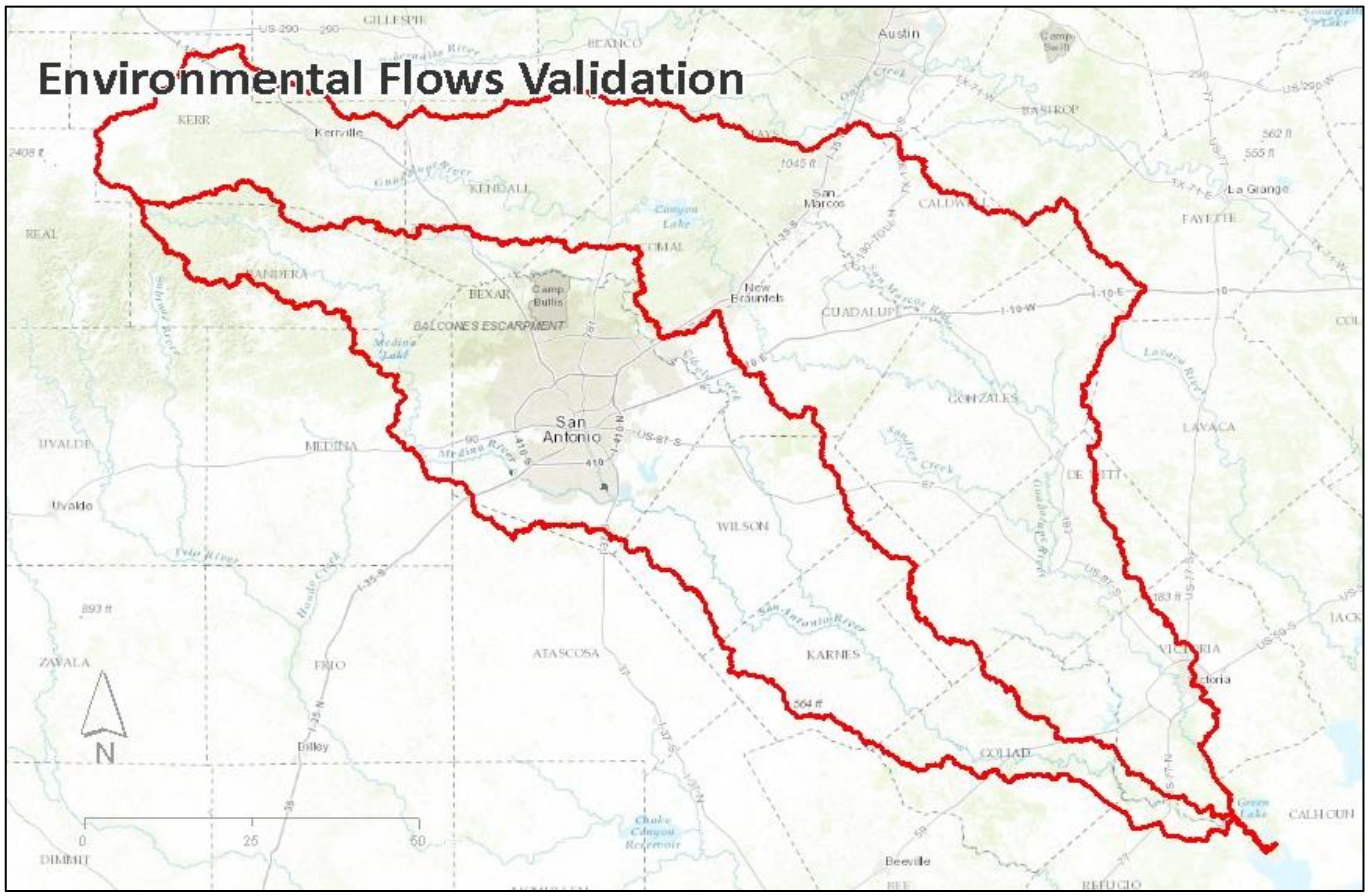
The Texas Clean Rivers Program (CRP) funded by the Texas Commission on Environmental Quality (TCEQ) with additional funding support from the River Authority, supports the River Authority's routine surface water quality data collection within the San Antonio River basin. The CRP provide for the analysis and data gathered management of surface water samples collected throughout the basin. CRP produces quality assured water quality data for the assessment of current water quality conditions and identify long-term trends. Information is shared with the community and stakeholders. The CRP has been ongoing since 1992.

The CRP and the River Authority's Stream Monitoring Project utilize a watershed approach to address impairments, concerns, and long-term trends to generate lasting and recognized improvements to the health and safety of our creeks, rivers, estuaries and bays. The CRP will collect, analyze, and manage surface water quality data collected throughout the San Antonio River basin. Operations and maintenance costs associated with this project are included in the FY 2017/18 Adopted Budget.

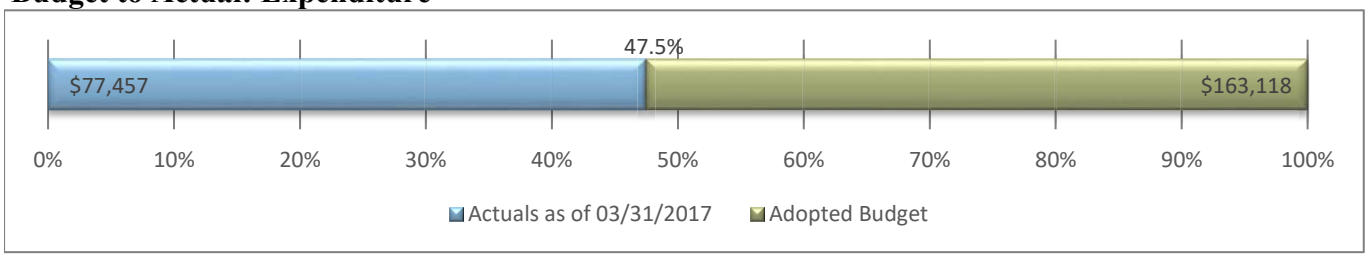
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Operations	$ -	$ 8,000	$ -	$ -	$ 8,000
Equipment	-	15,000	-	-	15,000
Total	$ -	$ 23,000	$ -	$ -	$ 23,000

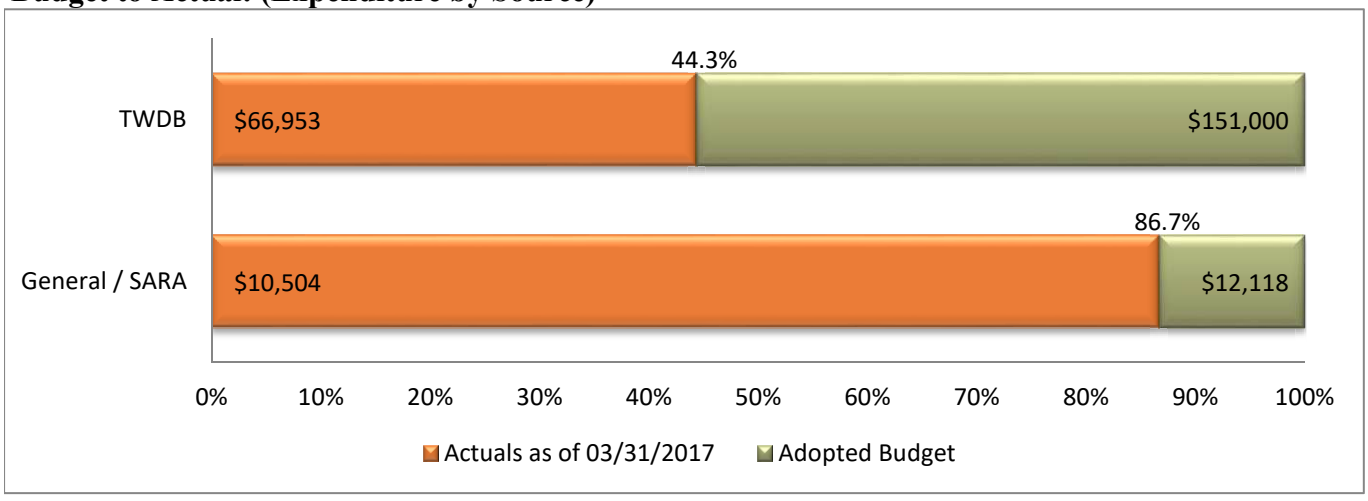
Project Name: **Environmental Flows Validation** **Project #** **0447**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Environmental Flows Validation**		**Project #**	**0447**
Managing Department:	Environmental Sciences			
		Adopted Budget:	$	163,118
Project Start Date:	04/15/2014	Unfunded Plan:	$	-
Project Finish Date:	12/29/2017	Total Project:	$	163,118

This project develops methodologies to validate environmental flows adopted by the State of Texas. Phase I was completed in 2015 and the Texas Water Development Board granted the River Authority additional funds to perform additional work. The current project budget from grant funding is $151,000. This project focuses on determining biological responses (both aquatic and riparian) to pulse flows, so that the needs of biological communities are met by the timing and magnitude of the pulse flow. This information can then be used to refine future environmental flow recommendations.

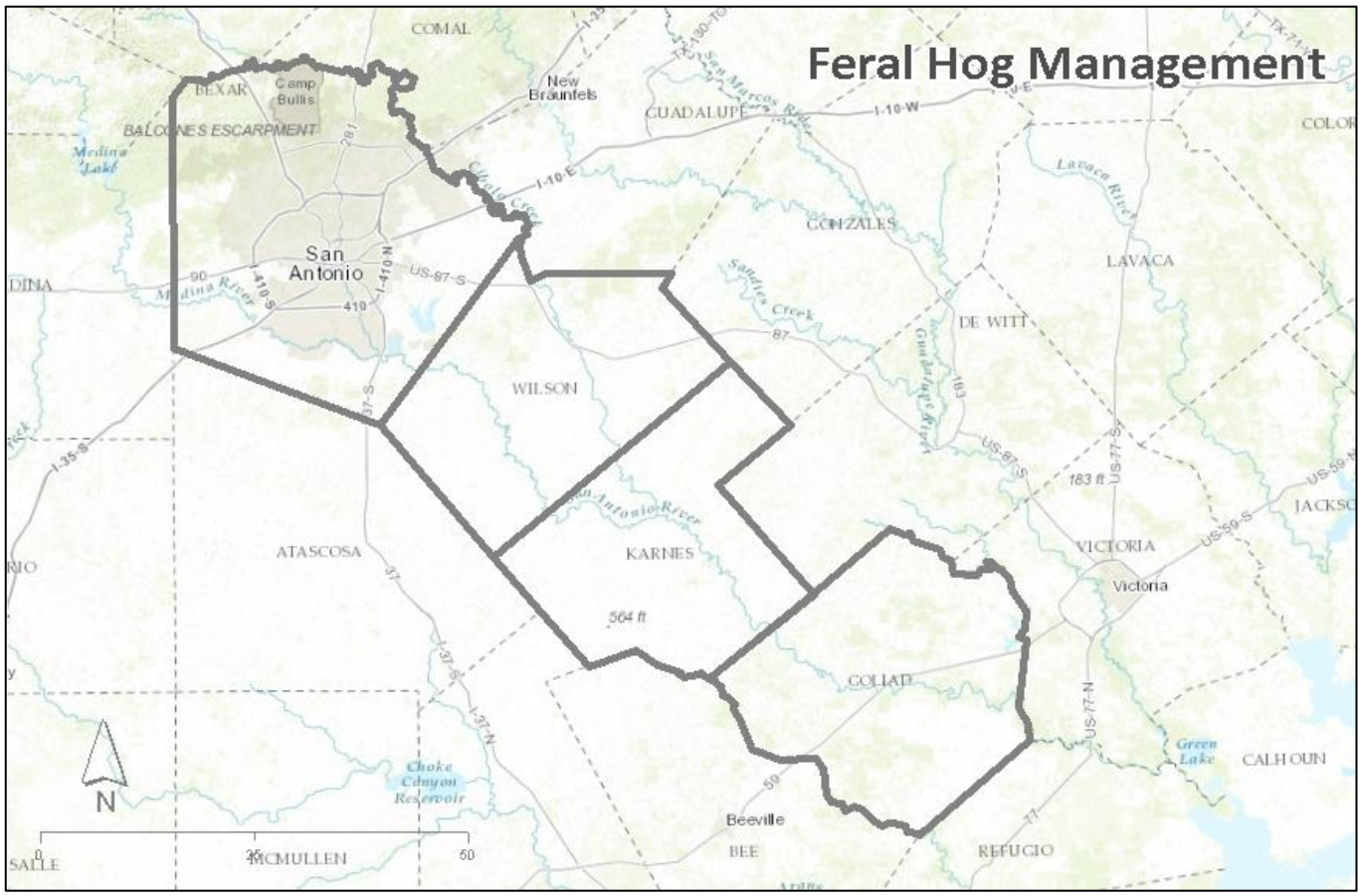
In FY 2017/18, an expert workshop will be held to explain the findings to date and seek advice on which ideas show promise and should be investigated further. Sampling will continue at some of the current sampling locations.

Of the total $163,118 Adopted Budget, $12,006 is estimated labor contribution through the River Authority General Fund.

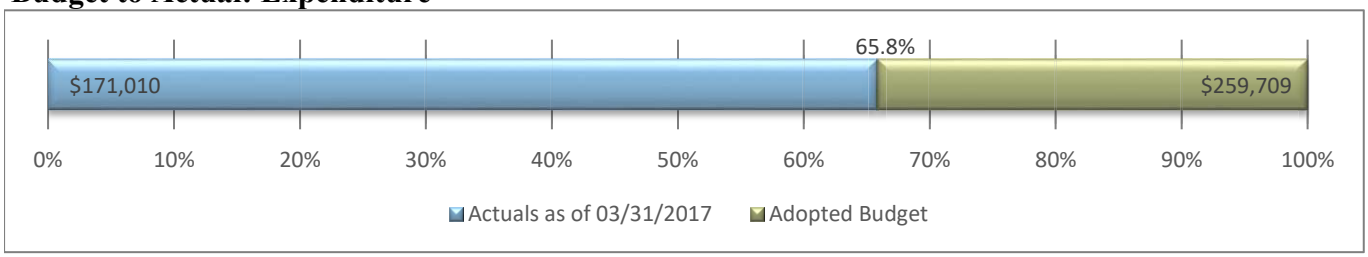
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Labor	$ 10,373	$ 1,633	$ -	$ -	$ 12,006
Operations	67,084	84,028	-	-	151,112
Total	$ 77,457	$ 85,661	$ -	$ -	$ 163,118

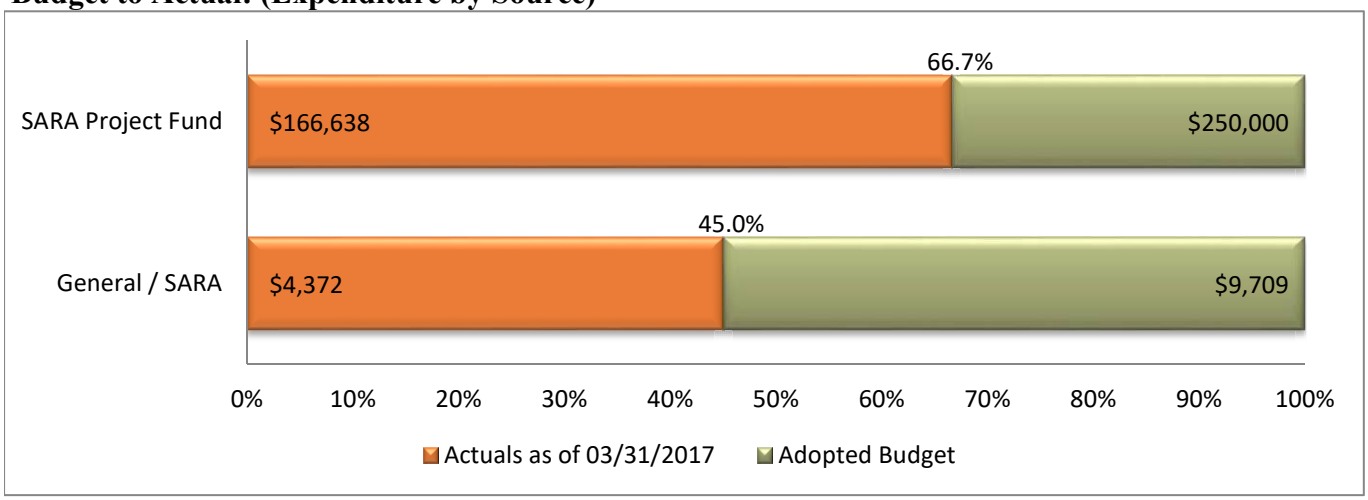
Project Name: **Feral Hog Management** **Project #** **0510**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Feral Hog Management**		**Project #**	**0510**
Managing Department:	Environmental Sciences			
		Adopted Budget:	$	259,709
Project Start Date:	07/01/2015	Unfunded Plan:	$	80,182
Project Finish Date:	06/30/2019	Total Project:	$	339,891

Texas is home to about 2.6 million feral hogs which cause an estimated $500 million annually in damages to rural and urban areas in Texas. The hogs cause damage to riparian areas along streams, increasing erosion. Feral hogs defecate in and around water, increasing levels of bacteria and nutrients in creeks and rivers. Efforts from this continued project work towards generating lasting and recognized improvements to the health and safety of the creeks, rivers, estuaries and bays.

This project, in its third year, continues to develop relationships and fund activities with other agencies to develop strategies that work to manage the feral hog population in the River Authority's district using programs that both educate land owners and provide support for management of feral hogs. This project implements wildlife best management practices in the district to improve water quality and promote riparian health.

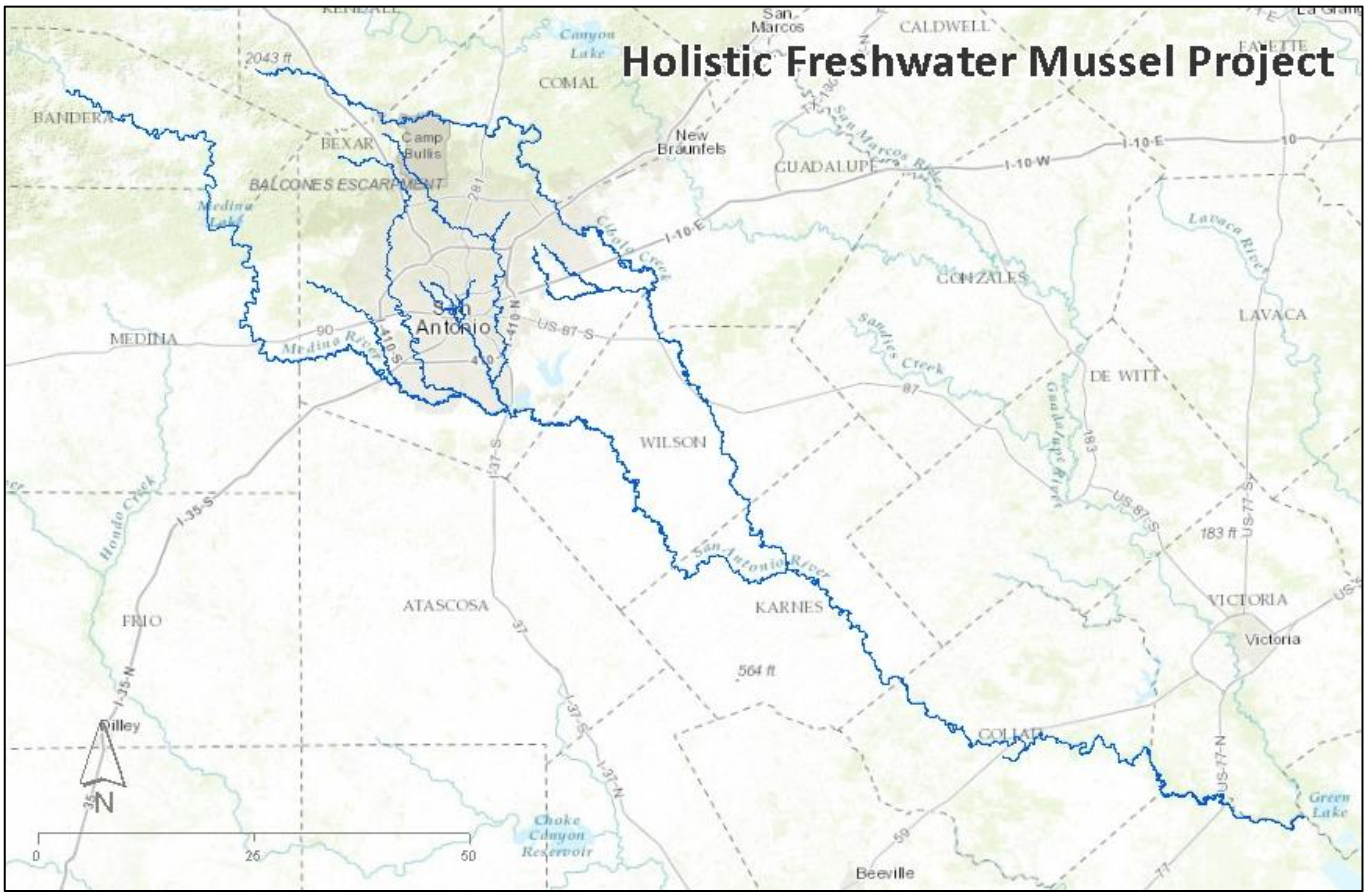
Since FY 2015/16, the River Authority has partnered with Texas A&M AgriLife, to host workshops to educate landowners in the district about feral hog management. Staff has also work with the United States Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS) Wildlife Services to actively reduce populations of feral hogs in the district. The program does not require any future investments in operations and maintenance costs by the River Authority.

Of the total $259,709 Adopted Budget, $9,709 is estimated labor contribution through the River Authority General Fund.

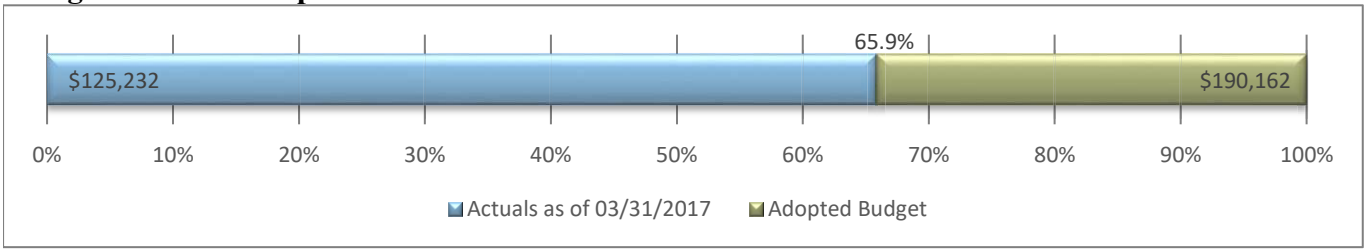
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Labor	$ 4,372	$ 5,337	$ 5,182	$ -	$ 14,891
Administration	166,638	83,362	75,000	-	325,000
Total	$ 171,010	$ 88,699	$ 80,182	$ -	$ 339,891

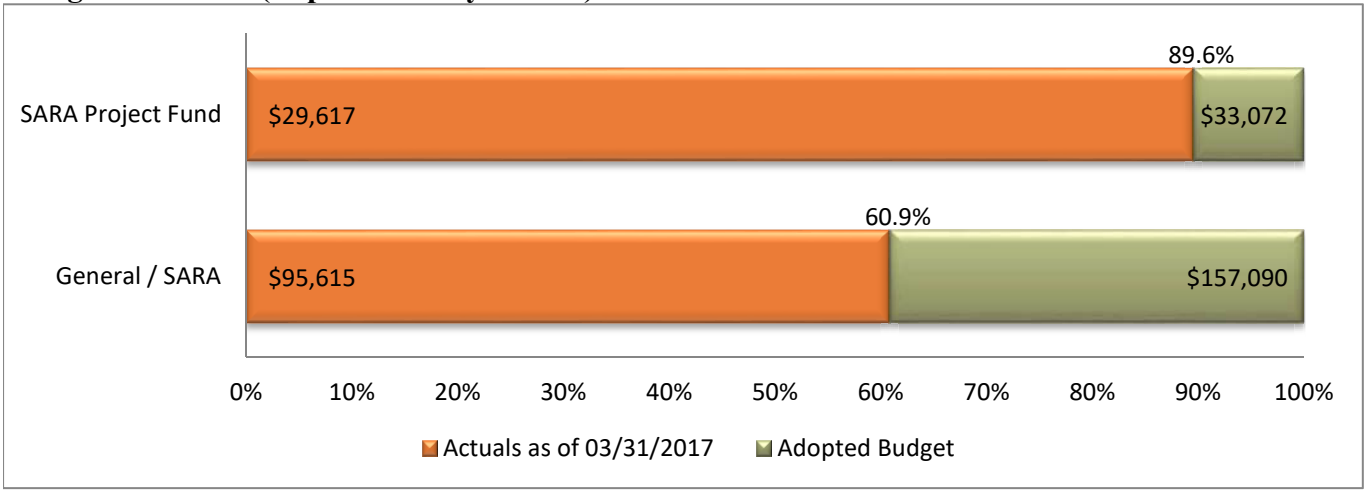
Project Name: **Holistic Freshwater Mussel Project** **Project #** **0442**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **Holistic Freshwater Mussel Project** **Project #** **0442**
Managing Department: Environmental Sciences

		Adopted Budget:	$ 190,162
Project Start Date:	07/01/2014	Unfunded Plan:	$ 91,916
Project Finish Date:	12/31/2019	Total Project:	$ 282,078

This ongoing project promotes watershed solutions and leverages resources by providing data for the United States Fish and Wildlife Service for at risk species through mussel surveys from the lower Cibolo Creek and San Antonio River, augmenting the Cibolo Creek Watershed Master Plan, and providing data for Texas Parks and Wildlife Department (TPWD) for the Texas Instream Flows Program (TIFP).

Three freshwater mussel species under review for federal listing as threatened or endangered have historically been found in the San Antonio River Basin. One species, the Golden Orb, has been recently found in numerous locations in the San Antonio River. In an effort to determine mussel densities and species richness for the entire native mussel community in the San Antonio River Basin, the River Authority conducts reconnaissance surveys and mussel sample collections efforts throughout the basin. Data collected is distributed to regulatory agencies to assist in decision-making for listing or delisting candidate species. Sampling locations include the San Antonio River, Cibolo Creek, Salado Creek, Lower Leon Creek, Salatrillo and Martinez Creeks, lower Medina River, Medio Creek and Westside Creeks.

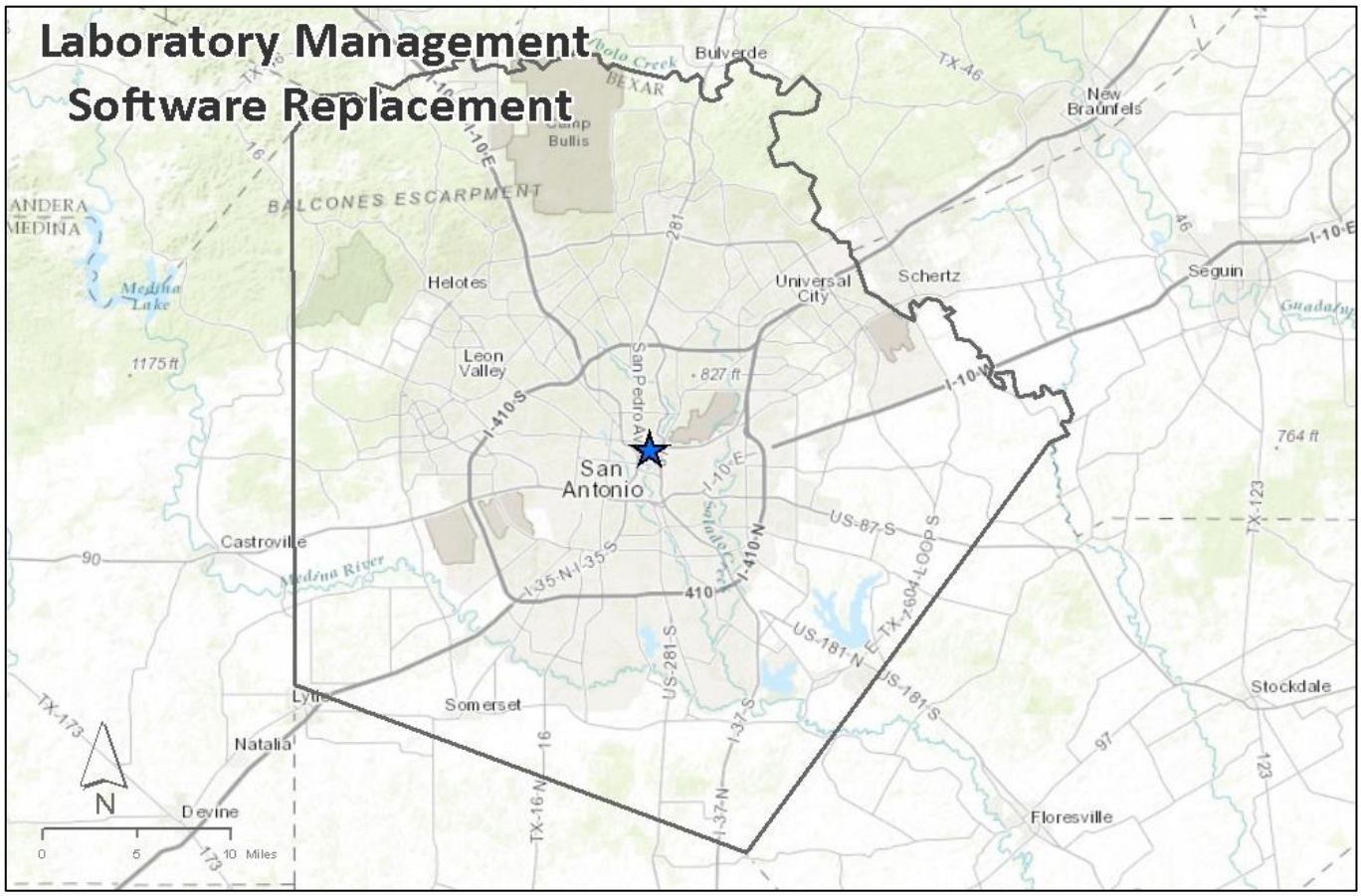
Since FY 2014/15, River Authority biologists have conducted reconnaissance surveys and sampling efforts on the Lower Cibolo Creek, the Westside Creeks, the Upper and Lower San Antonio River, the San Juan Remnant Channel, the Espada Ditch, and the Lower Medina River. In FY 2017/18, the River Authority will continue reconnaissance surveys throughout the Upper and Lower San Antonio River to estimate mussel population parameters which includes species richness, mussel densities, population size and recruitment. Following completion of these qualitative efforts, mussel abundance from all qualitative sites will be assessed to determine if quantitative efforts are needed throughout the study area. To date, Lower Cibolo Creek, the Westside Creeks, San Juan Remnant, Espada Ditch have been completed and the Lower Leon Creek is near completion. This project will not require operations and maintenance expenditures in future years.

Of the total $190,162 Adopted Budget, $144,668 is estimated labor contribution through the River Authority General Fund.

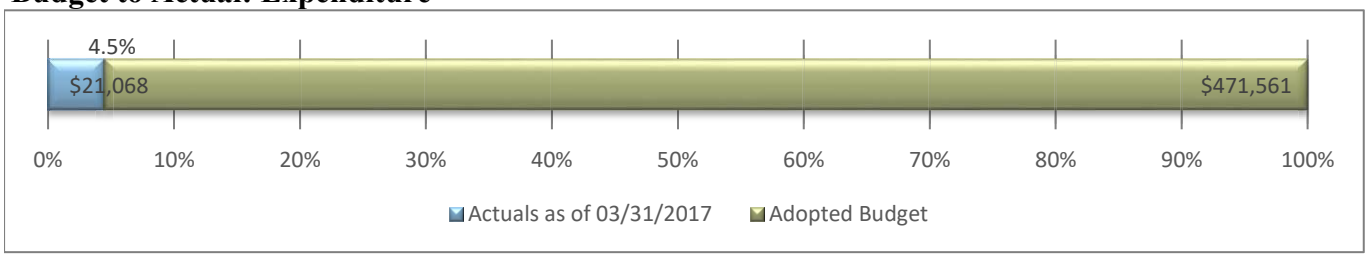
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Labor	$ 83,193	$ 61,475	$ 45,169	$ 46,747	$ 236,584
Operations	42,039	3,455	-	-	45,494
Total	$ 125,232	$ 64,930	$ 45,169	$ 46,747	$ 282,078

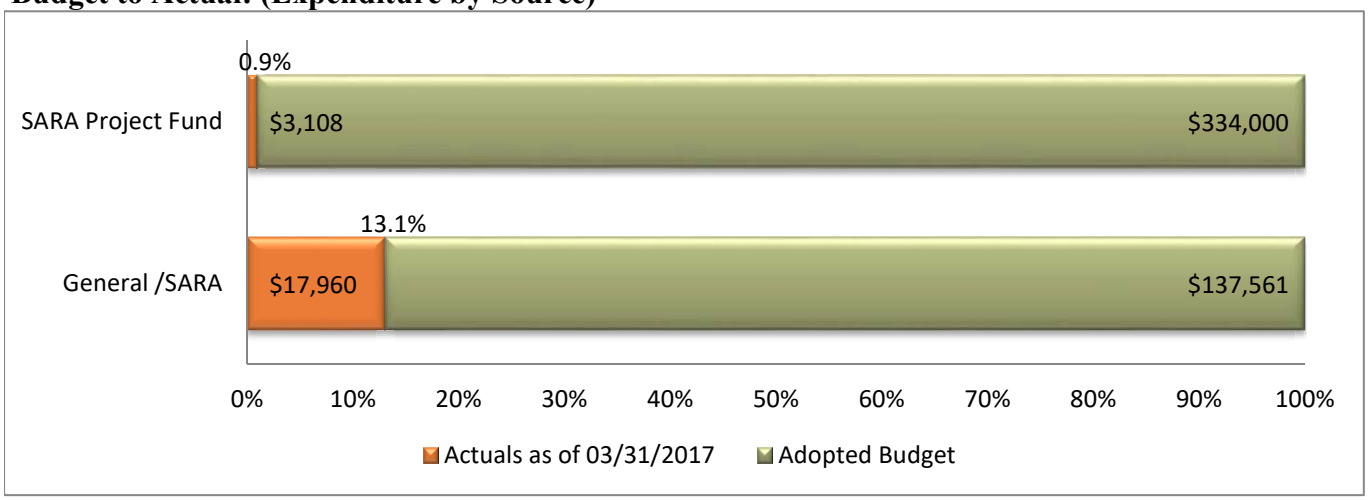
Project Name: **LIMS Replacement** **Project #** **0537**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**LIMS Replacement**	**Project #**	**0537**
Managing Department:	Environmental Sciences		

		Adopted Budget:	$ 471,561
Project Start Date:	07/01/2016	Unfunded Plan:	$ -
Project Finish Date:	06/30/2018	Total Project:	$ 471,561

The acquisition and implementation of a new Laboratory Information Management System (LIMS) supports the River Authority's commitment to advance the science of watershed management by utilizing an advanced modern tool to manage, store, report, retrieve, and integrate data used for decision making. It facilitates implementation of operational efficiencies that respond to the growing and evolving demands for laboratory testing and data services.

The River Authority's Regional Environmental Laboratory utilizes a Laboratory Information Management System (LIMS) to electronically capture information for all samples submitted to the laboratory from internal and external customers. The current LIMS has been in use since February 2006 and was last upgraded in 2011. However, the version of the product currently in use does not include advances made throughout the industry and lacks productivity, reporting, interfacing, and management tools to meet the ever increasing data management and reporting challenges of environmental testing laboratories.

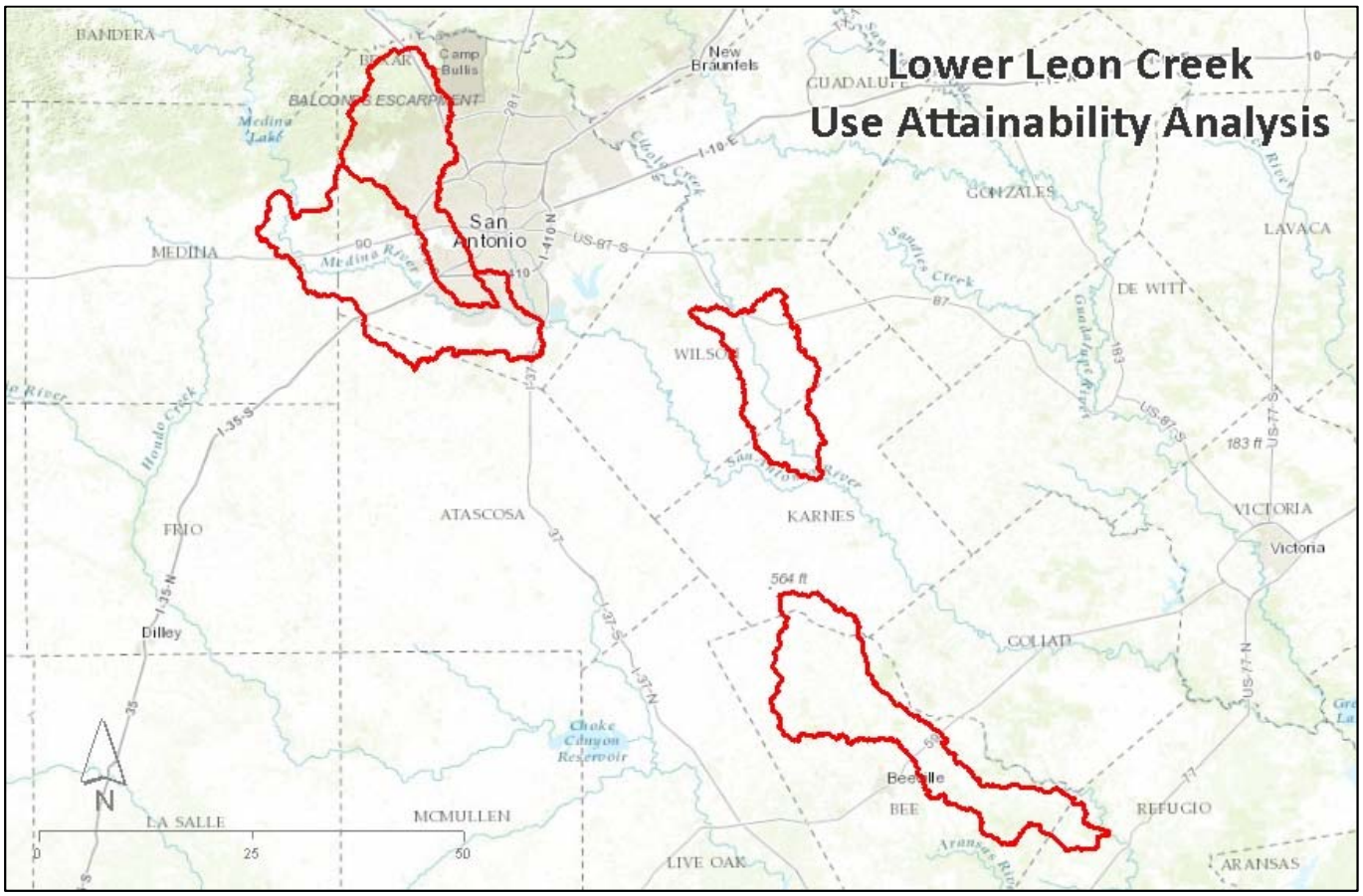
The contract was negotiated and the software was acquired and in FY 2016/17. In FY 2017/18, staff complete the software implementation process and incorporate additional laboratory workflows and new applications – such as chemical preparation and traceability, instrument interfaces, bar code labels, and client portal. Staff will update all existing documents, tools, and data migration protocols to reflect new table structures. Staff will also document new protocols incorporating new LIMS features into laboratory workflows. User and administrator level training will be conducted by the vendor. Operations and maintenance costs (software licensing and support) for the upgraded software are included in the FY 2017/18 Adopted Budget.

Of the total $471,561 Adopted Budget, $137,561 is estimated labor contribution through the River Authority General Fund.

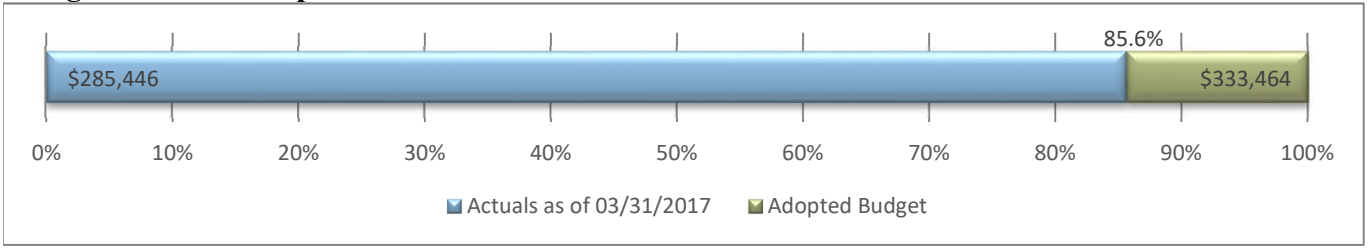
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 21,068	$ 450,493	$ -	$ -	$ 471,561
Total	$ 21,068	$ 450,493	$ -	$ -	$ 471,561

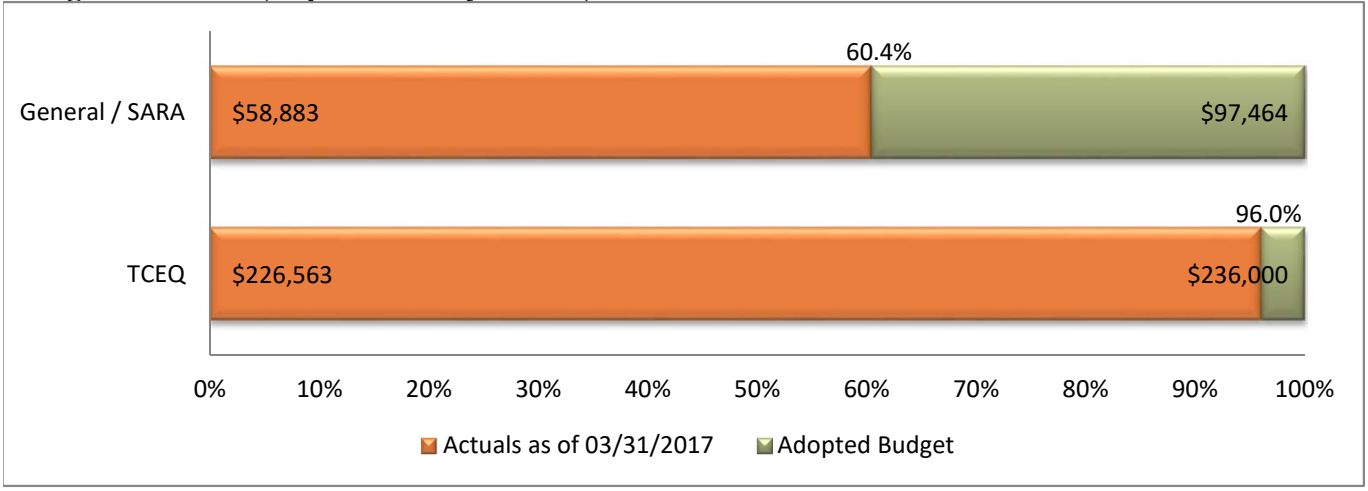
Project Name: Lower Leon Creek Use-Attainability Analysis **Project #** 0428



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Lower Leon Creek Use-Attainability Analysis**		**Project #**		**0428**
Managing Department:	Environmental Sciences				
		Adopted Budget:	$	333,464	
Project Start Date:	03/03/14	Unfunded Plan:	$	-	
Project Finish Date:	12/29/17	Total Project:	$	333,464	

The purpose of the Lower Leon Creek Use-Attainability Analysis (UAA) is to conduct monitoring in support of Texas Commission on Environmental Quality (TCEQ) efforts to assign appropriate aquatic life use and dissolved oxygen criterion in Lower Leon Creek. Additional quarterly routine monitoring is performed and samples are collected throughout the San Antonio River Basin. The current grant funding is $236,000.

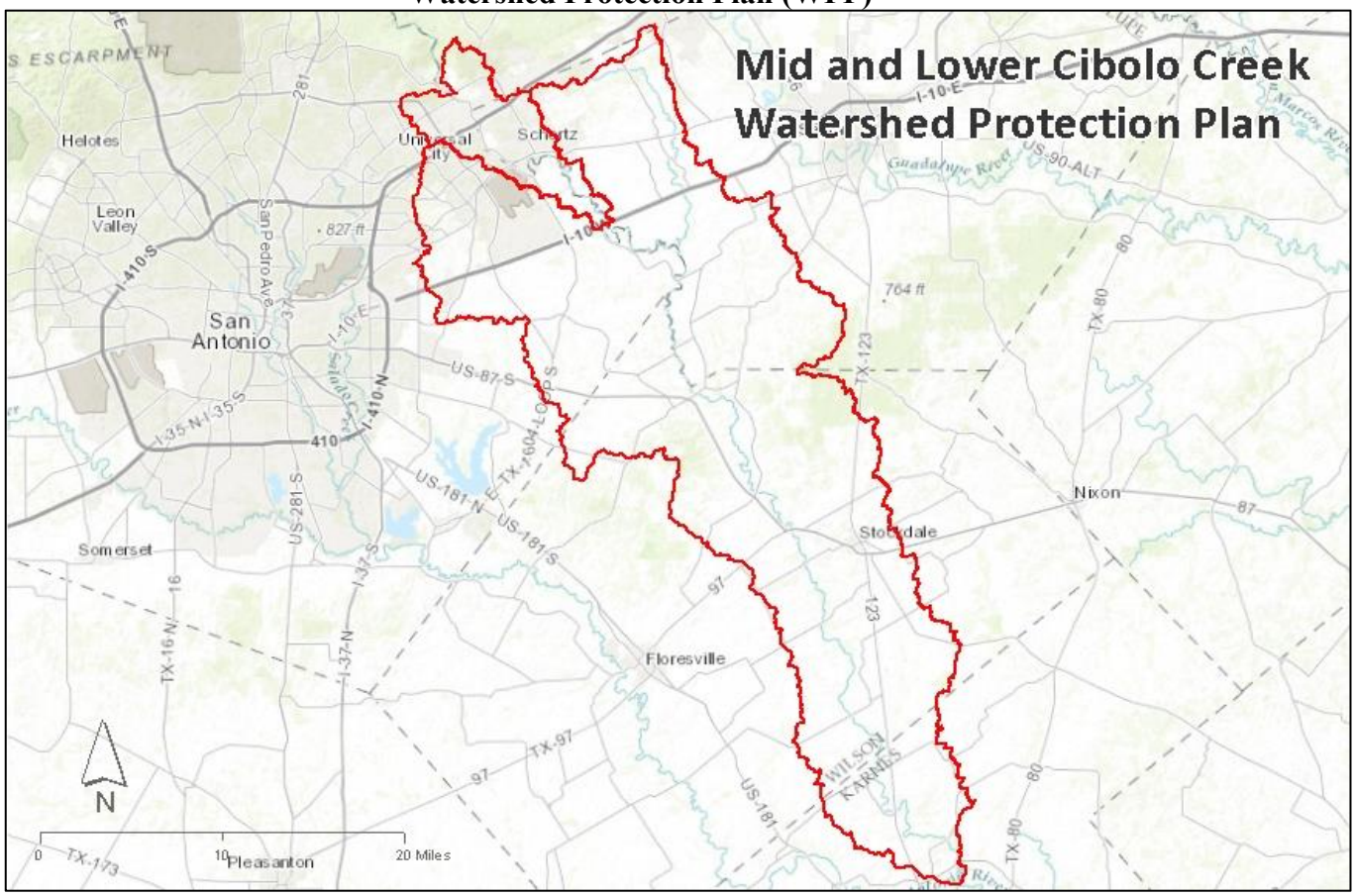
For FY 2017/18, a total of four routine collection events will be completed at six stations in the Cibolo Creek (3), Medina River (2) and Medio Creek (1) watersheds and submitted to the TCEQ for inclusion into the state's database. The Lower Leon Creek Use-Attainability Analysis Report is the major deliverable for the project and will detail the correlation of water quality.

Of the total $333,464 Adopted Budget, $97,464 is estimated labor contribution through the River Authority General Fund.

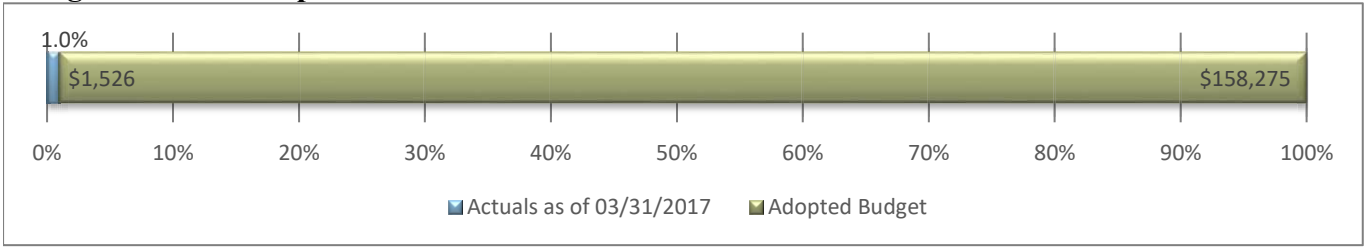
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 285,446	$ 48,018	$ -	$ -	$ 333,464
Total	$ 285,446	$ 48,018	$ -	$ -	$ 333,464

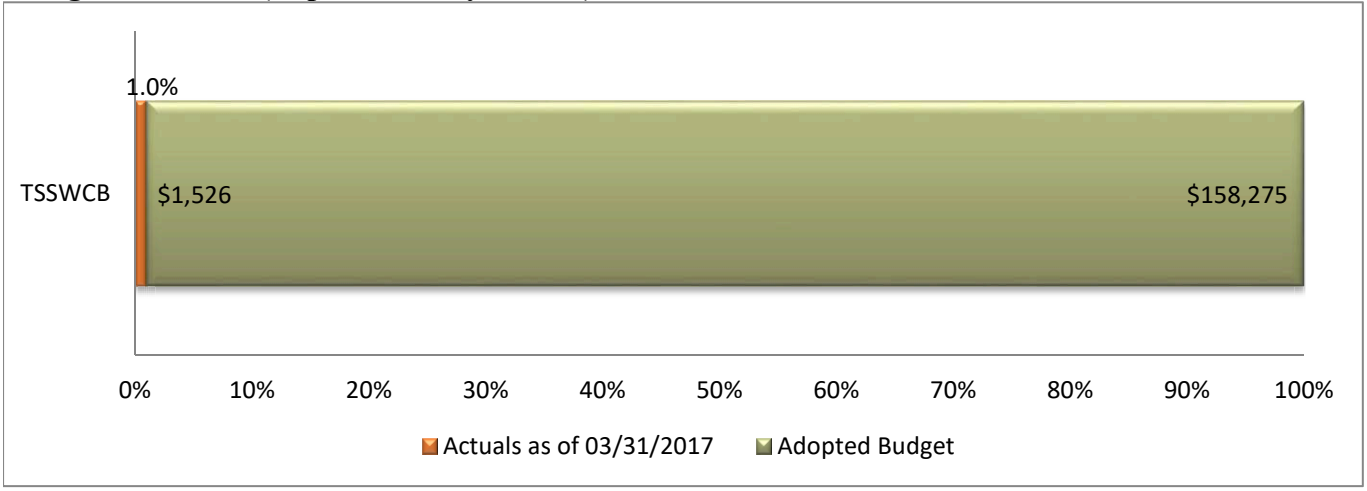
Project Name: Mid/Lower Cibolo Creek Watershed Protection Plan (WPP) **Project #** 0532



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Mid/Lower Cibolo Creek Watershed Protection Plan (WPP)**		**Project #**	**0532**
Managing Department:	Environmental Sciences			
		Adopted Budget:	$	158,275
Project Start Date:	07/01/2016	Unfunded Plan:	$	-
Project Finish Date:	12/31/2019	Total Project:	$	158,275

The project will complete a Watershed Protection Plan for the Mid and Lower Cibolo Creek Watersheds for the Texas State Soil and Water Conservation Board (TSSWCB) and is entirely funded by TSSWCB. The River Authority will participate with Texas AgriLife Extension (AgriLife) to develop a Watershed Protection Plan (WPP) for the Mid Cibolo Creek and Lower Cibolo Creek watersheds. The River Authority will participate as a subcontractor to AgriLife and will provide stormwater quality monitoring, participate in public meetings and use the water quality model developed for the Cibolo Creek Watershed Master Plan Project. The River Authority's tasks include Project Administration, Quality Assurance, Water Quality Monitoring, Water Quality Modeling (to consist of running of scenarios to support the development of the WPP) and participation in stakeholder facilitation; as well as participation in the development of the WPP document.

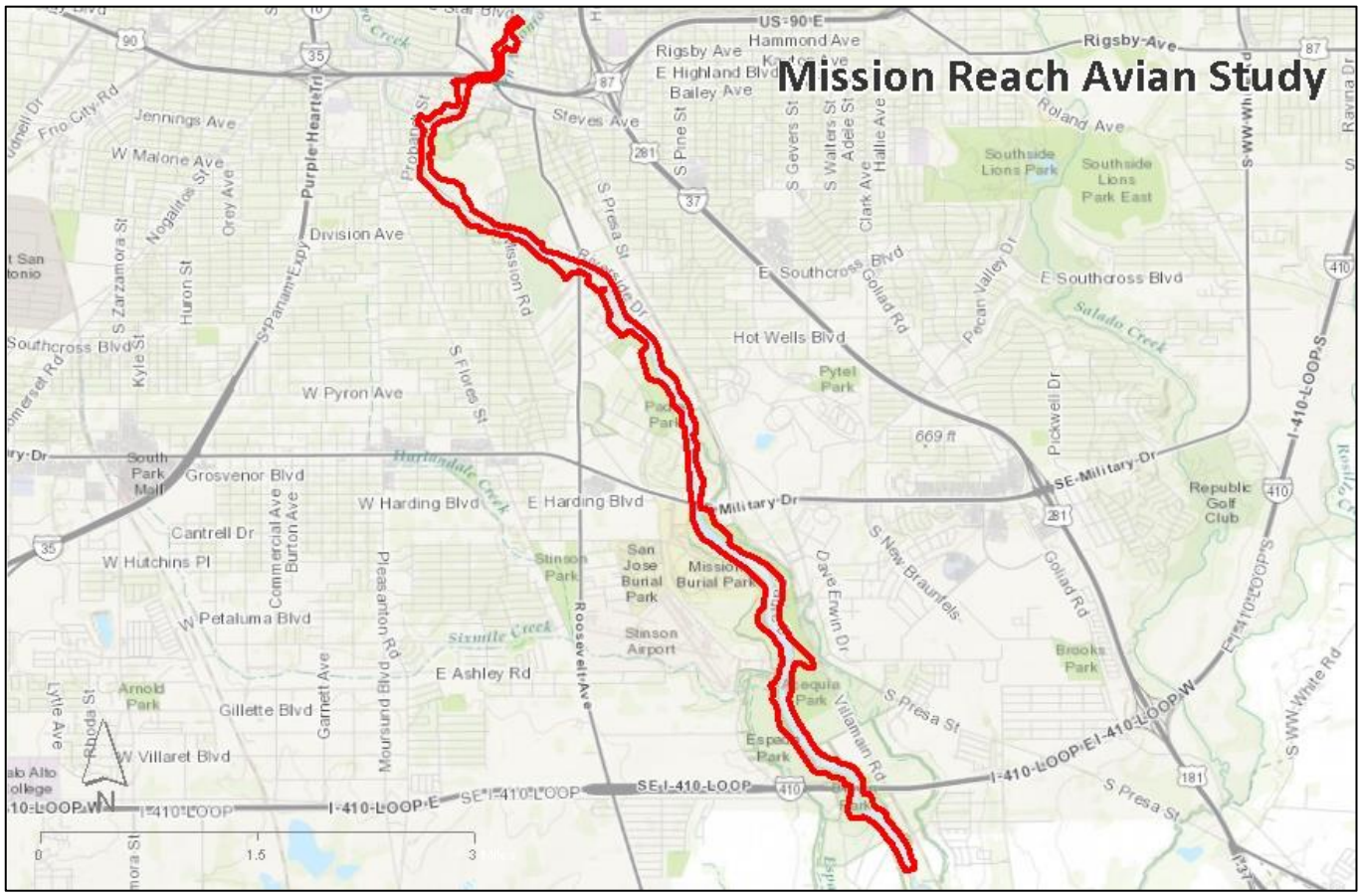
This project compliments the Cibolo Creek Watershed Master Plan and utilizes the River Authority's ability to identify sources of E. coli that are contributing to concerns and impairments within the Mid and Lower Cibolo Creek Watersheds. The project also develops outreach and educational strategies that highlight SARA's expertise as they participate on the development of the watershed protection plan and increase public knowledge and appreciation for the Mid and Lower Cibolo Creek. The project expands funding sources and partnerships with both AgriLife and TSSWCB in the area of Watershed Protection Plan development.

In FY 2017/18, the project will include a draft and final quality assurance project plan and the initiation of water quality monitoring. Grant funding totals $158,275.

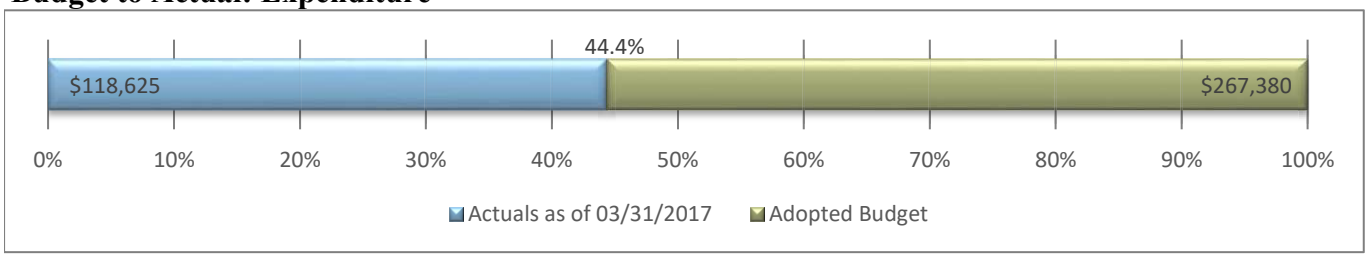
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Operations	$ -	$ 70,826	$ -	$ -	$ 70,826
Administration	1,526	85,923	-	-	87,449
Total	$ 1,526	$ 156,749	$ -	$ -	$ 158,275

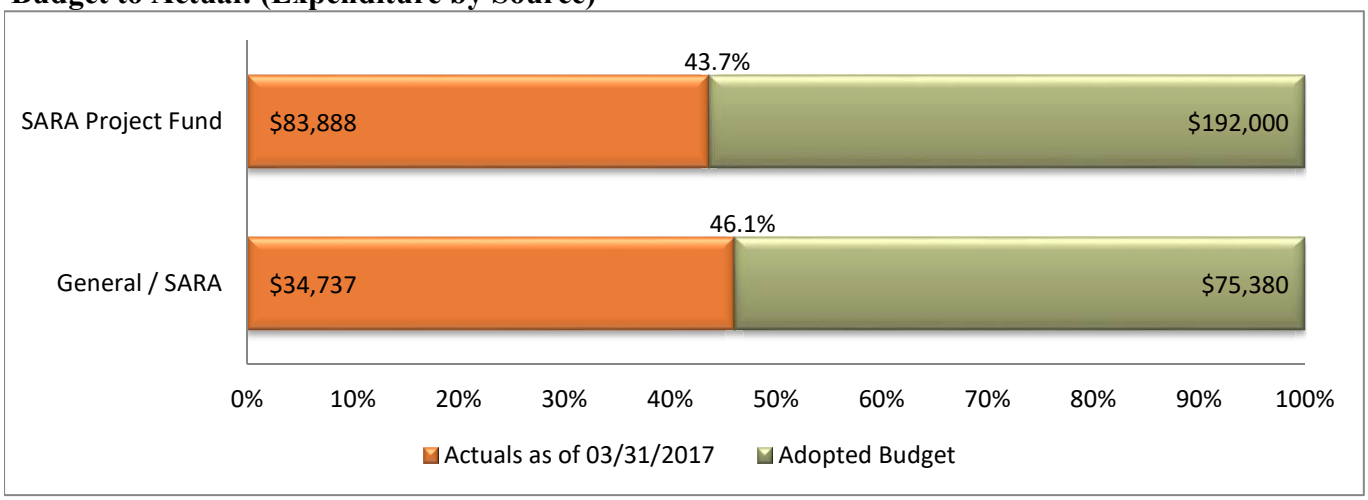
Project Name: **Mission Reach Avian Study** **Project #** **0502**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Mission Reach Avian Study**		**Project #**	**0502**
Managing Department:	Watershed and Park Operations			
		Adopted Budget:	$	267,380
Project Start Date:	07/01/2015	Unfunded Plan:	$	-
Project Finish Date:	06/30/2018	Total Project:	$	267,380

This study enhances community appreciation for and recreational use of the San Antonio River by documenting avian species along the Mission Reach, utilizing the data to demonstrate the benefits of the ecosystem restoration project and sharing information about the types and locations of avian species present in the Mission Reach with the community.

The Mission Reach Avian Study is a three year study that documents avian species within the Mission Reach Ecosystem Restoration and Recreation Project. Incidental and point count surveys are used to document avian species found in the project area. The incidental survey data is being used to prepare an avian checklist for the project that will be used for a variety of education and outreach purposes. The point count survey data establishes a baseline data set that can be used in the future for statistical analysis of the project outcomes as they relate to avian habitat being provided on the Mission Reach.

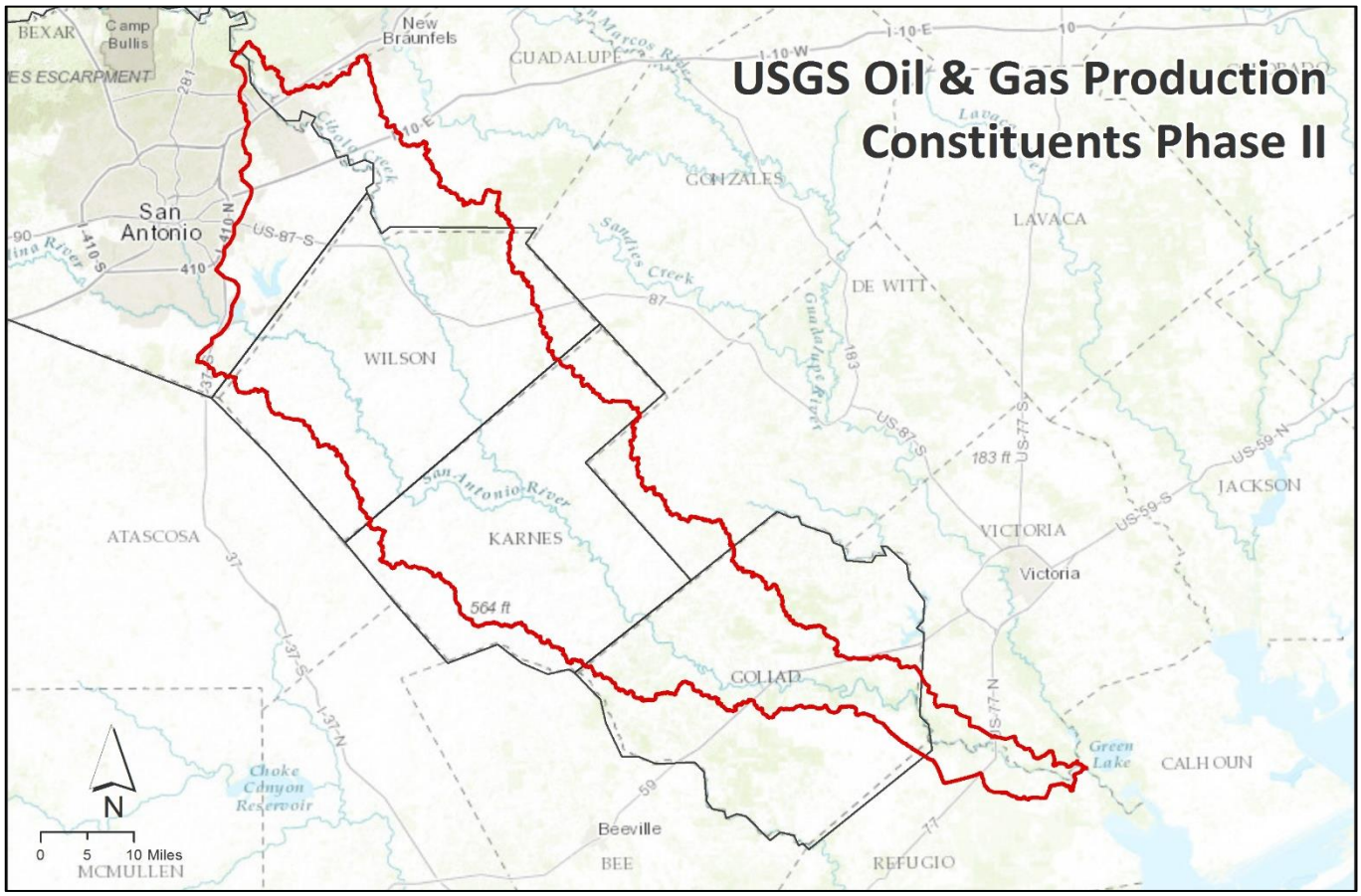
Started in FY 2015/16, the three-year avian study will conclude this fiscal year. At the conclusion of FY 2017/18, the River Authority will have three years of data and analysis for the Mission Reach project that will serve as a baseline to demonstrate future benefits of the ecosystem restoration project. This project will not require operations and maintenance.

Of the total $267,380 Adopted Budget, $75,380 is estimated labor contribution through the River Authority General Fund.

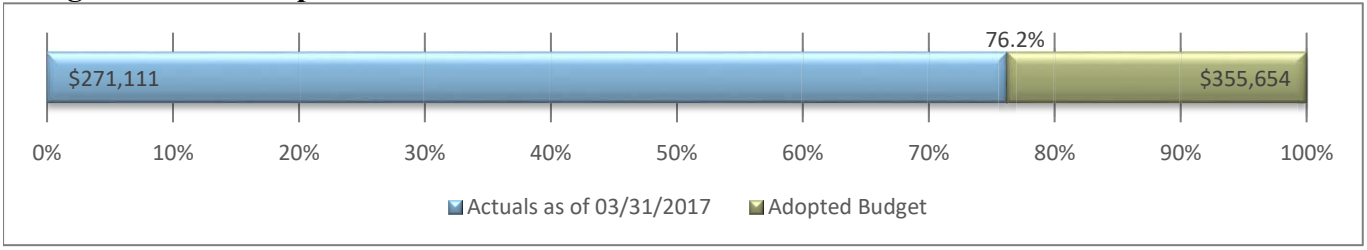
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Operations	$ 83,888	$ 108,112	$ -	$ -	$ 192,000
Administration	34,737	40,643	-	-	75,380
Total	$ 118,625	$ 148,755	$ -	$ -	$ 267,380

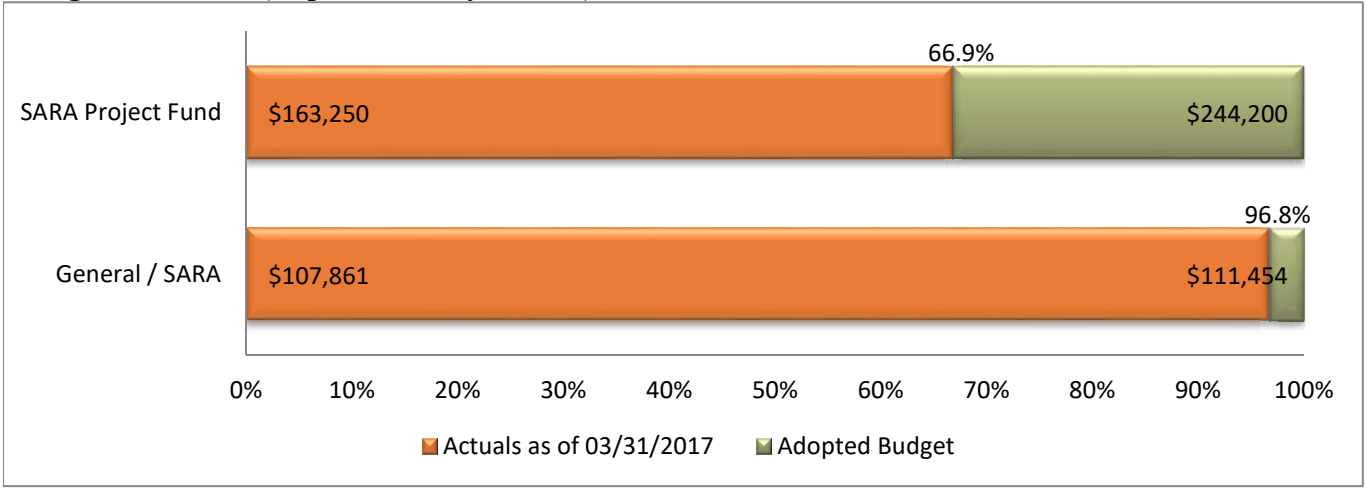
Project Name: USGS Oil and Gas Production Constituents Phase II **Project #** 0445



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **USGS Oil and Gas Production Constituents Phase II** **Project #** **0445**
Managing Department: Environmental Sciences

		Adopted Budget:	$ 355,654
Project Start Date:	10/01/2014	Unfunded Plan:	$ 3,589
Project Finish Date:	12/31/2018	Total Project:	$ 359,243

This specialized monitoring project contributes to the health and safety of the creeks and rivers by monitoring whether oil and gas production is impacting the Lower San Antonio River, Cibolo Creek and Ecleto Creek. This data assists in keeping the watershed master plans dynamic and relevant.

The oil and gas production increase throughout the United States has elicited a multitude of concerns regarding the potential risks to human and environmental health (U.S. Environmental Protection Agency, 2011). The Phase I study, (2011-2013), established a baseline of a broad range of water and streambed constituents. With Phase II, the USGS revisited a subset of the sites from Phase I to determine any changes in surface water and streambed sediment quality, plus collected samples at additional sites within the Lower San Antonio River Basin to try and determine if any correlation exists between polyaromatic hydrocarbon (PAH) concentrations and impervious surface area.

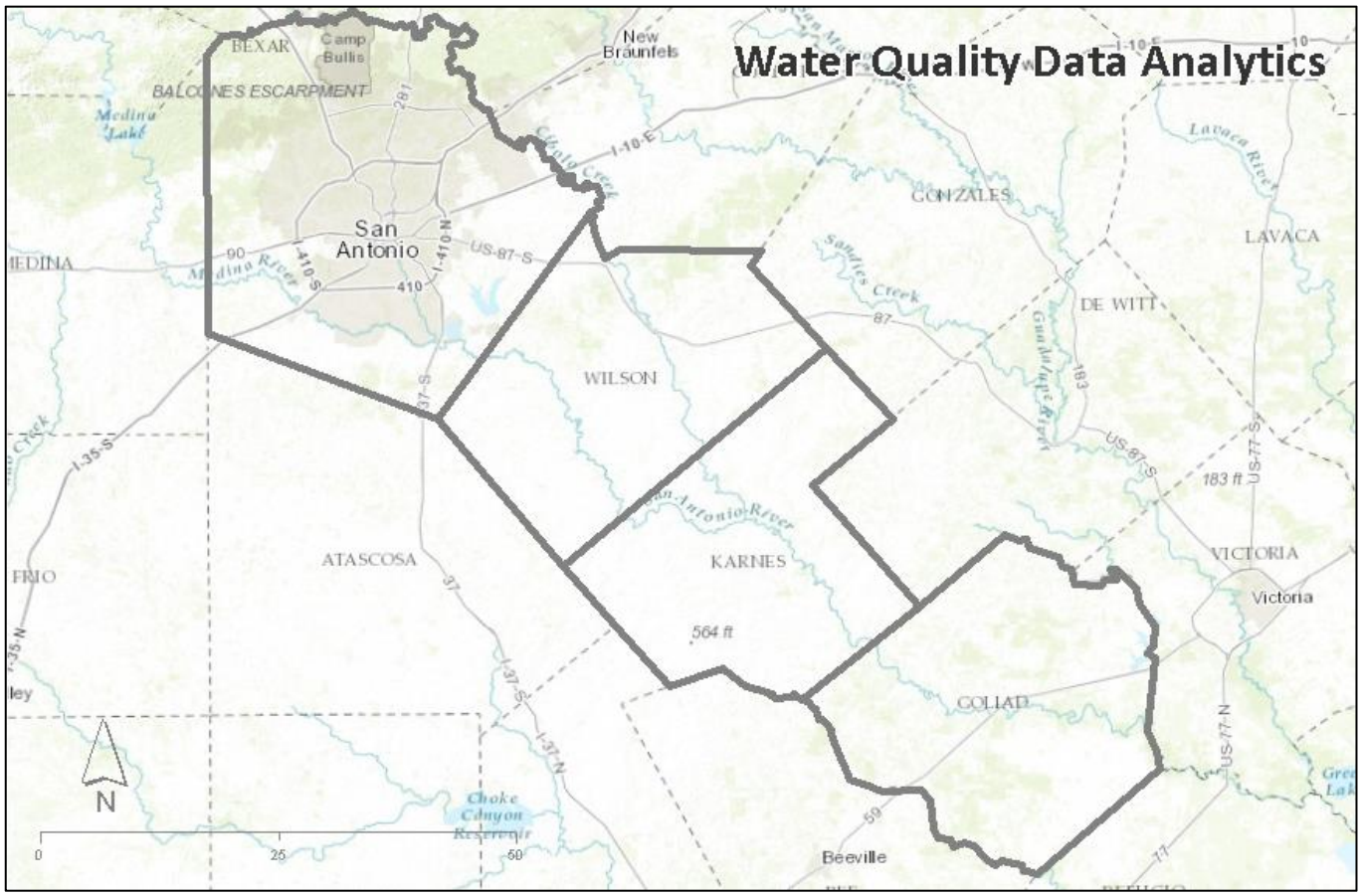
In FY 2014/15, activities included surface water and streambed-sediment sampling, and an initial land cover analysis in Wilson. Karnes, DeWitt, and Goliad Counties. Since then, sampling and analysis continues within the Lower San Antonio River, Cibolo and Ecleto Creek. For FY 2017/18, Phase II activities include water and streambed-sediment sampling and analysis, land cover analysis, and data interpretation. In addition, the report documenting this activity will be published for the Lower San Antonio River, and Cibolo and Ecleto Creeks. Operations and maintenance costs associated with this project are included in the FY 2017/18 Adopted Budget.

Of the total $355,654 Adopted Budget, $5,254 is estimated labor contribution through the River Authority General Fund.

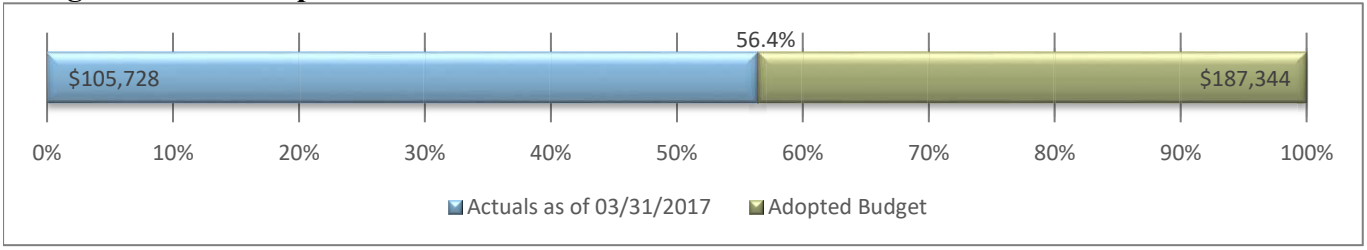
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 271,111	$ 84,543	$ 3,589	$ -	$ 359,243
Total	$ 271,111	$ 84,543	$ 3,589	$ -	$ 359,243

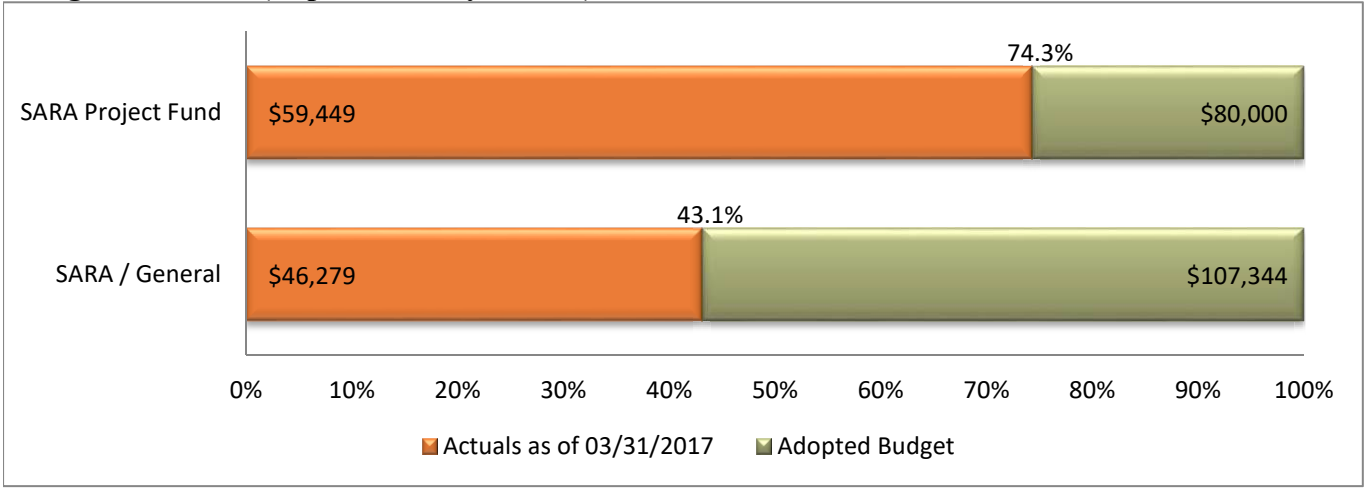
Project Name: **Water Quality Data Analytics** **Project #** **0460**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Water Quality Data Analytics**		**Project #**	**0460**
Managing Department:	Watershed Engineering			
		Adopted Budget:	$	187,344
Project Start Date:	07/01/2015	Unfunded Plan:	$	-
Project Finish Date:	06/30/2018	Total Project:	$	187,344

The development and use of the water quality data analytics tool strengthens and develops the expertise of the users and developers. The tool assists staff in analyzing large amounts of water quality data in a shorter amount of time and to explore the data to develop operational conclusions. This expertise, along with the data collected by the River Authority can be used to generate lasting improvements to the health and safety of creeks and rivers.

While the River Authority collects extensive water quality and biological data, the technical analysis of the data to draw conclusions is an intensive process. This project develops a tool that facilitates the process of exploring environmental data. By being able to efficiently assess the data, staff can draw conclusions that assess the condition of the watershed, develop recommendations for addressing watershed concerns and impairments, and improve future sampling plans.

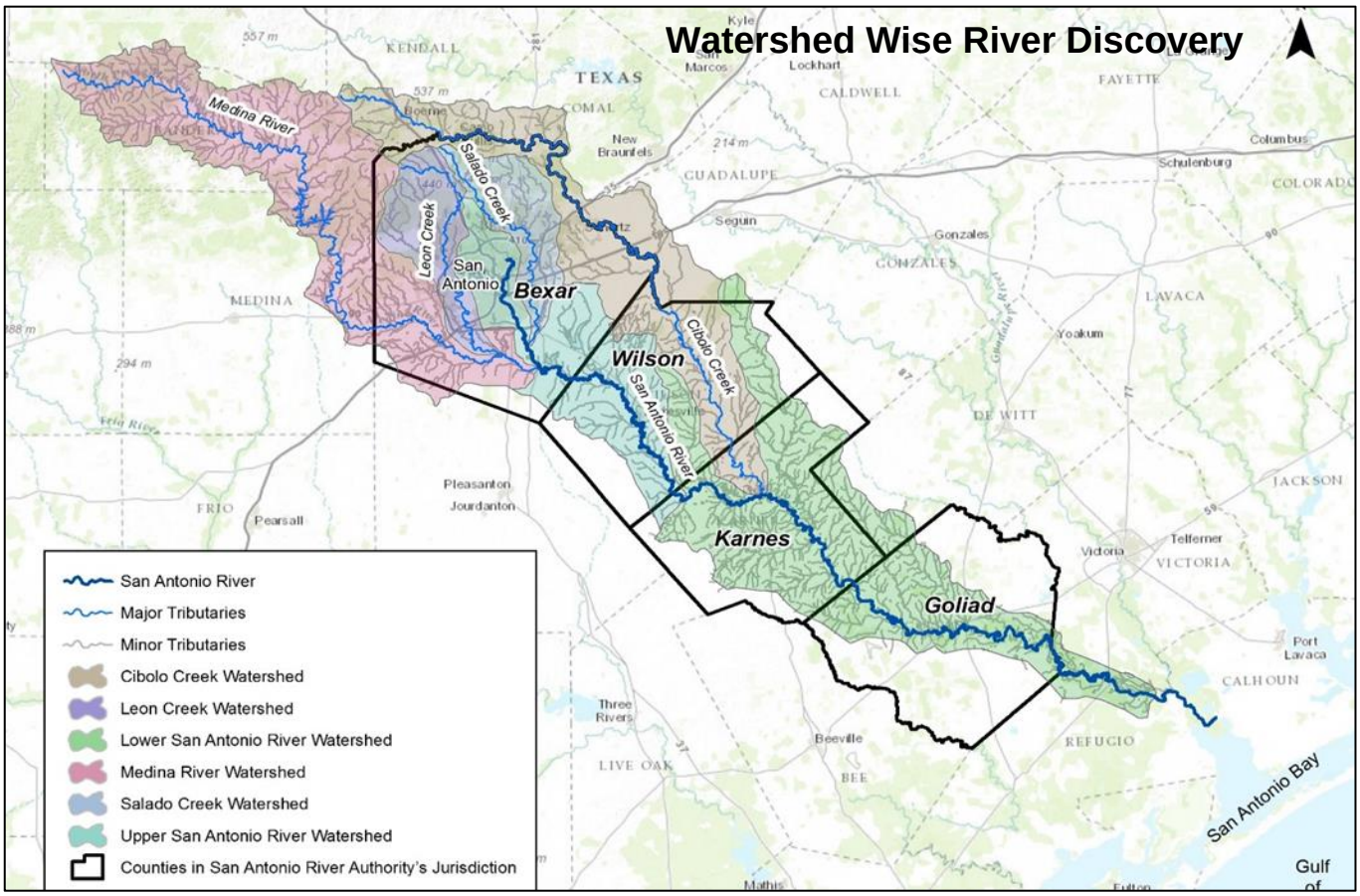
This project began in FY 2015/16 with the scoping and testing of data analysis tools for rapid statistical analysis of water quality data. Stakeholders collaborated on the interface and technical structure of the tool. In FY 2017/18, the tool will be refined and tested. Staff will receive additional MATLAB training in advanced statistics that are useful for analyzing ecological data. MATLAB, short for matrix laboratory, is a computer programming language developed for computing large amounts of data. Operations and maintenance costs associated with this project are included in the FY 2017/18 Adopted Budget.

Of the total $187,344 Adopted Budget, $107,344 is estimated labor contribution through the River Authority General Fund.

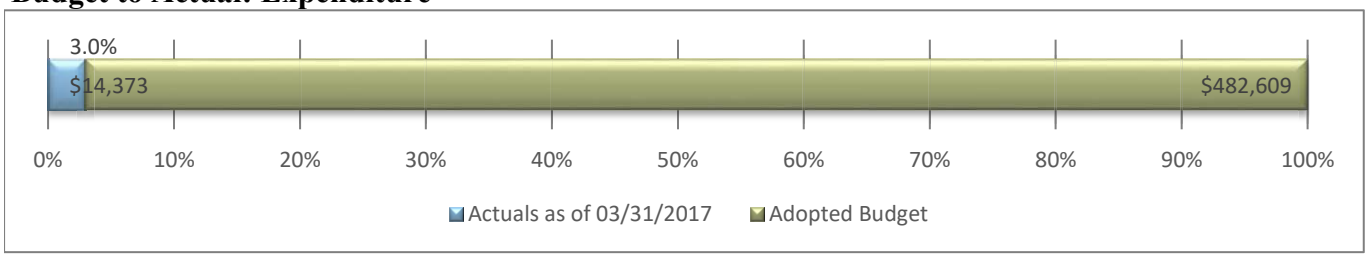
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 105,728	$ 81,616	$ -	$ -	$ 187,344
Total	$ 105,728	$ 81,616	$ -	$ -	$ 187,344

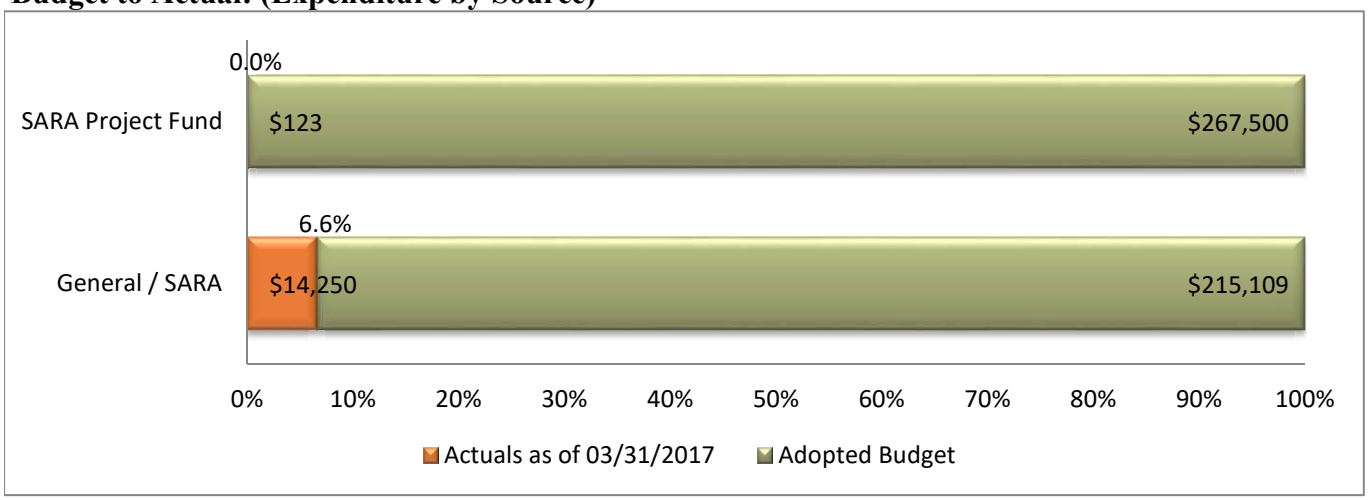
Project Name: **Watershed Wise River Discovery** **Project #** **0553**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Watershed Wise River Discovery**		**Project #**	**0553**
Managing Department:	Intergovernmental and Community Relations			
		Adopted Budget:	$	482,609
Project Start Date:	06/27/2016	Unfunded Plan:	$	200,220
Project Finish Date:	06/30/2019	Total Project:	$	682,829

The Watershed Wise River Discovery is a multi-faceted outreach and educational project that collects data and information from multiple sources, and presents it through the www.sara-tx.org website to reach a wide audience to enhance community appreciation and recreation for the watershed.

This project, which was initiated in FY 2016/17, provides various informative and interactive modules to include water quality, aquatic and riparian ecosystems, recreation, bays and estuaries, and historical information including the acequias, geology, and economic uses.

The major public outreach and educational outcomes of the project include improvements to the River Authority's website that involves: the most citizen-relevant information, a combination of GIS and recreation information, digital media and interactive components, design and integration that encourage exploration and discovery, demonstration of the River Authority's watershed expertise, and inspiring actions for healthy creeks and rivers.

In FY 2017/18, the project will continue to gather the information and digital media (videos, graphics, data, dynamic maps) necessary to complete and make available to the public two of the topic modules, Water Quality and Recreation, as well as compile the copy and digital media towards fifty percent completion of the remaining modules. This phase of the project will be finalized and made available to the public in FY 2018/19. The project will require additional operations and maintenance expenditures by the River Authority. However, these cannot yet be quantified as the project is still in its early phases.

Of the total $482,609 Adopted Budget, $215,109 estimated labor contribution through the River Authority General Fund.

Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Operations	$ 123	$ 267,377	$ -	$ -	$ 267,500
Administration	14,250	200,859	200,220	-	415,329
Total	$ 14,373	$ 468,236	$ 200,220	$ -	$ 682,829

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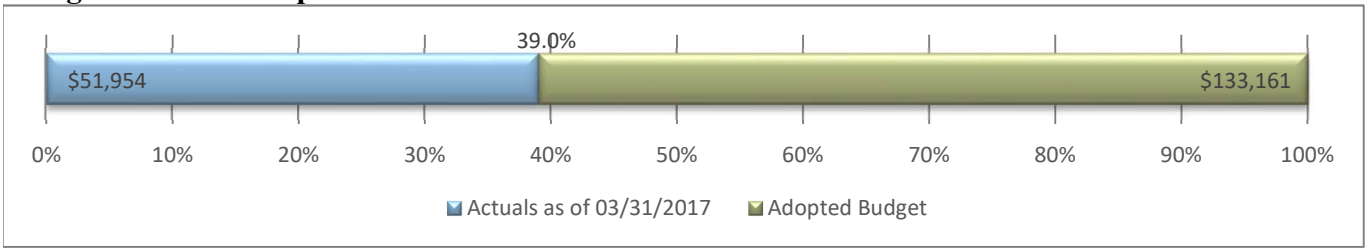
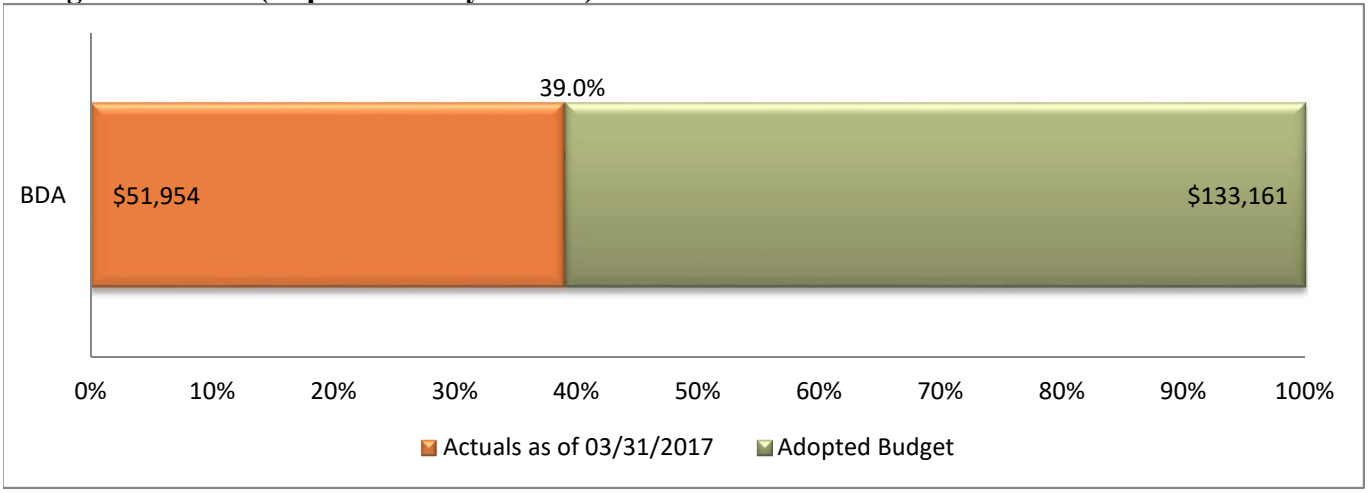
Project Name: **Brooks City Base - Mission Reach Linkage** **Project #** **0525**

Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Brooks City Base - Mission Reach Linkage**		**Project #**	**0525**
Managing Department:	Watershed Engineering			
		Adopted Budget:	$	133,161
Project Start Date:	01/21/2016	Unfunded Plan:	$	-
Project Finish Date:	05/30/2018	Total Project:	$	133,161

The Brooks City Base – Mission Reach Linkage project supports increased attendance, improved visitor experience and access to the San Antonio River Mission Reach.

The project is a trail connection between the San Antonio River Mission Reach and Brooks City Base. The approximate 2/10 mile long, 10-foot wide, hike and bike trail begins at Corpus Christi Road. The connection at Corpus Christi Road includes pavement markings and signage at street level to signify the crossing. The trail continues west crossing an acequia located north of a tributary to the San Antonio River. The trail passes through the existing box culvert at South Presa Street and follows along the north side of the tributary to the San Antonio River. The trail then continues through the existing Union Pacific Railroad right-of-way and tie into the existing Mission Reach Trail.

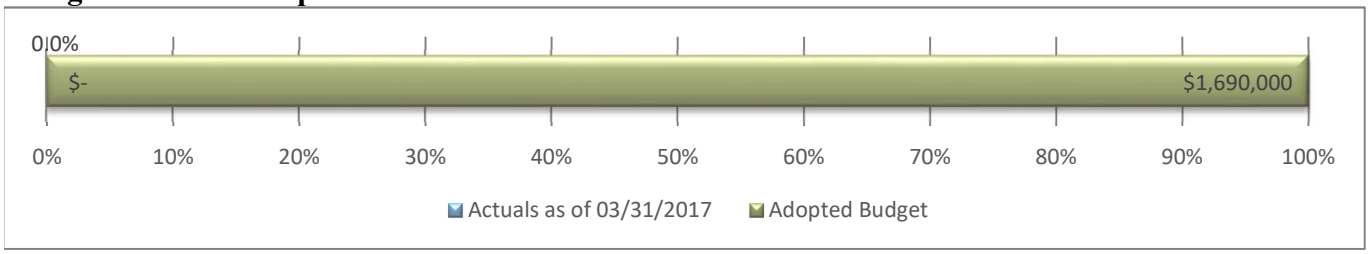
In FY 2017/18, the River Authority will bid and award the project and begin construction. Construction is expected to be completed in March 2018. This project is funded in the FY 2017/18 Adopted Budget in the Other Capital Projects Fund ($133,161). The San Antonio River Authority Project Fund does not include any funding for the project; however, this is an authorized project in this fund. The River Authority will not be responsible for operations and maintenance along these improvements.

Spending Plan of Total Project Budget

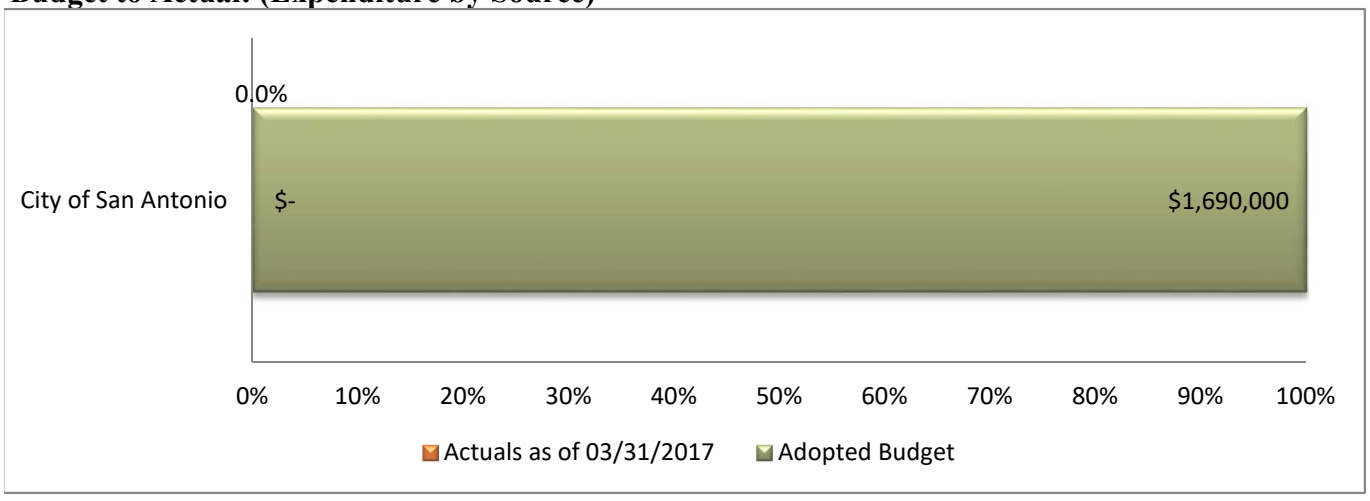
Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Right-of-Way Acquisition	$ 548	$ 9,452	$ -	$ -	$ 10,000
Design	51,407	71,754	-	-	123,161
Total	$ 51,954	$ 81,207	$ -	$ -	$ 133,161

Project Name: **Concepcion Creek Outfall Repair** **Project #** **0583**

Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Concepcion Creek Outfall Repair**		**Project #**		**0583**
Managing Department:	Watershed and Park Operations				
		Adopted Budget:		$	1,690,000
Project Start Date:	04/20/2017	Unfunded Plan:		$	-
Project Finish Date:	03/31/2018	Total Project:		$	1,690,000

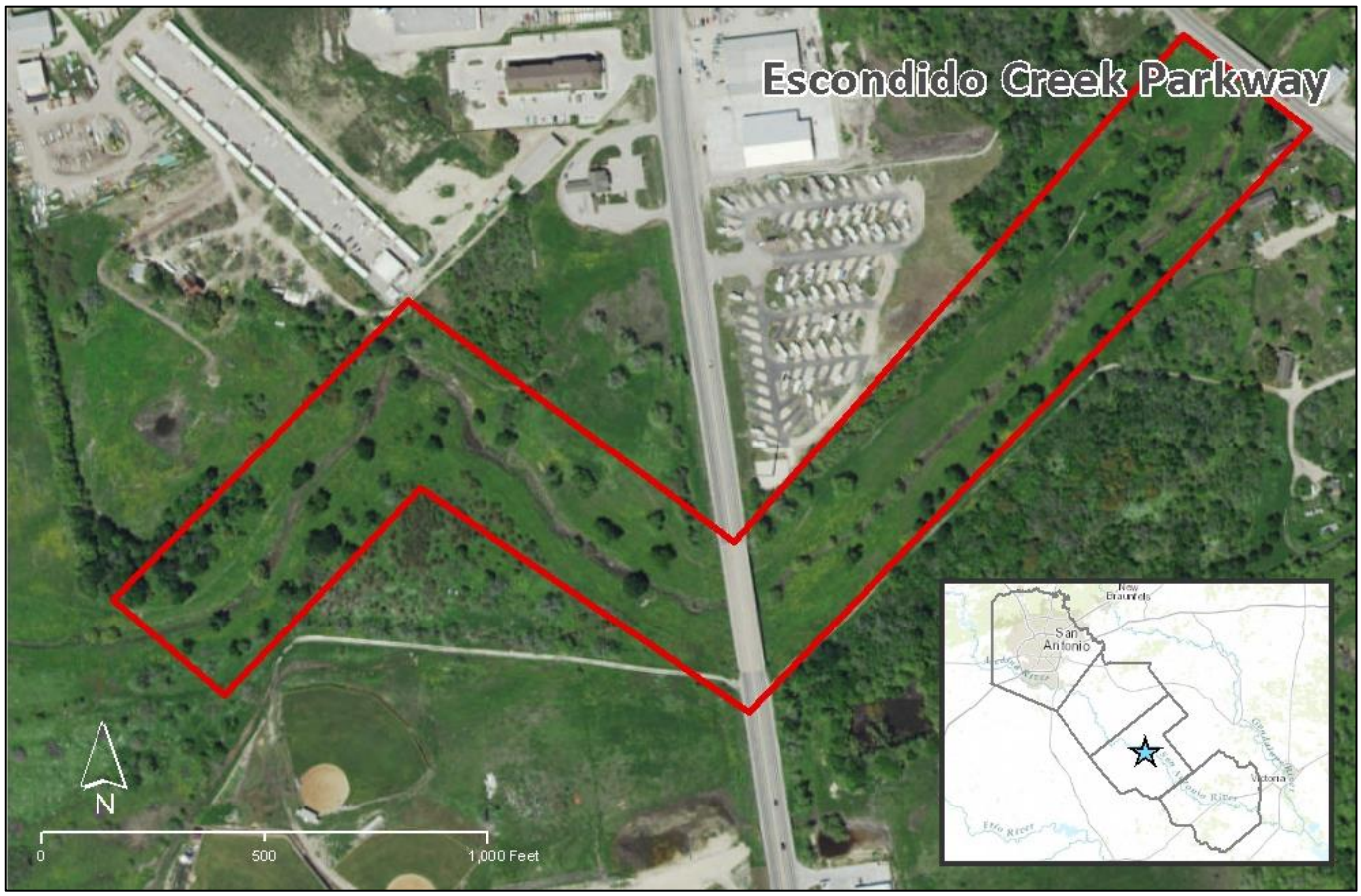
Concepcion Creek outfalls into the San Antonio River along the Mission Reach. The concrete lining of the outfall was damaged during a rain event in September 2016. This project will repair the damage to the channel.

In FY 2017/18, the project will be designed and constructed. The River Authority is not responsible for operations and maintenance of these improvements.

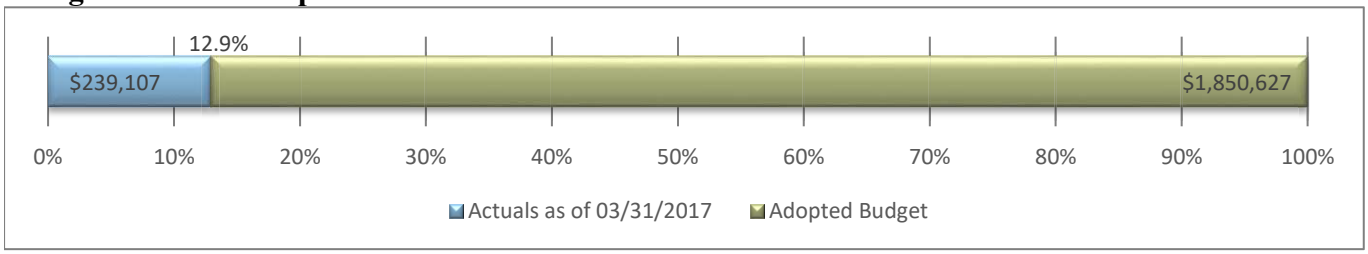
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/2019	Succeeding from 2019	Total
Design	$ -	$ 200,000	$ -	$ -	$ 200,000
Construction	-	1,490,000	-	-	1,490,000
Total	$ -	$ 1,690,000	$ -	$ -	$ 1,690,000

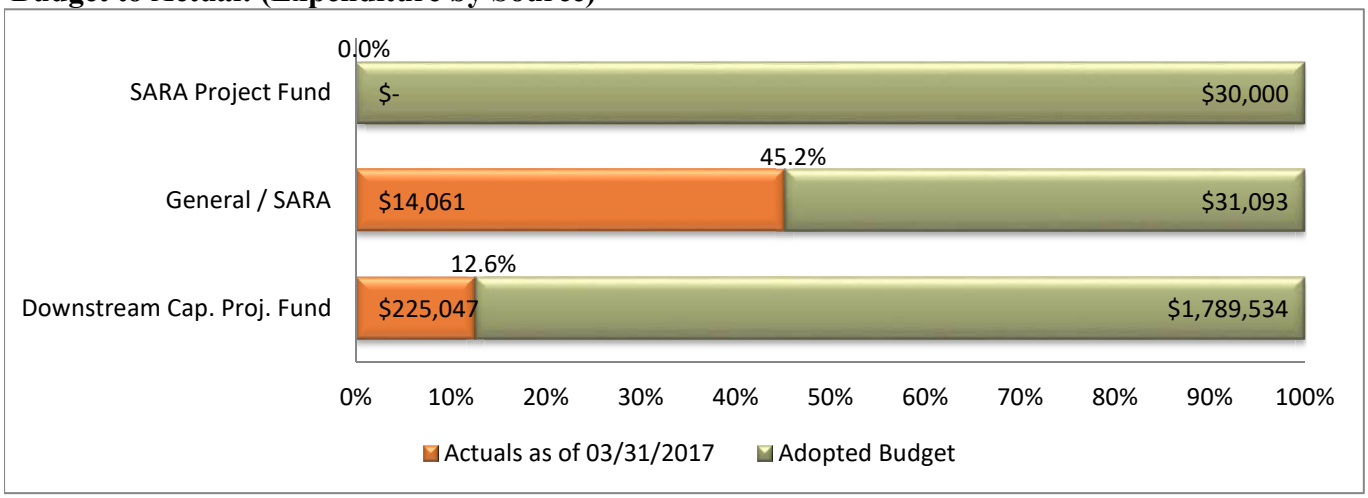
Project Name: **Escondido Creek Parkway** **Project #** **0397**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Escondido Creek Parkway**	**Project #**	**0397**
Managing Department:	Watershed and Park Operations		

		Adopted Budget:	$ 1,850,627
Project Start Date:	07/01/2012	Unfunded Plan:	$ -
Project Finish Date:	10/02/2019	Total Project:	$ 1,850,627

Escondido Creek Parkway, located in Karnes County, meanders between the City of Kenedy's Joe Gulley Park on the west and downtown Kenedy on the east. This 1.25 mile stretch is currently maintained by the San Antonio River Authority for drainage and flood control. The project supports the strategic planning goal of watershed health and safety.

The River Authority is working with the local community to develop the Escondido Creek Parkway. The initial development will extend between Joe Gulley Park to North 5th Street/Business 181, with potential future phases extending east to the old Southern Pacific Railroad right-of-way, and south to a downtown trailhead.

Beginning in FY 2011/12, the River Authority obtained a memorandum of agreement with the City of Kenedy, began conceptual planning and the real estate due diligence. Planning, identifying funding partners and real estate acquisition ensued. In FY 2016/17, a consultant was hired, and conceptual plans were completed. During FY 2017/18, the River Authority will build upon the 30 percent schematic design completed in FY 2016/17. A consultant will continue to work with the Escondido Creek Oversight Committee to advance the preliminary design into 100 percent design plans and construction documents. Funding opportunities will be identified and, based upon funding levels secured, the project will move into construction. Additional funding sources will continue to be pursued with project completion anticipated in FY 2019/20. The project is currently funded by the San Antonio River Authority Project Fund and the Downstream Capital San Antonio River Authority Project Fund, which represents funding from various contributor in Karnes County including the City of Kenedy 4B Corporation and the City of Kenedy Chamber of Commerce. Operation and maintenance expenditures are estimated to be between $275,000 and $300,000.

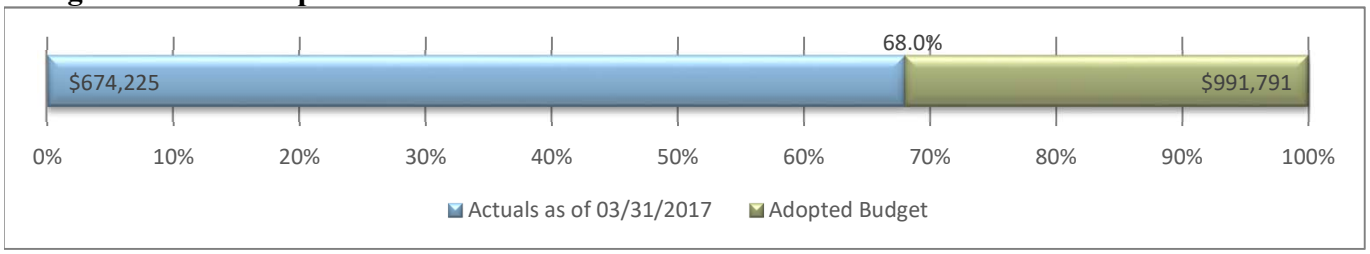
Of the total $1,850,627 Adopted Budget, $21,081 is estimated labor contribution through the River Authority General Fund.

Spending Plan of Total Project Budget

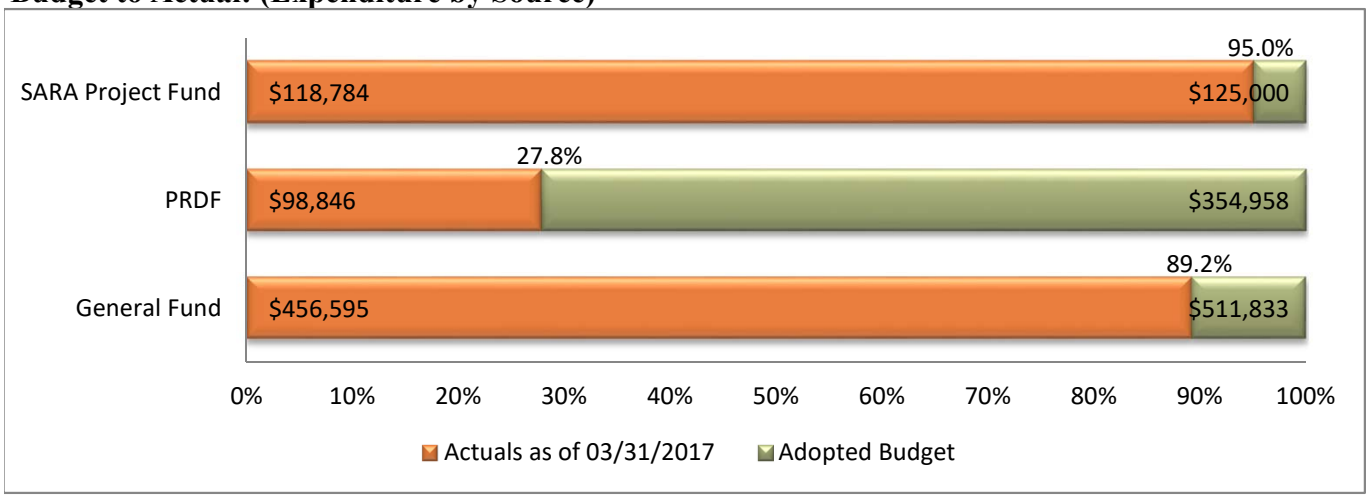
Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Right-of-Way Acquisition	$ 216,016	$ 66,453	$ -	$ -	$ 282,469
Design	990	299,010	-	-	300,000
Construction	-	1,200,000	-	-	1,200,000
Administration	22,101	46,057	-	-	68,158
Total	$ 239,107	$ 1,611,520	$ -	$ -	$ 1,850,627

Project Name: **Graytown Park on the San Antonio River** **Project #** **0298**

Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Graytown Park on the San Antonio River**		**Project #**	**0298**
Managing Department:	Watershed and Park Operations			
		Adopted Budget:	$	991,791
Project Start Date:	02/01/2011	Unfunded Plan:	$	-
Project Finish Date:	01/31/2018	Total Project:	$	991,791

The Graytown Park on the San Antonio River project continues development of park amenities to increase and enhance visitor experiences, attendance and overall provide opportunities for visitors to enjoy, appreciate and understand the San Antonio River.

Graytown, initially referred to as County Road 125 (CR125), is approximately 22 acres situated midway between the Loop 1604 river access site and John William Helton San Antonio River Nature Park. This location is an alternative put-in and takeout for the SASPAMCO paddling trail located near SASPAMCO, Texas. This location also provides an additional area for day use recreational park activities such as picnic pads and walking trails, and also contains an 18-hole disc golf course.

In FY 2011/12, this nature-based park site was identified and acquisition efforts began. In the ensuing years, the park was planned and construction began on the park amenities. In FY 2017/18, the River Authority will construct a pavilion and public restroom which will complete the park's major improvements which include road work, paddling trail put-in and take-out site, 18-hole disc golf course, walking trails and picnic pads. Operations and maintenance costs for the funded improvements are included in the FY 2017/18 Adopted Budget.

Of the total $991,791 Adopted Budget, $181,558 is estimated labor contribution through the River Authority General Fund.

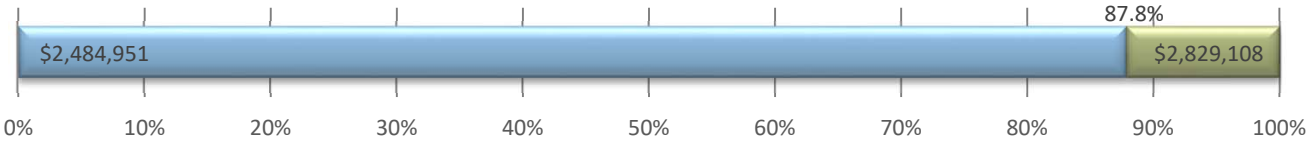
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Construction	$ 674,225	$ 317,567	$ -	$ -	$ 991,791
Total	$ 674,225	$ 317,567	$ -	$ -	$ 991,791

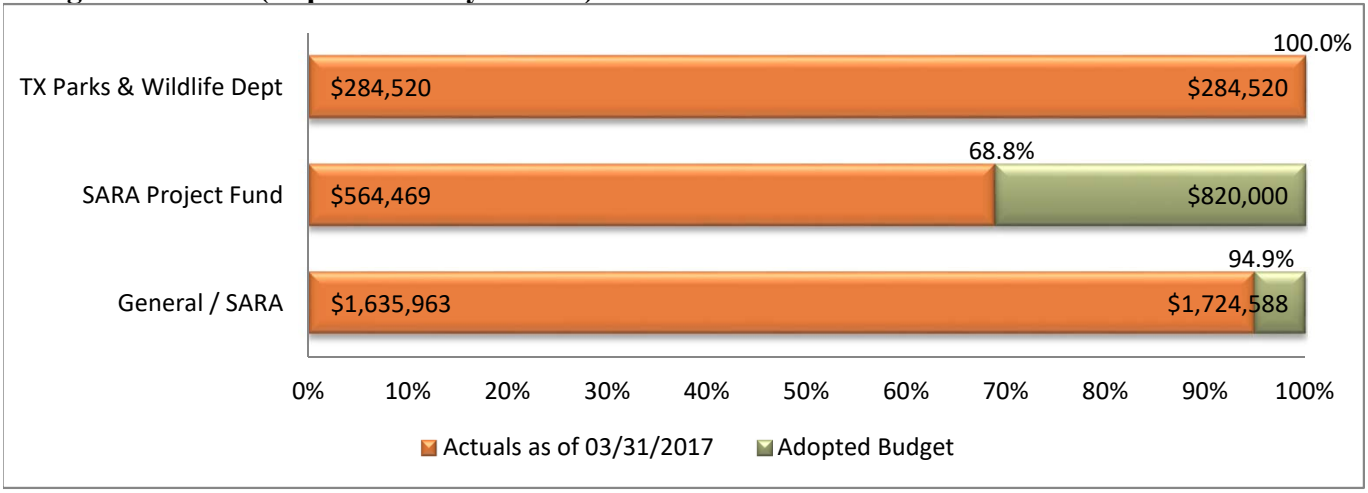
Project Name: **John William Helton** **Project #** **0067**

San Antonio River Nature Park

Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **John William Helton San Antonio River Nature Park** **Project #** **0067**

Managing Department: Watershed and Park Operations

		Adopted Budget:	$ 2,829,108
Project Start Date:	07/01/2007	Unfunded Plan:	$ -
Project Finish Date:	01/31/2018	Total Project:	$ 2,829,108

Continued improvements at John William Helton Nature Park (Helton) furthers opportunities for visitors to enjoy, appreciate and understand the San Antonio River.

Over the past several years, the River Authority has improved the 98 acres John William Helton San Antonio River Nature Park by adding a multi-use pavilion, picnic units, signage, educational panels, paddling trail access, restrooms, a playground, park trails and a riparian land management demonstration area. Additionally, River Authority staff has hosted numerous community programs and events. Funding included in this project allows for continued development of the park to increase usage.

Since FY 2006/07, the park has been master planned and elements of the plan implemented. This nature park serves as a paddling trail put-in and take-out site, an active recreation site for the area's youth soccer association and archery club, and also serves as a nature learning center with various programs hosted throughout the year. In FY 2017/18, the River Authority will improve the park entrance on FM 775 to meet Texas Department of Transportation requirements and increase the safety of patrons to enter and leave the park. Additionally, a camping flood alert system will be installed. Finally, a barge access area will be constructed to improve the River Authority staff's ability to provide services in and along the river in this area. Operations and maintenance costs for the funded improvements are included in the FY 2017/18 Adopted Budget.

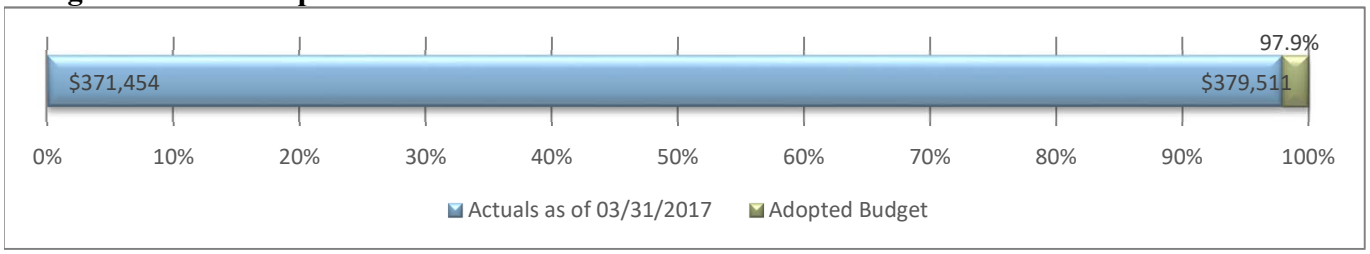
Of the total $2,829,108 Adopted Budget, $284,755 is estimated labor contribution through the River Authority General Fund.

Spending Plan of Total Project Budget

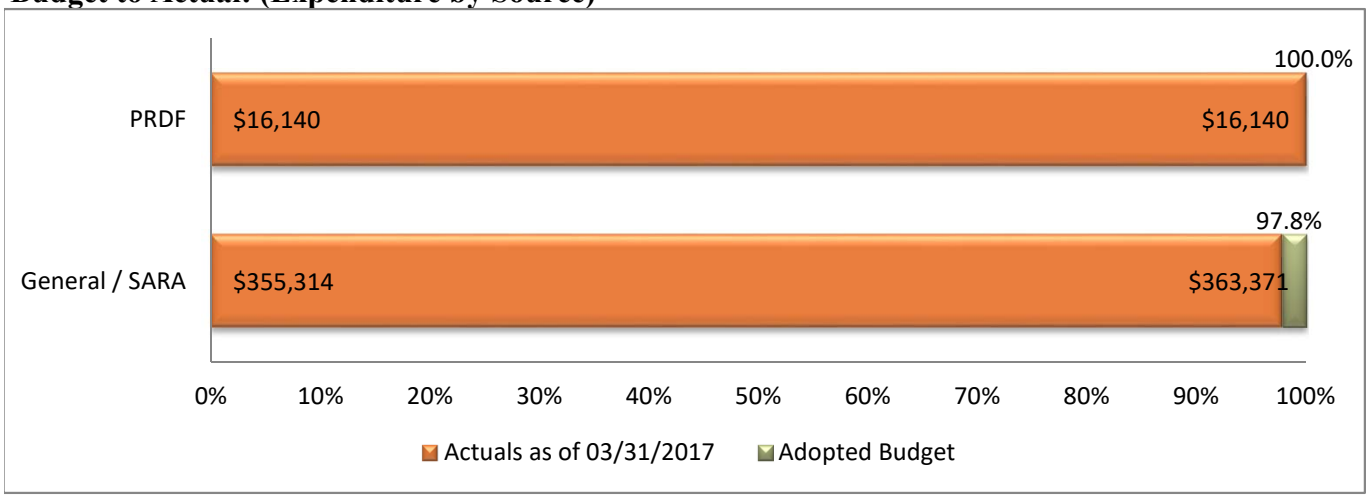
Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Construction	$ 2,484,951	$ 344,157	$ -	$ -	$ 2,829,108
Total	$ 2,484,951	$ 344,157	$ -	$ -	$ 2,829,108

Project Name: **Mann's Crossing Park on the Medina River** **Project #** **0410**

Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Mann's Crossing Park on the Medina River**		**Project #**		**0410**
Managing Department:	Watershed and Park Operations				
		Adopted Budget:	$	379,511	
Project Start Date:	07/01/2013	Unfunded Plan:	$	225,000	
Project Finish Date:	06/30/2018	Total Project:	$	604,511	

Future development of Mann's Crossing Park will promote enhanced community appreciation for and recreational usage of the Medina River and its natural resources.

Formerly referred to as the Catfish Farm/Medina Paddling Trail, the long-term vision for this property is to develop recreational enhancements while preserving the natural beauty and character of the property adjoining the Medina River. Additionally, this site will provide an access point along the Medina River for a paddling trail.

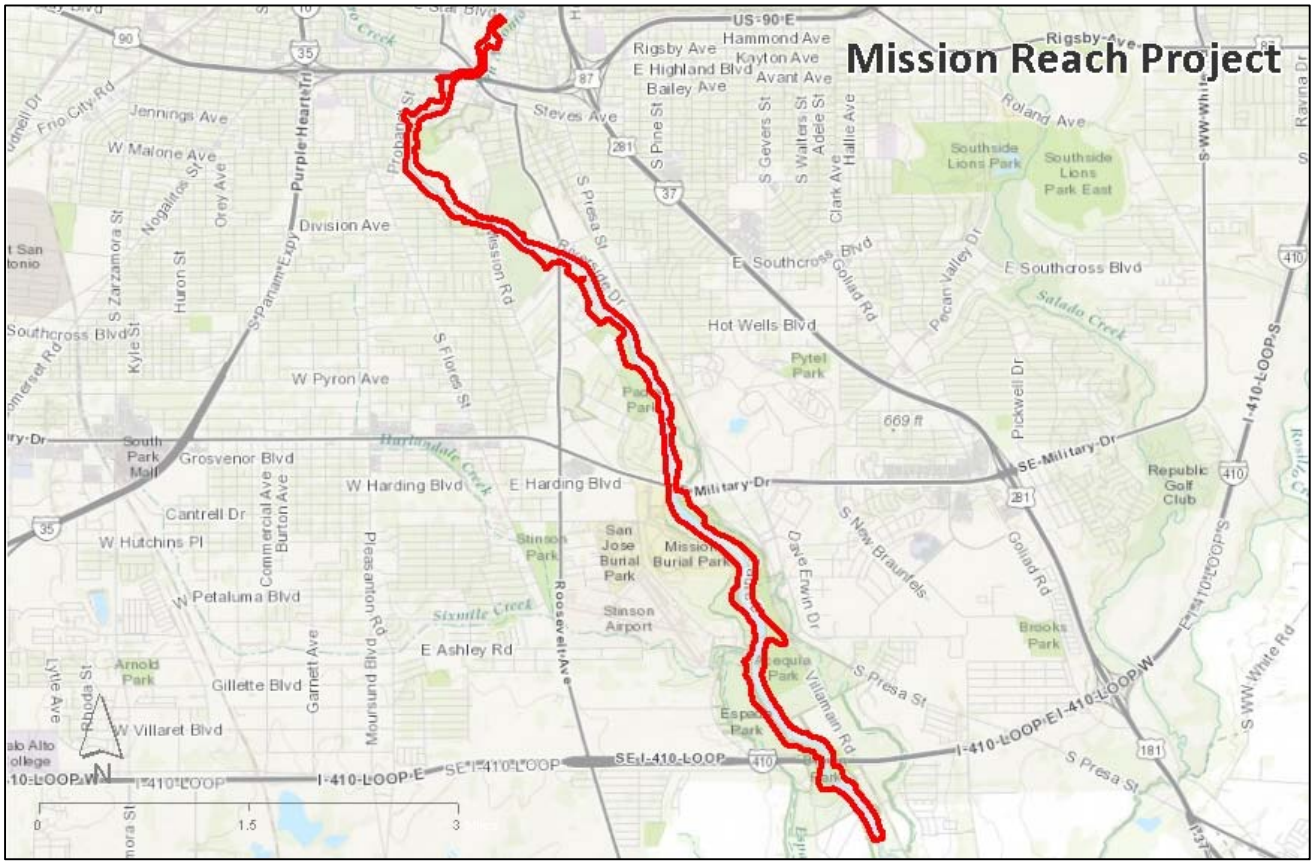
The project, in FY 2017/18, will expend staff time to investigate activities such as a vehicular park entrance and exit, and possible park master plan. Should improvements occur as a result of these planning efforts, additional operations and maintenance costs may be incurred. These are unknown at this time.

Of the total $379,511 Adopted Budget, $8,132 is estimated labor contribution through the River Authority General Fund.

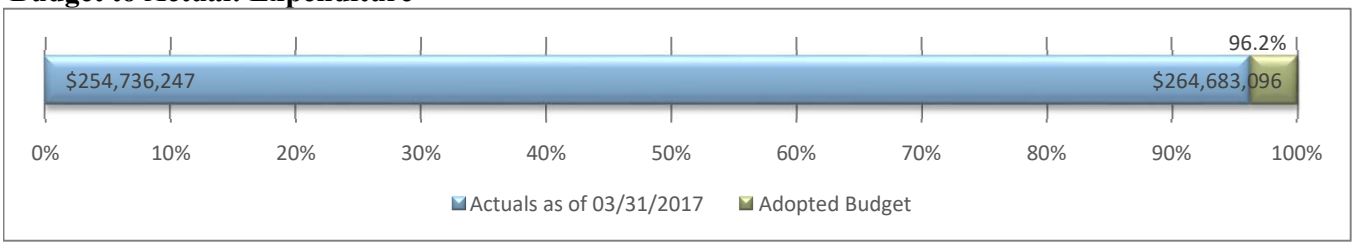
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Construction	$ 371,454	$ 8,057	$ 225,000	$ -	$ 604,511
Total	$ 371,454	$ 8,057	$ 225,000	$ -	$ 604,511

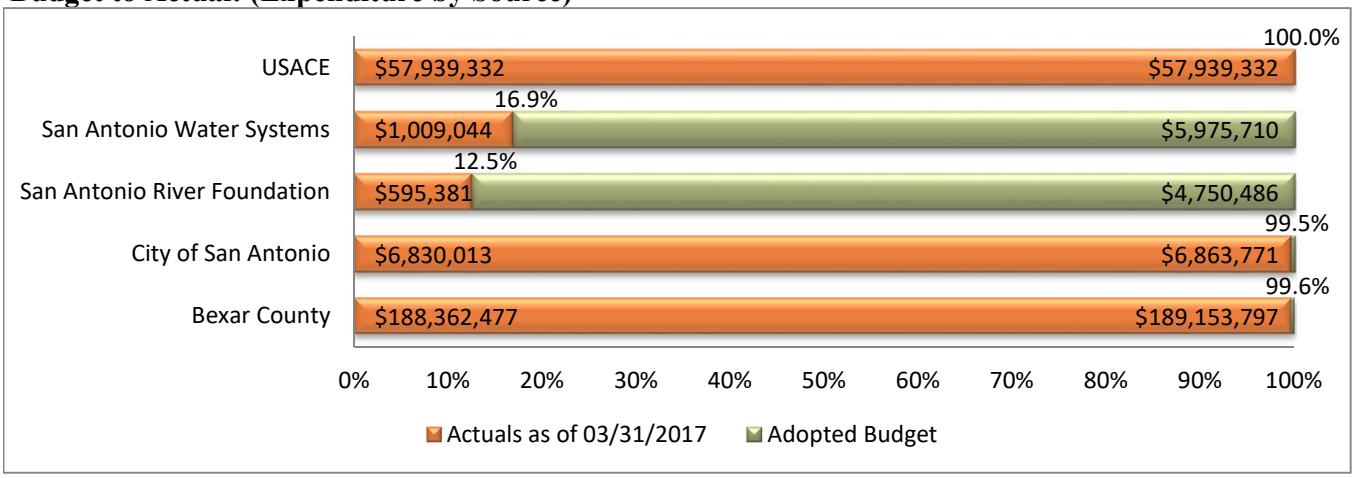
Project Name: **Mission Reach** **Project #** **0136**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Mission Reach**	**Project #**	**0136**
Managing Department:	Watershed Engineering		

		Adopted Budget:	$ 264,683,096
Project Start Date:	01/01/1998	Unfunded Plan:	$ -
Project Finish Date:	05/31/2018	Total Project:	$ 264,683,096

The Mission Reach project is a joint effort between the U.S. Army Corps of Engineers (USACE), Bexar County, City of San Antonio, and the San Antonio River Authority to provide ecosystem restoration while maintaining or improving flood reduction benefits to the San Antonio River from Lone Star Boulevard to Mission Espada. The San Antonio River Oversight Committee provided public direction and input. Preliminary authorization for the Historic Mission Reach was substantially completed in October 2003. The locally prepared design with modifications was selected by the USACE as the preferred plan; final design began in October 2004. Through the co-commitment of local and federal funding, Phase 1 construction was completed in December 2009. Phase 2 construction was completed in May of 2011 with a formal grand opening of Phases 1 and 2 in June 2011. The last portion - Phase 3 construction - was completed in August 2013.

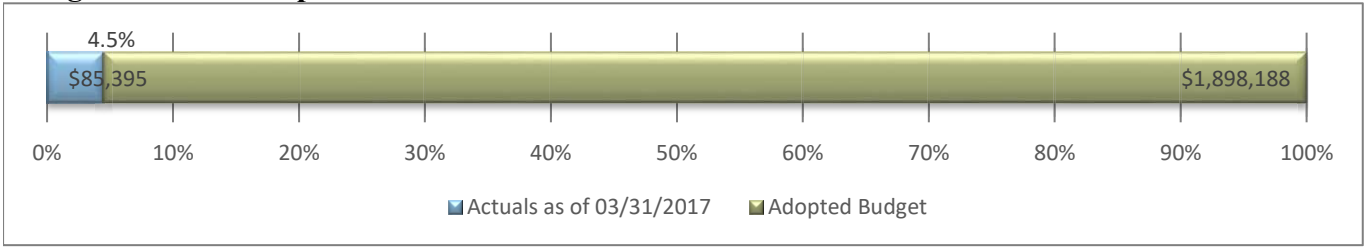
In FY 2017/18, the project team will complete a land exchange with National Park Service, and the project will close. Operations and maintenance costs for this project are included in the FY 2017/18 Adopted Budget.

Spending Plan of Total Project Budget

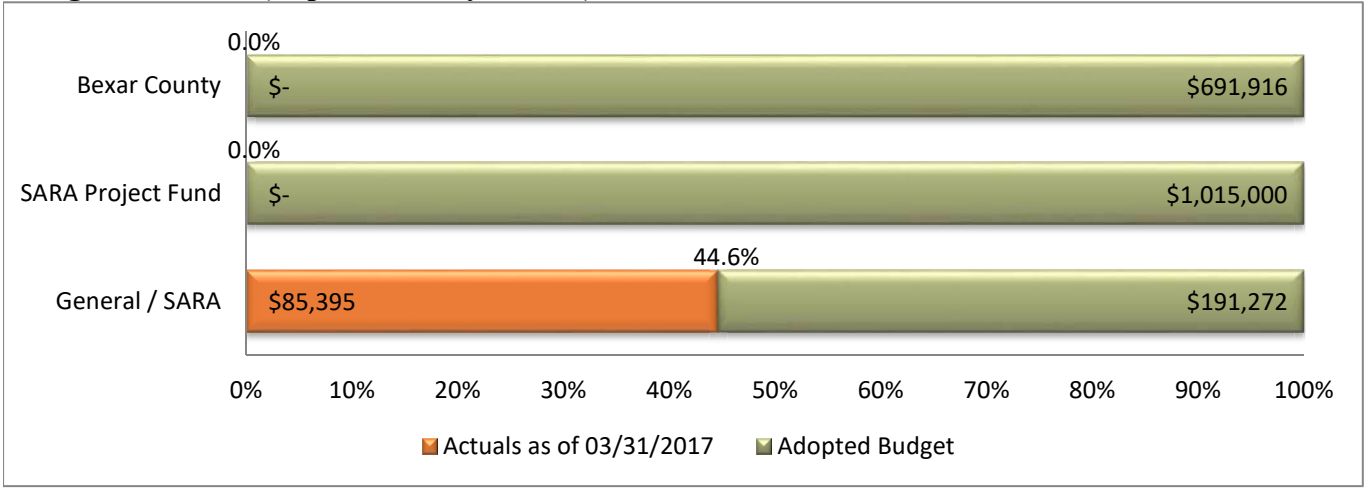
Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Right-of-Way Acquisition	$ 10,156,290	$ 45,804	$ -	$ -	$ 10,202,094
Pre-Design	2,183,170	-	-	-	2,183,170
Design	28,300,366	-	-	-	28,300,366
Construction	214,096,422	9,901,045	-	-	223,997,467
Total	$ 254,736,247	$ 9,946,849	$ -	$ -	$ 264,683,096

Project Name: **Mission Reach Erosion Repairs** **Project #** **0528**

Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **Mission Reach Erosion Repairs** **Project #** **0528**
Managing Department: Watershed Engineering/ Watershed and Park Operations

		Adopted Budget:	$ 1,898,188
Project Start Date:	03/01/2016	Unfunded Plan:	$ -
Project Finish Date:	11/28/2018	Total Project:	$ 1,898,188

The Mission Reach Erosion Repairs project contributes to the health and safety of the San Antonio River by protecting the hike and bike trails and reducing sediment loads within the San Antonio River along the Mission Reach.

The project funds repairs to address erosion at various locations along the Mission Reach. Two types of repairs are funded – larger, specific projects that address major erosion issues in defined locations (generally requiring outside design and construction services) and smaller area repairs that can be accomplished by staff with outside assistance in some locations.

The larger project areas for erosion repair include Roosevelt Park, downstream of Mitchell Street, the confluence with San Pedro Creek, the rock wall upstream of Mission Road, downstream of Mission Parkway, upstream of Steves Avenue, upstream of Theo Avenue, and downstream of the Espada Dam. In FY 2016/17, repairs to three locations and four sites (one location was addressed on both sides of the river) were designed and constructed. The current erosion repair locations funded by Bexar County include the confluence with San Pedro Creek (east and west bank) and downstream of the Espada Dam. Erosion repairs funded by the San Antonio River Authority include the rock wall upstream of Mission Road, Roosevelt Park, downstream of Mission Parkway, and upstream of Steves Avenue.

In FY 2017/18, larger erosion repairs are planned to an area downstream of San Juan Dam, a second site downstream of Mitchell Street, upstream of Theo Avenue, and downstream of Camino Coahuilteca. The site near San Juan Dam is scheduled to be funded by Bexar County through the Operations and Maintenance Interlocal Agreement. The remaining locations will be funded by the River Authority. Smaller erosion repair locations will be prioritized and addressed as needed. The project is funded by the San Antonio River Authority Project Fund ($1,015,000) and the Bexar County Capital Projects Fund ($691,916). Operations and maintenance costs for these improvements are included in the FY 2017/18 Adopted Budget.

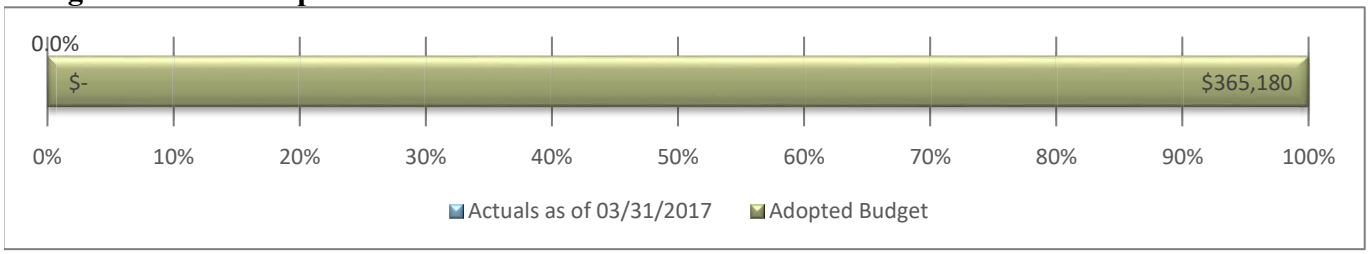
Of the total $1,933,830 Adopted Budget, $91,272 is estimated labor contribution through the River Authority General Fund.

Spending Plan of Total Project Budget

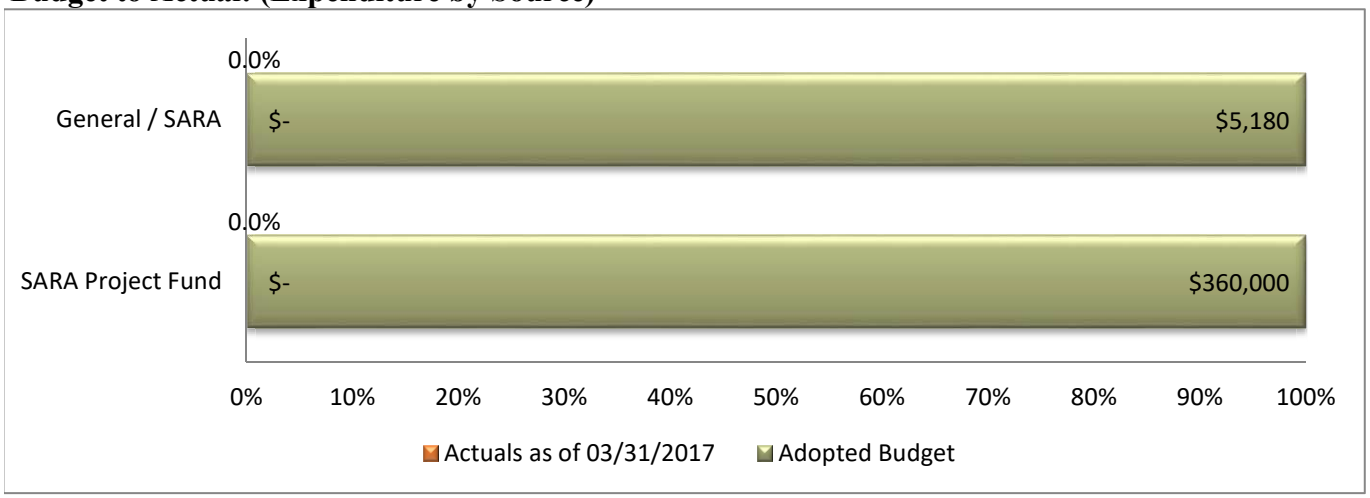
Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Design	$ 62,706	$ 37,294	$ -	$ -	$ 100,000
Construction	-	1,706,916	-	-	1,706,916
Administration	22,689	68,583	-	-	91,272
Total	$ 85,395	$ 1,812,793	$ -	$ -	$ 1,898,188

Project Name: **Museum Reach Electrical Infrastructure Upgrade** **Project #** **0584**

Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Museum Reach Electrical Infrastructure Upgrade**		**Project #**	**0584**
Managing Department:	Watershed and Park Operations			
		Adopted Budget:	$	365,180
Project Start Date:	07/01/2017	Unfunded Plan:	$	-
Project Finish Date:	06/30/2018	Total Project:	$	365,180

The electrical infrastructure at Museum Reach will be updated to accommodate additional events and activities, as well as increase electrical efficiency. As the River of Lights event has increased over the years, light poles have been modified with electrical outlets to support additional holiday lighting. With this past year's event, the electrical infrastructure reached capacity and there is a need for additional outlets and possibly new circuits.

In addition to the holiday lighting needs, improved lighting is sought throughout the Museum Reach, which may include light-emitting diode (LED) lighting and additional outlets.

In this first phase, electrical improvements will be made from Lexington to Brooklyn, including lighting and light pole improvements, new circuits and additional outlets.

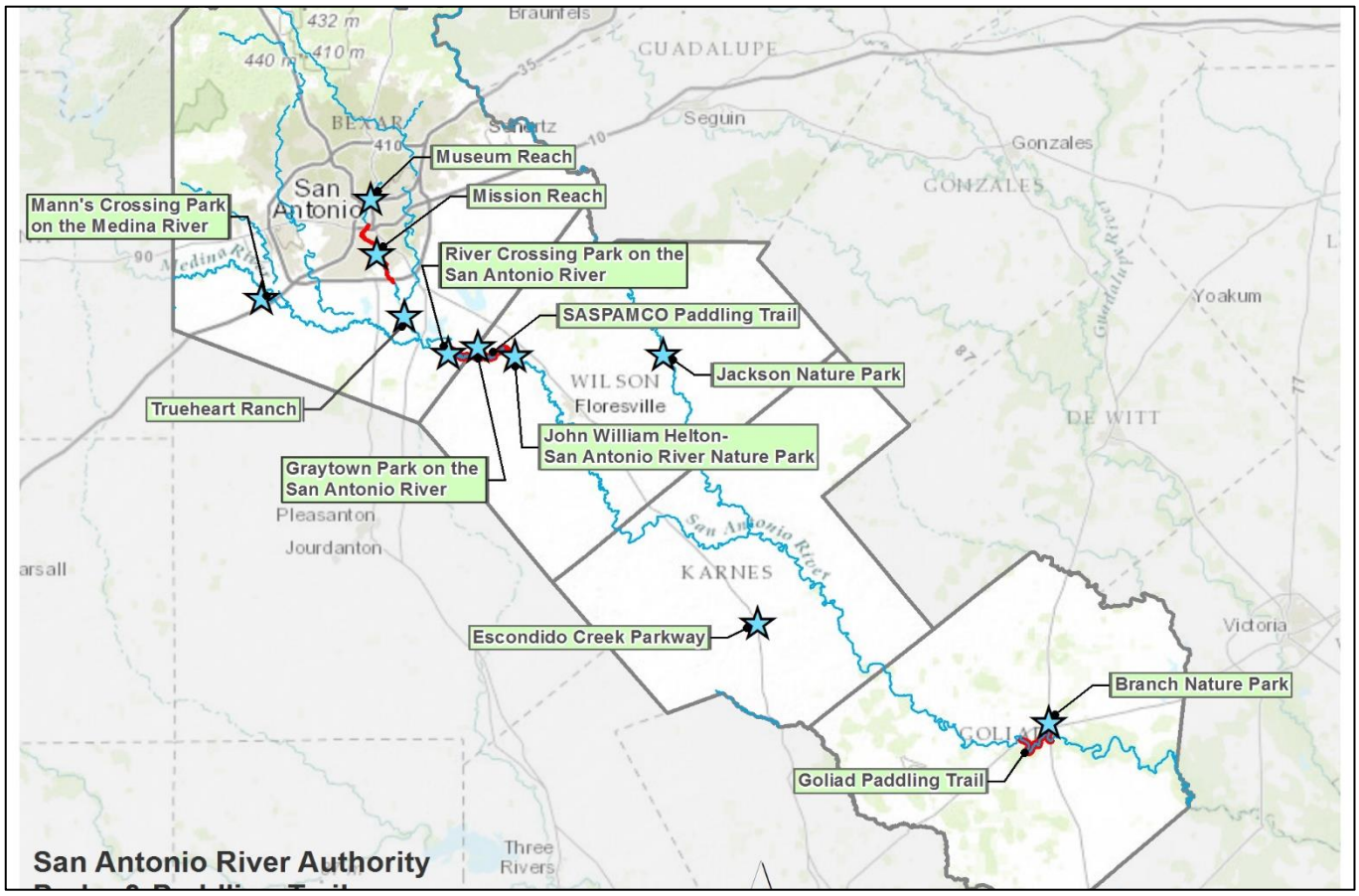
In FY 2017/18, site plans will be completed, an electrical load study will be done and the infrastructure from Lexington to Brooklyn will be updated. The operations and maintenance expenditures will increase as a result of additional lighting. However, some efficiencies may also be achieved through the project that may reduce existing costs, offsetting to some extent the costs associated with expanding the system.

Of the total $365,180 Adopted Budget, $5,180 is estimted labor contribution through the River Authority General Fund.

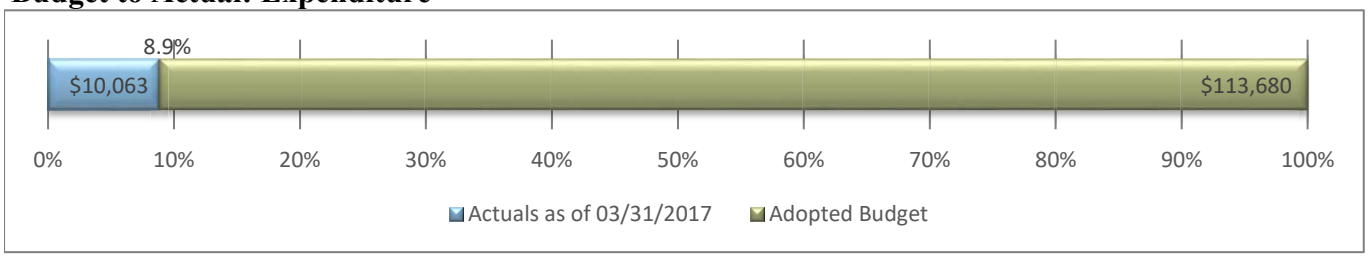
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Operations	$ -	$ 365,180	$ -	$ -	$ 365,180
Total	$ -	$ 365,180	$ -	$ -	$ 365,180

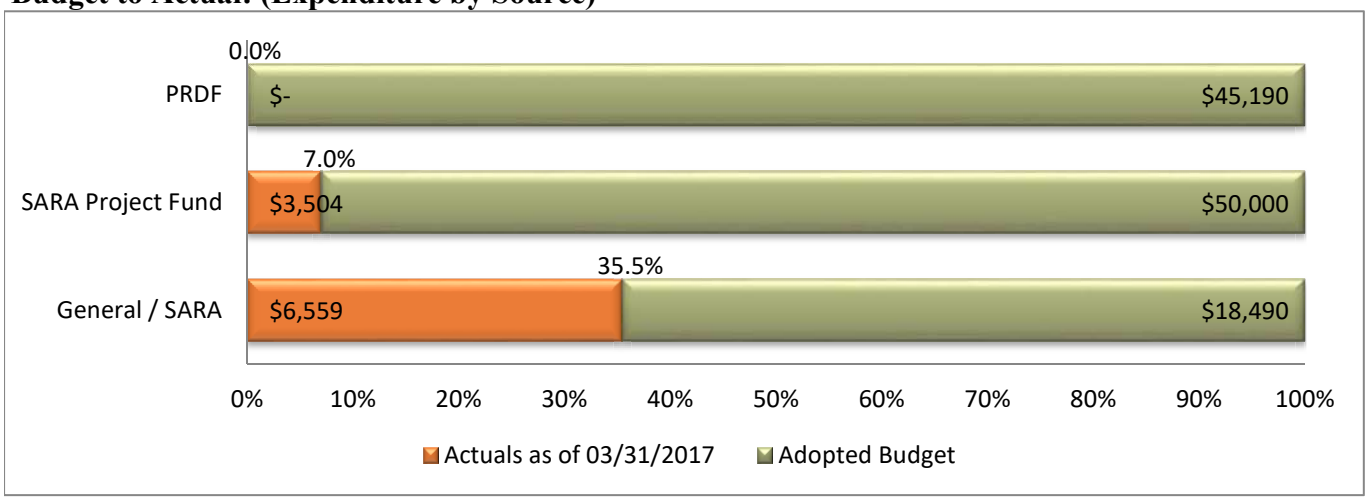
Project Name: **Nature Park Signage Development** **Project #** **0501**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Nature Park Signage Development**		**Project #**	**0501**
Managing Department:	Watershed and Park Operations			
		Adopted Budget:	$	113,680
Project Start Date:	07/01/2015	Unfunded Plan:	$	-
Project Finish Date:	06/30/2018	Total Project:	$	113,680

Development of park signage enhances visitors' enjoyment, understanding and knowledge of the park as well as identifying other park opportunities/locations the River Authority has to offer the public. While enjoying the parks, visitors can develop an enhanced appreciation for the San Antonio River and its tributaries.

This project designs, constructs, and installs a holistic signage package that is consistent between all of the current River Authority owned nature parks; it also provides templates for all future park development. Signage includes: wayfinding signage to the park, gateway signs, maps (both to the park and within each park, print and online), directional signage for attractions, interpretive signage, and coordination with appropriate entities for applicable state and federal signage for national and state designations (i.e. El Camino Real National Historic Trail, Texas Inland Paddling Trail).

Since the start of the project in FY 2015/16, park signage design standards have been established, signs fabricated and installed in Branch River Park and John William Helton Nature Park. In FY 2017/18, additional signs ordered in FY 2016/17, will be installed at John William Helton San Antonio River Nature Park, Graytown Park on the San Antonio River, Jackson Nature Park, Branch River Park, and the Highway 97 San Antonio River access point. Operations and maintenance costs associated with this signage are included in the FY 2017/18 Adopted Budget.

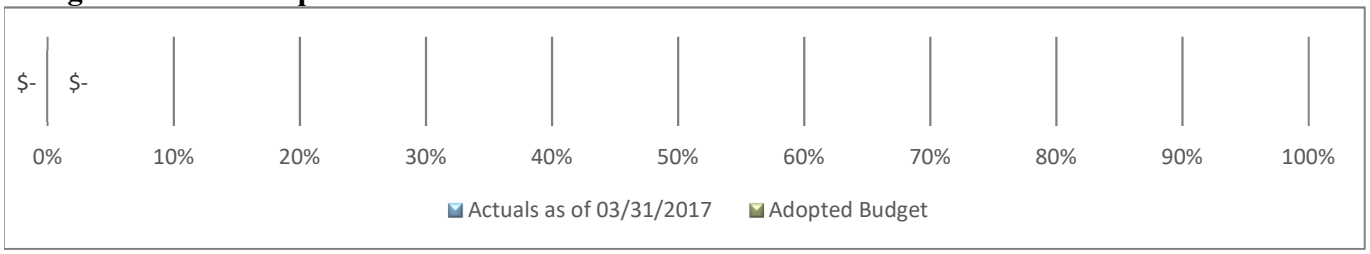
Of the total $113,680 Adopted Budget, $18,490 is estimated labor contribution through the River Authority General Fund.

Spending Plan of Total Project Budget

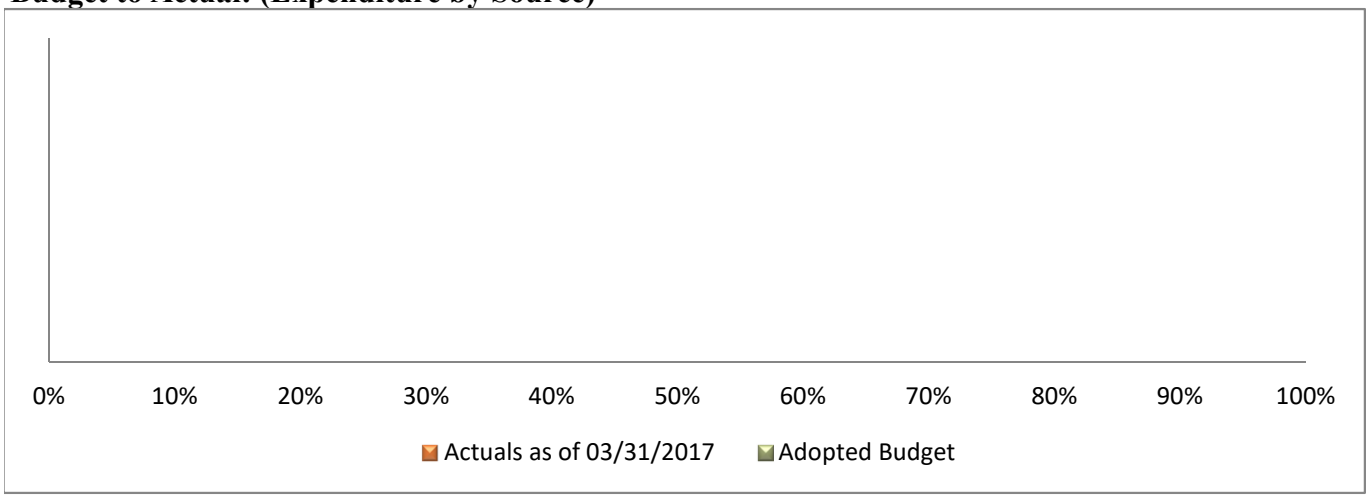
Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Equipment	$ 3,504	$ 91,686	$ -	$ -	$ 95,190
Administration	6,559	11,931	-	-	18,490
Total	$ 10,063	$ 103,617	$ -	$ -	$ 113,680

Project Name: River Crossing Park River Access Reconstruction **Project #** 0576

Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**River Crossing Park River Access Reconstruction**		**Project #**		**0576**
Managing Department:	Watershed and Park Operations				
		Adopted Budget:	$	-	
Project Start Date:	07/01/2017	Unfunded Plan:	$	-	
Project Finish Date:	06/30/2019	Total Project:	$	-	

River Crossing Park serves as the trail head of the SASPAMCO Paddling Trail located in Bexar County near the City of Elmendorf. Recent storm events damaged the river access and the park is currently closed until river access can be provided. This access helps encourage use of the park and trail by citizens and community groups.

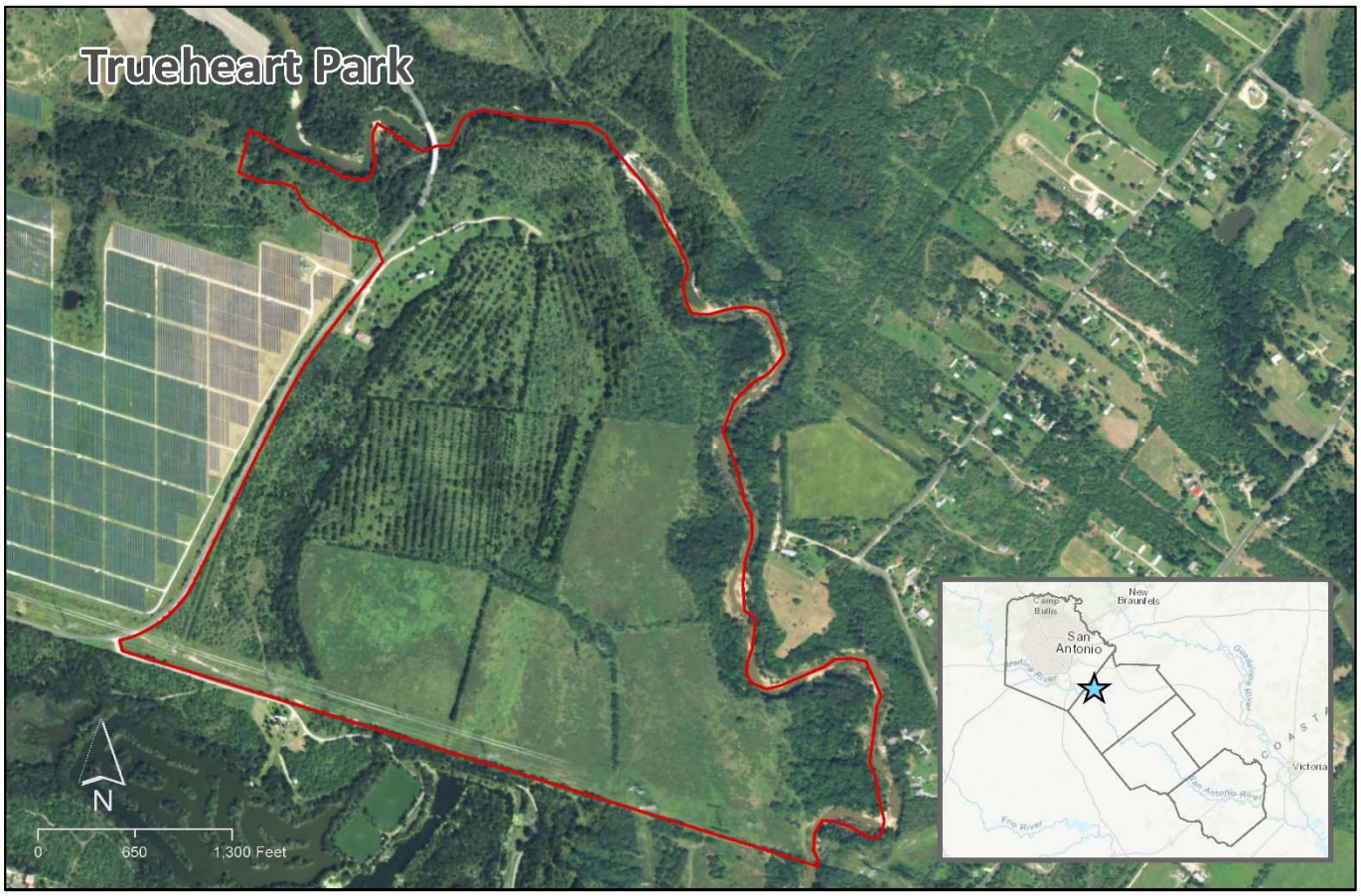
The River Crossing Park sustained considerable damage to the river access stairs and bank during recent storm/high water events. The bank was eroded and the steps were washed away. The project will examine design solutions to stabilize the banks and reinstall the steps returning the River Crossing Park back to full use by the public.

In FY 2017/18, staff will evaluate options for returning public river access to the park. The proposed solution will be designed to withstand future high water events. Operations and maintenance costs associated with a crossing in this area are included in the FY 2017/18 Adopted Budget.

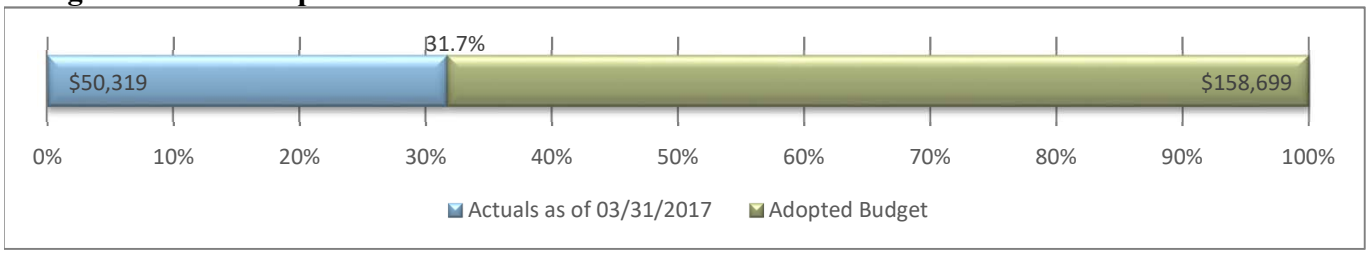
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Design	$ -	$ -	$ -	$ -	$ -
Construction	-	-	-	-	-
Total	$ -	$ -	$ -	$ -	$ -

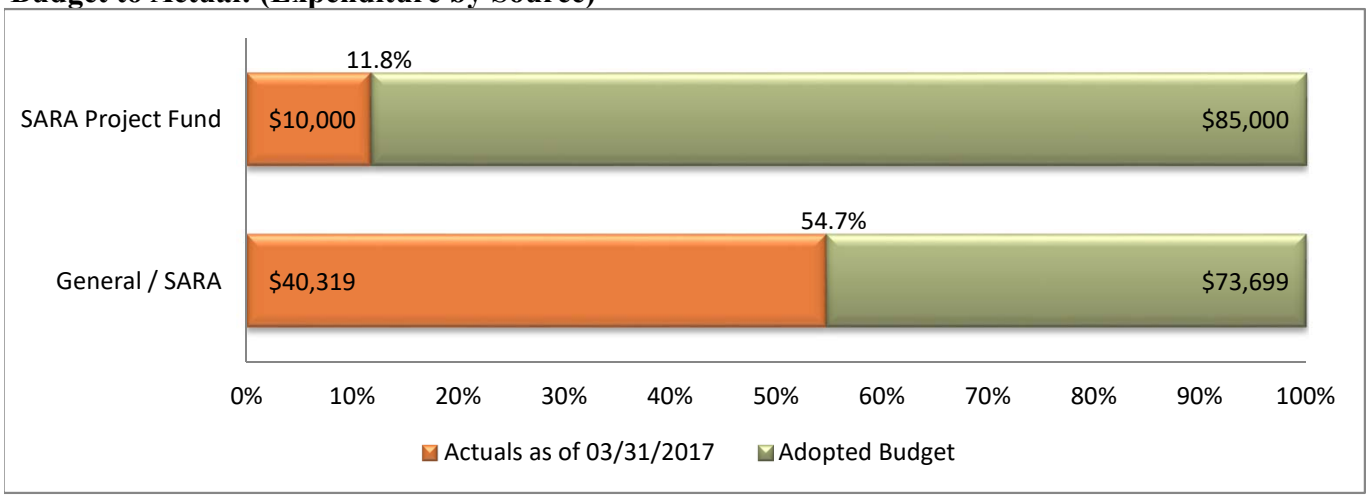
Project Name: **Trueheart Park** **Project #** **0436**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Trueheart Park**	**Project #**	**0436**
Managing Department:	Watershed and Park Operations		

		Adopted Budget:	$ 158,699
Project Start Date:	04/01/2014	Unfunded Plan:	$ 225,000
Project Finish Date:	06/30/2019	Total Project:	$ 383,699

This future park will provide opportunities for visitors to recreate and increase awareness and appreciation of the San Antonio River.

Trueheart Park, located in southern Bexar County off Blue Wing Road along the San Antonio River, was acquired to improve and expand nature park and paddling trail opportunities as identified in the Nature Based Park Resources Plan Update. This future 300 plus acre park will allow the River Authority to offer increased nature-based recreational activities and park programs for the community. In FY 2015/16, staff worked to develop a conservation plan for the park.

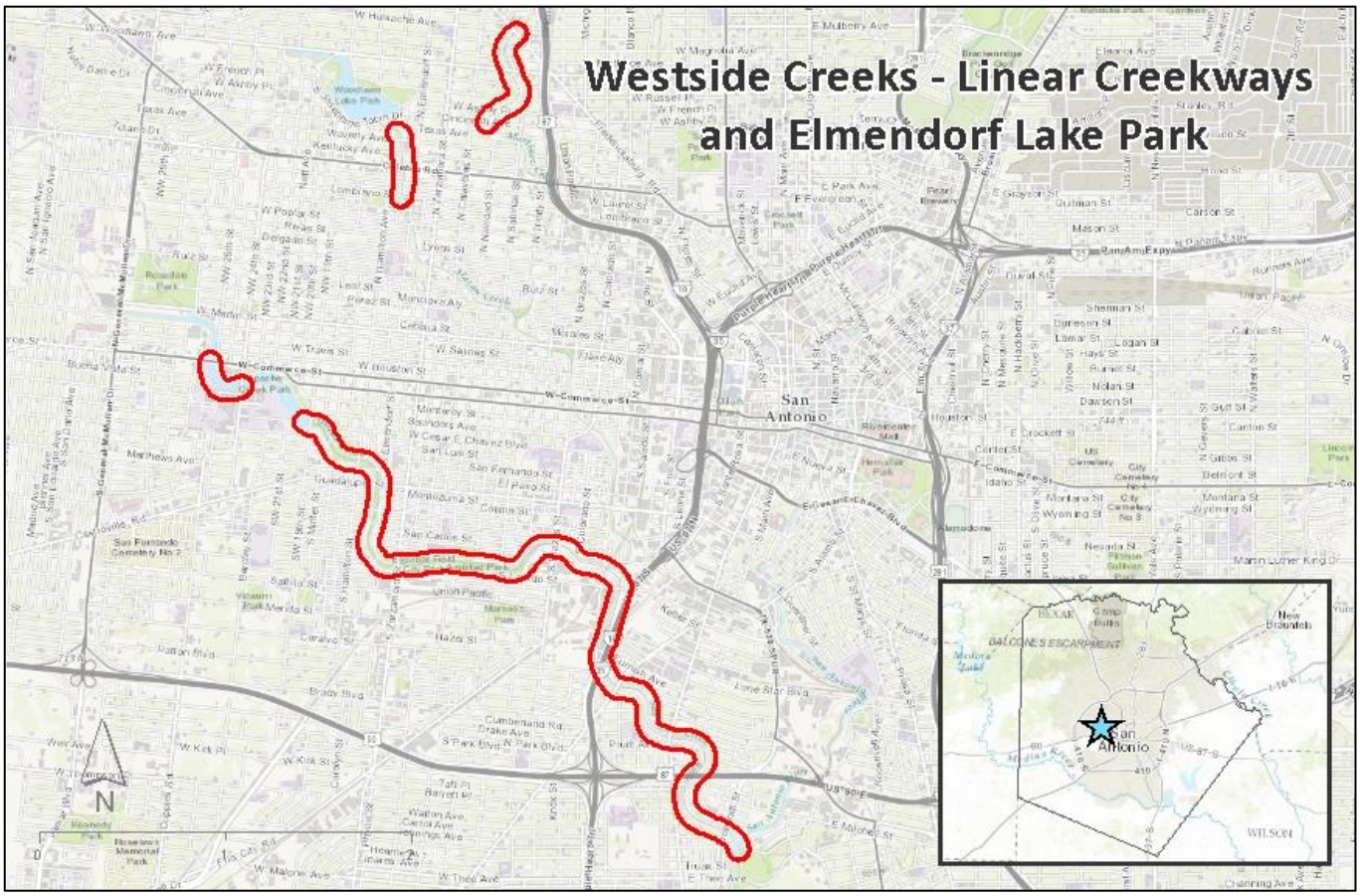
In FY 2014/15, the River Authority acquired the property and master planning efforts ensued. A conservation plan was funded in FY 2015/16 and in FY 2017/18, funding will be used to increase site security and protection of the historic buildings according to the Conservation Plan. Future amenities may include paddling trail infrastructure, roadways, and other recreational enhancements will be requested. Operations and maintenance costs associated with this project are included in the FY 2017/18 Adopted Budget.

Of the total $158,699 Adopted Budget, $33,380 is estimated labor contribution through the River Authority General Fund.

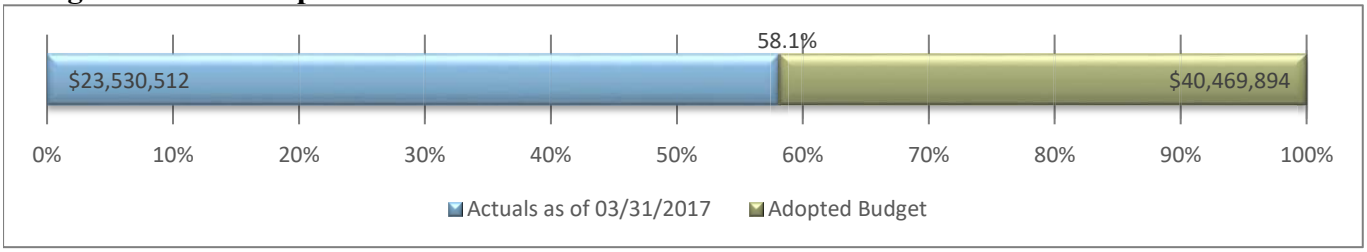
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Construction	$ -	$ -	$ 75,000	$ -	$ 75,000
Operations	48,415	75,000	150,000	-	273,415
Equipment	-	-	-	-	-
Administration	1,904	33,380	-	-	35,284
Total	$ 50,319	$ 108,380	$ 225,000	$ -	$ 383,699

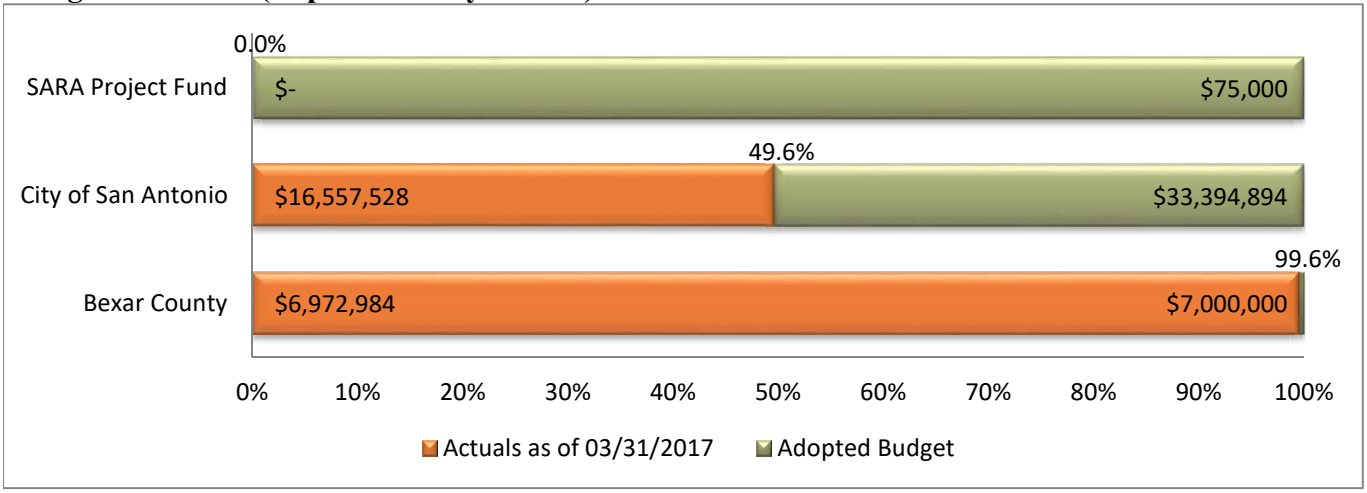
Project Name: WSC Linear Creekways Trails and Elmendorf Lake Park **Project #** 0380



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**WSC Linear Creekways Trails and Elmendorf Lake Park**		**Project #**	**0380**
Managing Department:	Watershed Engineering			
		Adopted Budget:	$	40,469,894
Project Start Date:	07/01/2012	Unfunded Plan:	$	-
Project Finish Date:	03/05/2021	Total Project:	$	40,469,894

The Westside Creeks Restoration Project Conceptual Plan, adopted in June 2011 by the River Authority's Board of Directors, has served as the catalyst for the Elmendorf Lake Park Improvements project, Linear Creekway Trails project, United States Army Corps of Engineers General Reevaluation Report, and the San Pedro Creek Improvements Project. The community-based plan, overseen by the Westside Creeks Restoration Oversight Committee, set out to develop concepts to restore the Alazan, Apache, Martinez, and San Pedro Creeks ecosystem, maintain or enhance the current flood components of these creeks, improve water quality, and provide opportunities for people to enjoy these creeks. Together, these projects advance the goals of watershed health and safety, community appreciation and recreation, and implanting watershed solutions.

Through the voter approved Proposition 2 in 2010, the City of San Antonio funded segments of linear creekway trails along the Westside Creeks. The Apache and San Pedro Creeks trail connected Elmendorf Lake Park to the San Antonio River. The 10-foot wide trail included amenities such as shade structures, drinking fountains, signage, and seating. The Alazan Creek trail connected Woodlawn Lake Park to West End Park, and along Martinez Creek, the trail connected Fredericksburg Road to Cincinnati Avenue. The Martinez Creek segment included multimodal connections by linking VIA Metropolitan Transit's Primo bus station to the creekway trail and a bike lane along Cincinnati Avenue that extends into Woodlawn Lake Park. The design and construction of these improvements was managed by the River Authority and completed in 2016. In May 2015, the voters approved another proposition that funds additional Linear Creekway Trails segments along the Westside Creeks. The River Authority manages these projects to completion.

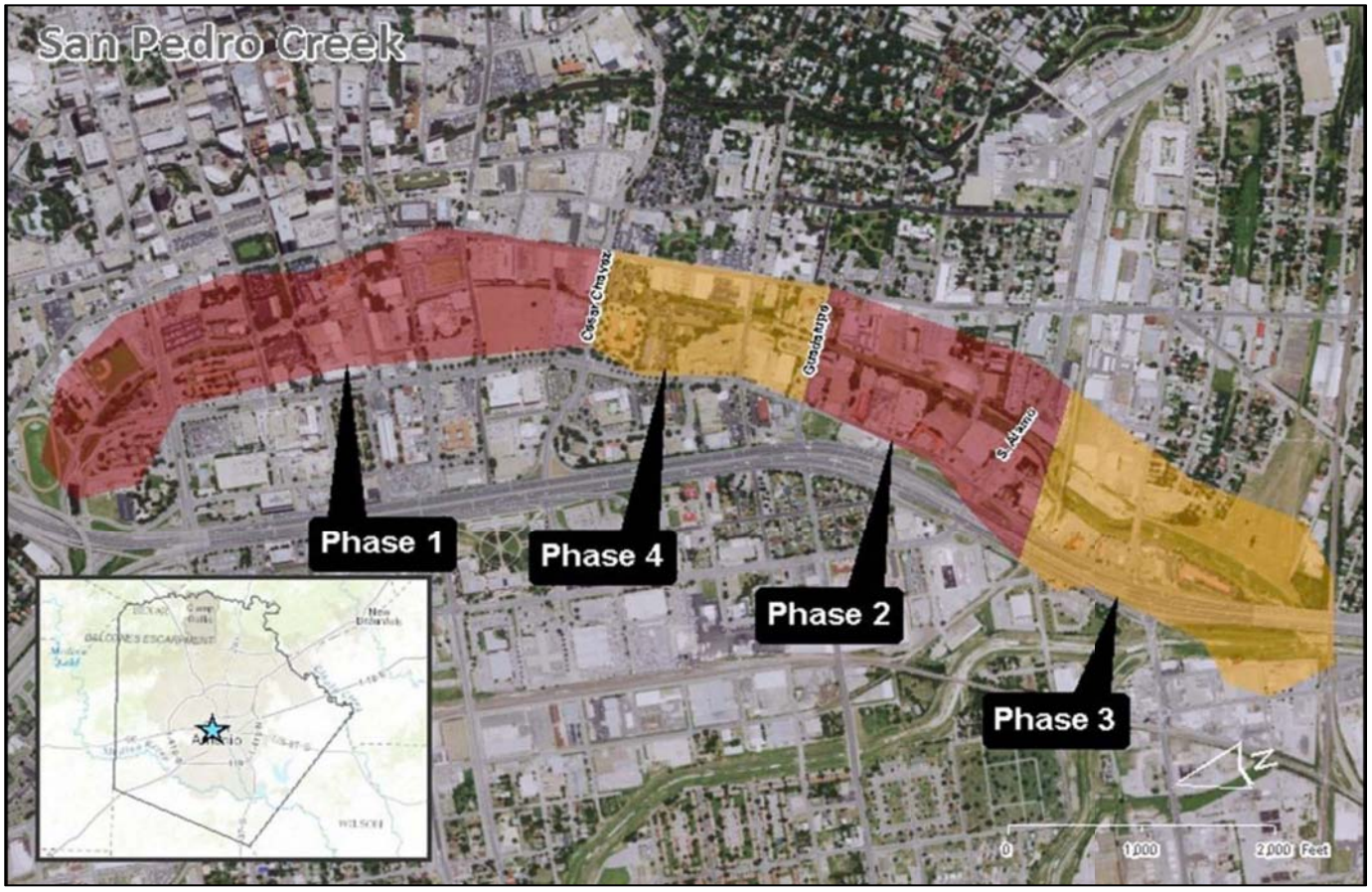
The Elmendorf Lake Park Improvements Project, completed in 2016, was approved by City of San Antonio voters in 2012 with the passage of the 2012 bond, and received additional funding from Bexar County for flood control and water quality enhancements around the lake. The improvements included recreational enhancements such as shade structures, a playground and splash pad, additional bridge crossings over the lake, a pier, trails, picnic areas throughout the park and an improved park plaza for large gatherings. In addition to the recreational elements, water quality best management practices (BMPs) were installed and included fountains and aerators in the lake, rain gardens and bioswales, shoreline invasive plant removal, and a recirculating water feature.

In FY 2017/18, the River Authority will administer the design and future construction of a second phase of trails along the Alazan, Martinez, and Zarzamora Creeks. The Alazan Creek trail will extend from Lombrano Street to the confluence with Apache Creek near Laredo Street. The Martinez Creek trail will extend from Cincinnati Avenue to the confluence of Alazan Creek at Mario Farias Park. The Zarzamora Creek trail will extend from General McMullen to Alderete Park, located on Aurora Avenue and NW 36th Street. These trails will be 10-feet in width and will include amenities such as trail heads, seating, and signage. Construction is projected to begin on the first two segments of these improvements in January 2019.

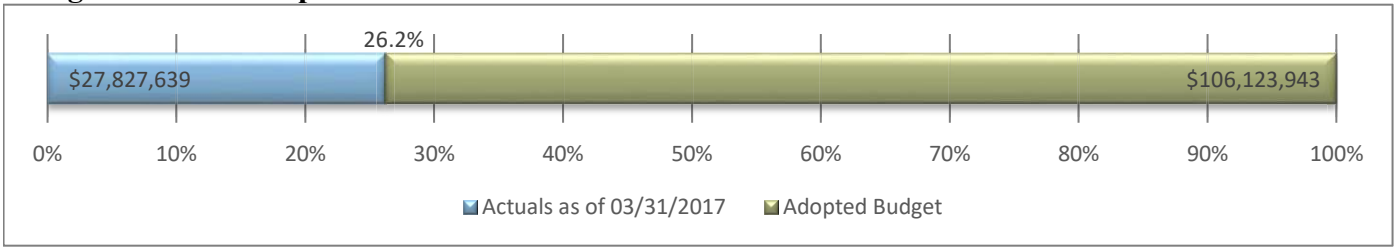
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	Succeeding 2018/19	Succeeding from 2019	Total
Right-of-Way Acquisition	$ 204,346	$ -	$ -	$ -	$ 204,346
Design	2,916,985	14,484,634	-	-	17,401,619
Construction	19,501,923	1,509,938	-	-	21,011,861
Administration	907,259	944,810	-	-	1,852,069
Total	$ 23,530,512	$ 16,939,382	$ -	$ -	$ 40,469,894

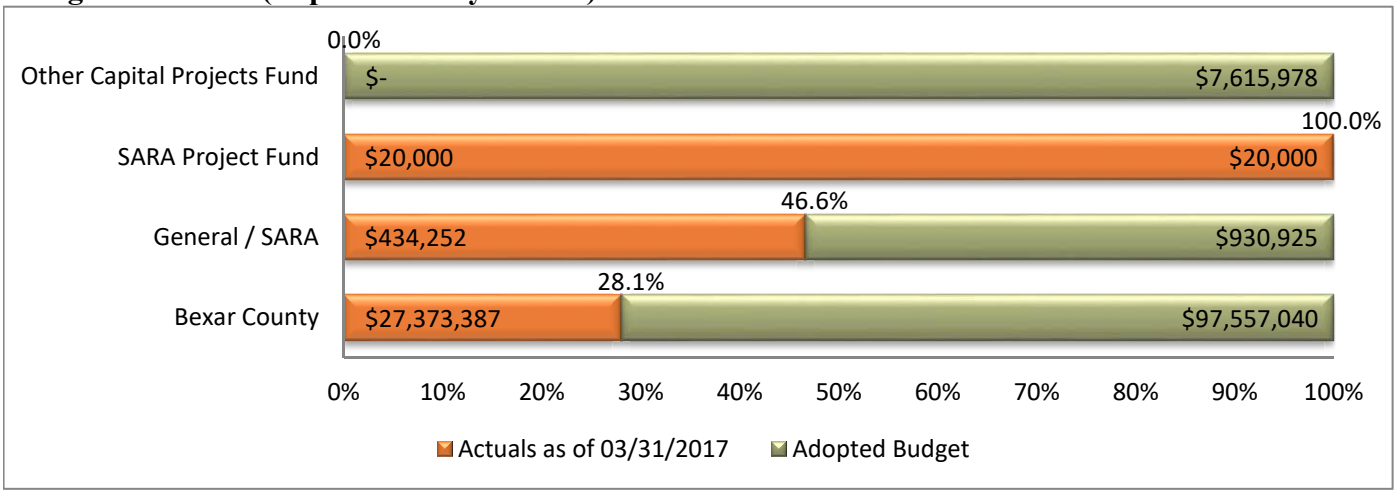
Project Name: **Westside Creeks San Pedro Creek** **Project #** **0378**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Westside Creeks San Pedro Creek**	**Project #**	**0378**
Managing Department:	Watershed Engineering		

		Adopted Budget:	$ 106,123,943
Project Start Date:	08/01/2012	Unfunded Plan:	$ 74,491,063
Project Finish Date:	08/28/2018	Total Project:	$ 180,615,006

Bexar County and the River Authority, in coordination with the City of San Antonio, are completing the first phase of the San Pedro Creek Improvements Project, which will transform the creek to reflect its place in our cultural history, improve its function in flood control, revitalize natural habitat and water quality, and promote economic development. Under the construction manager at risk contract for this project, construction in Segment 1 of Phase 1 has begun even as design elements are being finalized. The project starts at the tunnel inlet near Fox Tech High School and winds through the western side of downtown to the creek's confluence with the Alazan and Apache Creeks. The project includes four miles of trails and eleven acres of landscaped area and will remove approximately 30 acres and 38 adjacent structures from the 100-year flood plain. Through partnerships, this project is diversifying and leveraging funding and building upon employee expertise.

Bexar County and the River Authority authorized the use of an alternative delivery method, construction manager at risk (CMAR), in December 2015 to maintain the project schedule. The CMAR was hired in June 2016. Also in June 2016, Bexar County entered into an agreement with the River Authority to manage the construction of the project. Segment 1 of Phase 1, between the San Pedro Creek flood control inlet tunnel and Houston Street, will be completed by May 2018 in celebration of the 300th anniversary of the City of San Antonio.

The project's design progressed while construction began in FY 2016/17. Construction on the utilities in Phase 1 began in late December of 2016 and full project construction began in January of 2017. The 100 percent design of Phase 1 and 2 will be completed by July 2017.

In FY 2017/18, the project will complete all construction of Segment 1, Phase 1 in time for the City of San Antonio's tricentennial celebration in May 2018, and will begin construction of Phases 1 and 2, to be complete by mid-2019. The San Antonio River Authority will provide operations and maintenance along this newly developed area. The costs are still being finalized and negotiated with the City of San Antonio. Estimated costs for operation and maintenance is approximately $2 million. The activity will require the addition of personnel as well as contraction services and supplies expenditures.

Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Right-of-Way Acquisition	$ 2,628,873	$ 3,013,544	$ 25,802,511	$ -	$ 31,444,928
Pre-Design	685,925	30,000	-	-	715,925
Design	16,235,301	171,605	-	-	16,406,906
Construction	7,839,213	74,584,482	48,688,552	-	131,112,247
Administration	438,327	496,673	-	-	935,000
Total	$ 27,827,639	$ 78,296,304	$ 74,491,063	$ -	$ 180,615,006

SAN ANTONIO
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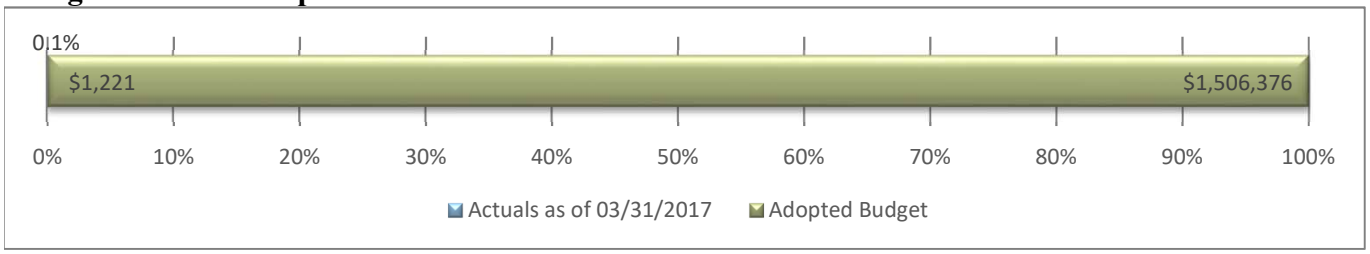
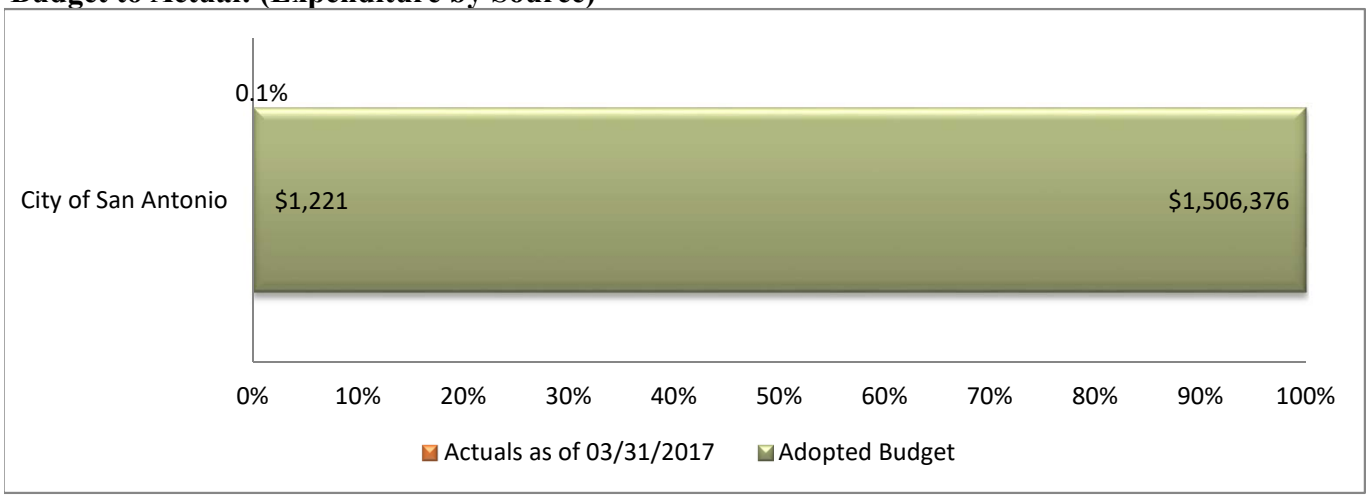
Project Name: **Broadway Underpass** **Project #** **0561**

Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Broadway Underpass**	**Project #**	**0561**
Managing Department:	Watershed Engineering		

		Adopted Budget:	$ 1,506,376
Project Start Date:	10/31/2016	Unfunded Plan:	$ -
Project Finish Date:	01/16/2018	Total Project:	$ 1,506,376

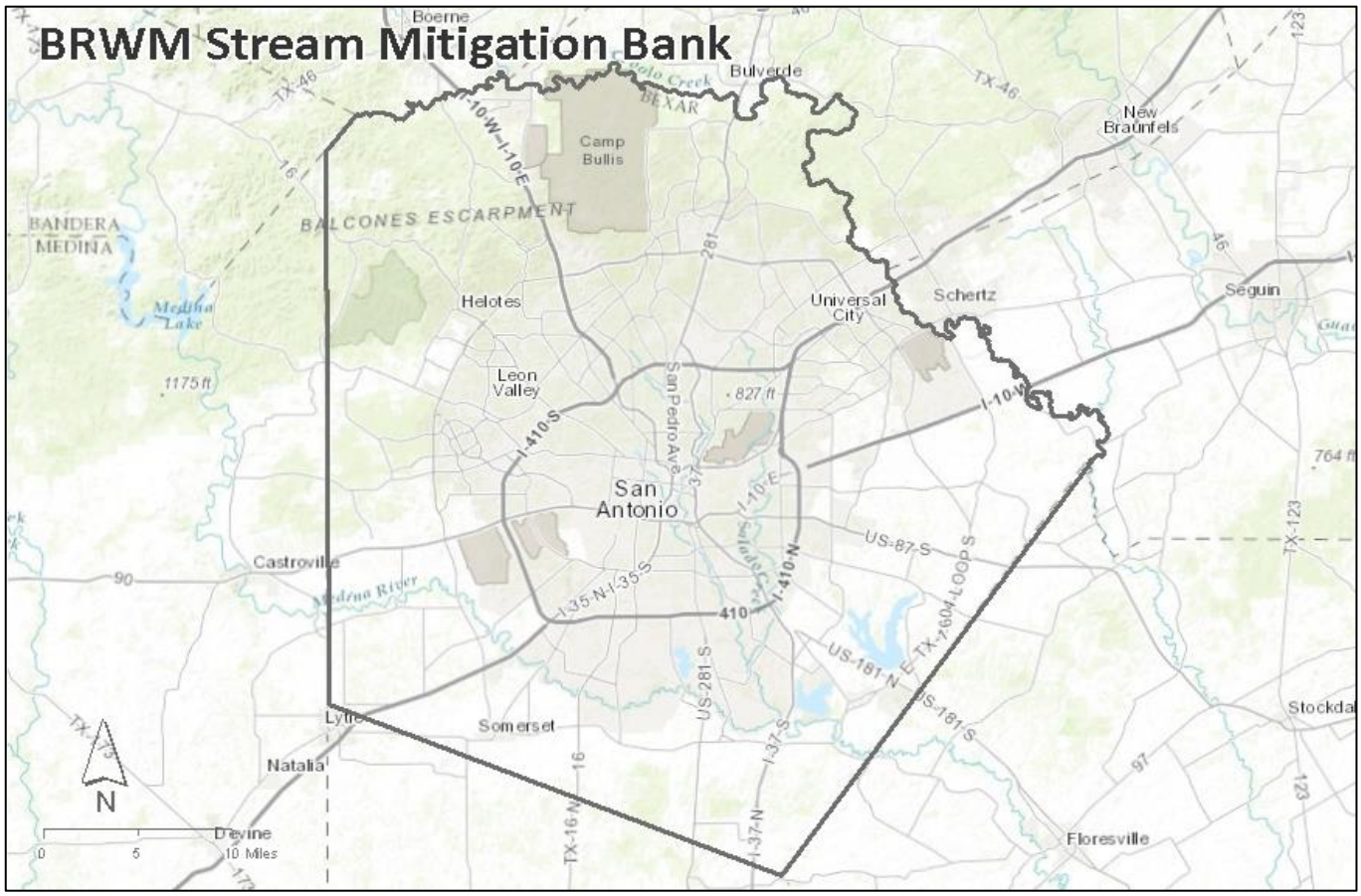
The River Authority, on behalf of the City of San Antonio, is overseeing the design and construction of a parking area under the IH-35/IH-37 interchange. The parking lot includes low impact development (LID) features that treat stormwater. Following construction, the River Authority will operate and maintain the LID features.

The parking area will provide access to the river and thereby enhance community appreciation and recreation. The LID features will provide watershed solutions by treating stormwater from impervious surfaces. In FY 2017/18, the project will be constructed. The River Authority will provide operations and maintenance services for these improvements through an interlocal agreement with the City of San Antonio. The net cost to the River Authority is $0 as the full cost of the effort will be reimbursed by the City of San Antonio.

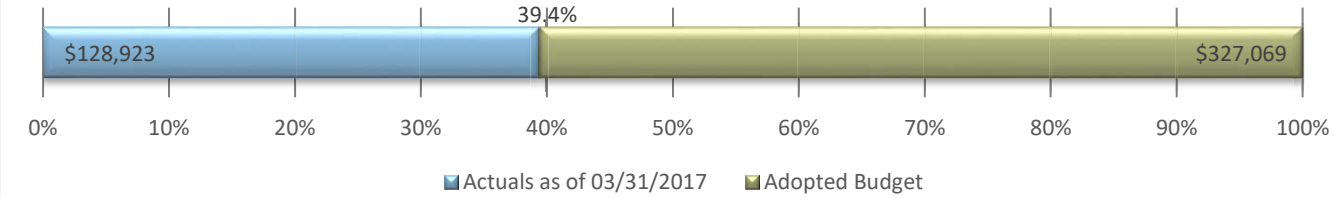
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Construction	$ 1,221	$ 1,505,155	$ -	$ -	$ 1,506,376
Total	$ 1,221	$ 1,505,155	$ -	$ -	$ 1,506,376

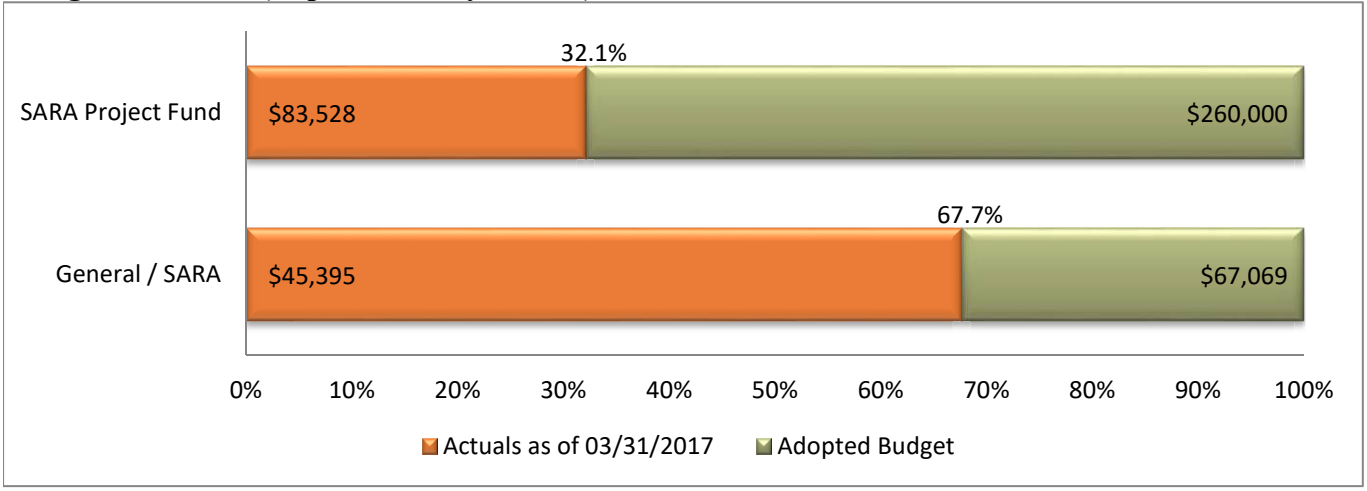
Project Name: **BRWM Stream Mitigation Bank** **Project #** **0466**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**BRWM Stream Mitigation Bank**		**Project #**	**0466**
Managing Department:	Watershed Engineering			
		Adopted Budget:	$	327,069
Project Start Date:	07/01/2014	Unfunded Plan:	$	-
Project Finish Date:	12/22/2017	Total Project:	$	327,069

Through collaboration with the Bexar Regional Watershed Management (BRWM) partners, the BRWM Mitigation Bank restores natural stream functions to improve the aquatic and riparian health of the creek. These restoration efforts generate lasting improvements to the creeks' health and safety.

A 2008 U.S. Environmental Protection Agency (EPA)/U.S. Army Corps of Engineers (USACE) rule established mitigation banking as the preferred method of mitigating stream impacts. A stream mitigation bank is a stream that has been restored and then set aside to compensate for future stream impacts. In FY 2013/14, the BRWM funded a study to evaluate developing an urban stream mitigation bank within Bexar County. Based on the recommendations of the study, the prospectus was submitted in FY 2014/15 and the Mitigation Banking Instrument (MBI) was submitted in FY 2016/17.

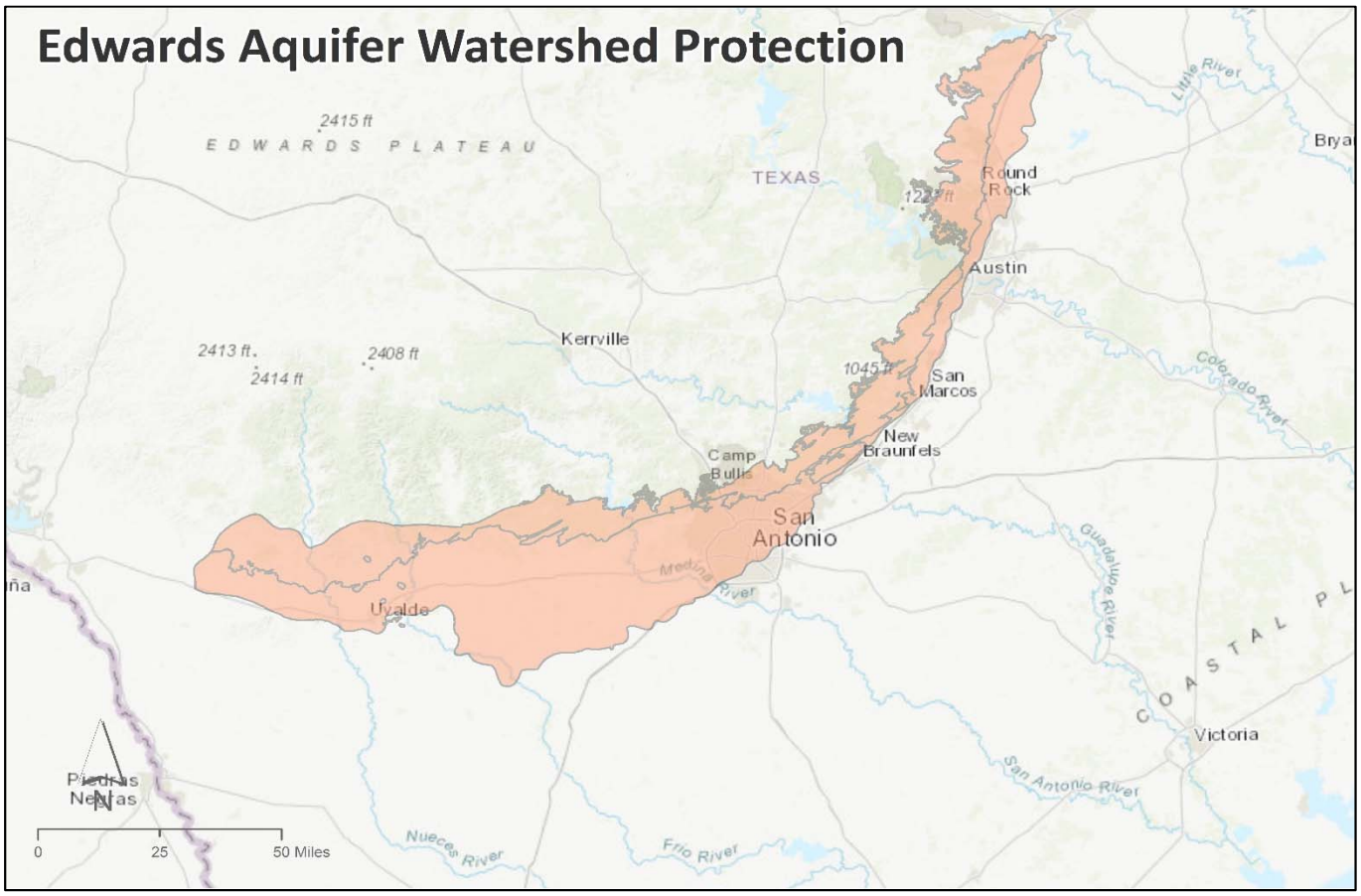
In FY 2017/18, staff will work with the USACE and interagency review team to address comments on the MBI and establish the mitigation bank. The MBI is documentation that includes design plans and establishes guidelines for the establishment, operation, and maintenance of the proposed mitigation bank. Management of the program will be accomplished by existing River Authority staff.

Of the total $327,069 Adopted Budget, $32,502 is estimated labor contribution through the River Authority General Fund.

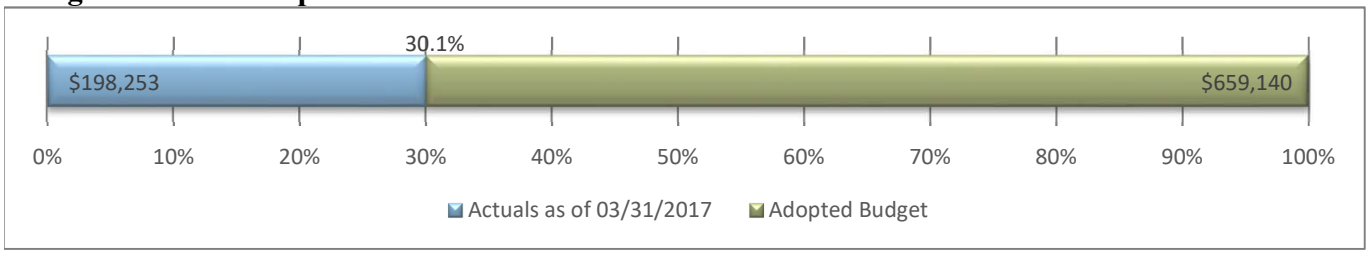
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 128,923	$ 198,146	$ -	$ -	$ 327,069
Total	$ 128,923	$ 198,146	$ -	$ -	$ 327,069

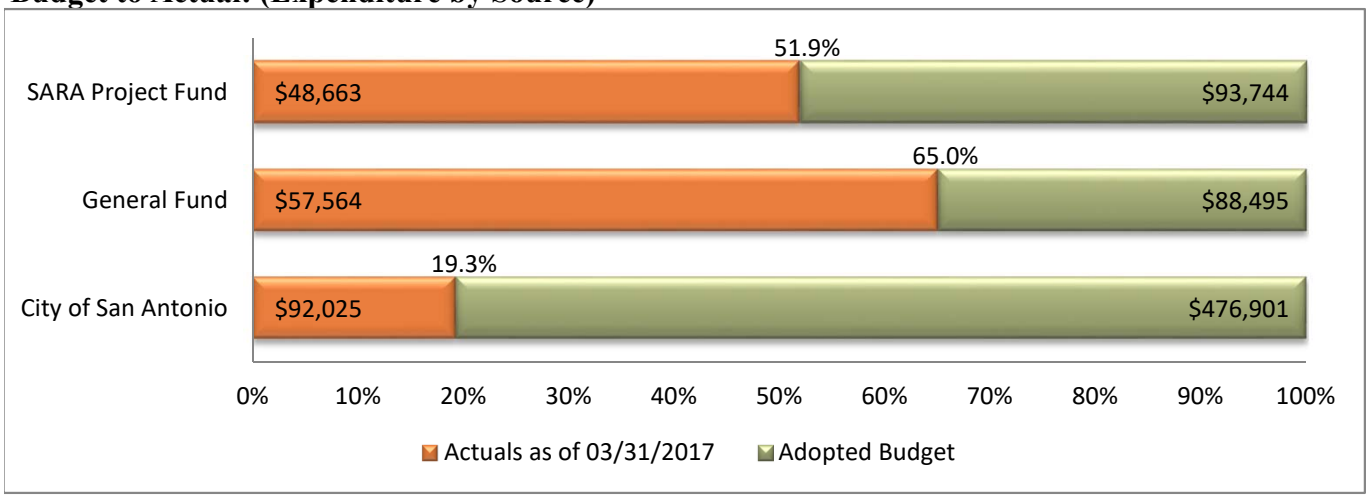
Project Name: **Edwards Aquifer Watershed Protection** **Project #** **0512**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Edwards Aquifer Watershed Protection**	**Project #**	**0512**
Managing Department:	Environmental Sciences		

		Adopted Budget:	$ 659,140
Project Start Date:	07/01/2015	Unfunded Plan:	$ 15,000
Project Finish Date:	06/30/2020	Total Project:	$ 674,140

This project supports advancement and application of the River Authority's expertise to influence, develop, and implement watershed solutions that balance environmental, economic, and quality life community needs. It meets the goal of advancing watershed health and safety by generating projects that, when implemented, improve the health of our streams. Also, the project seeks stormwater runoff management solutions that improve water quality and enhance, in concert with local partners, the health and safety of the creeks and rivers.

This project funds research and implementation of best management practices (BMPs) to protect and improve water quality over the Edwards Aquifer. The project scope includes serving as project manager and administrator of the City of San Antonio's Proposition 1 water quality project component centered within urbanized Bexar County's recharge and contributing zones. The scope also includes providing expertise and support to entities researching and/or developing BMPs within the Edwards Aquifer region.

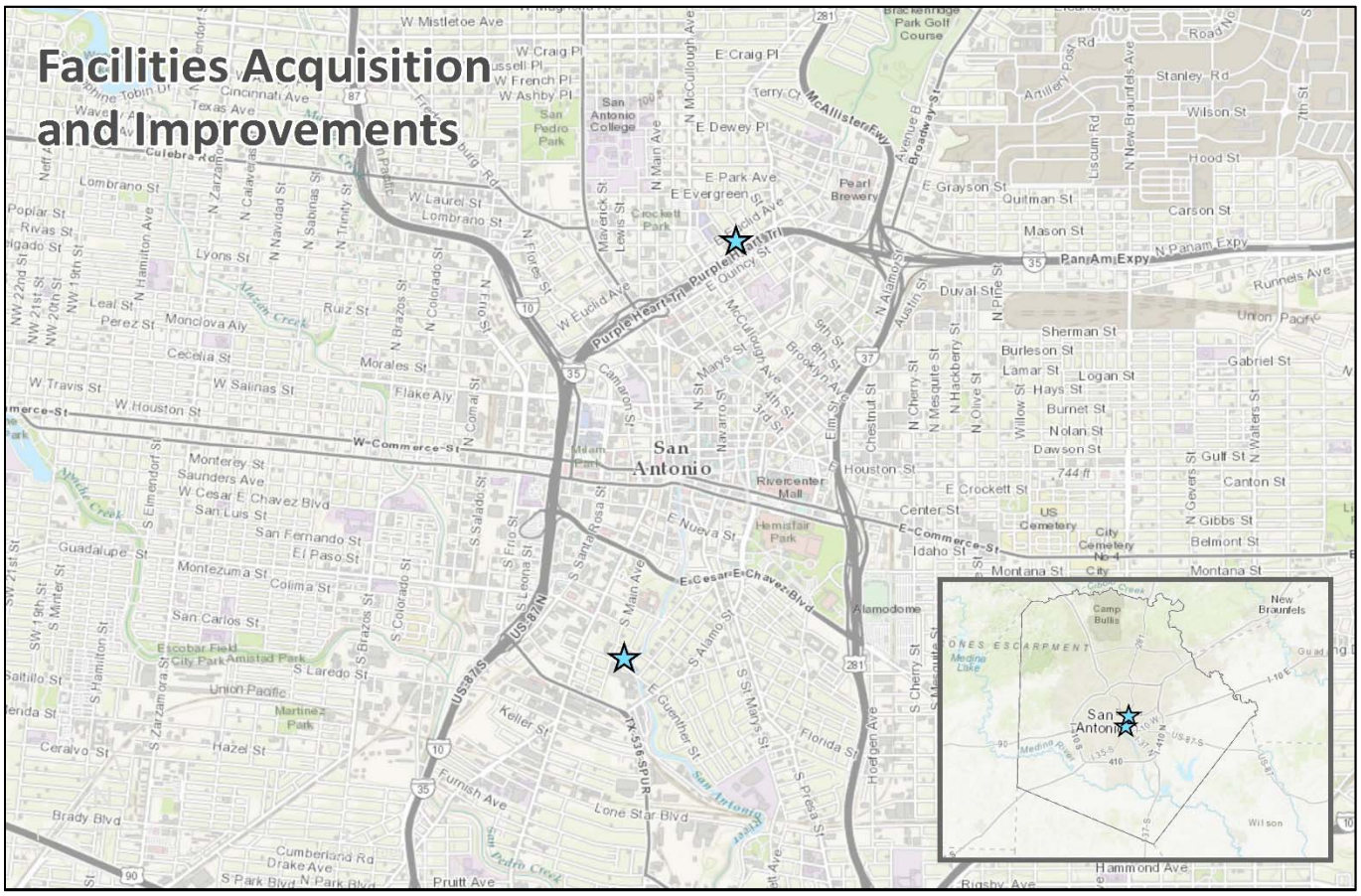
In FY 2016/17, the project pursued project partners, researched BMP placement and types, and utilized professional services to design BMPs. In FY 2017/18, the budget funds staff time to manage implementation of Proposition 1 year one projects funded by City of San Antonio; selection and management of year two projects funded by the City of San Antonio; and staff time and funding to support other water quality projects in the Edwards region. The City of San Antonio is responsible for any future operations and maintenance costs that may be associated with the funded projects.

Of the total $659,140 Adopted Budget, $72,996 is estimated labor contribution through the River Authority General Fund.

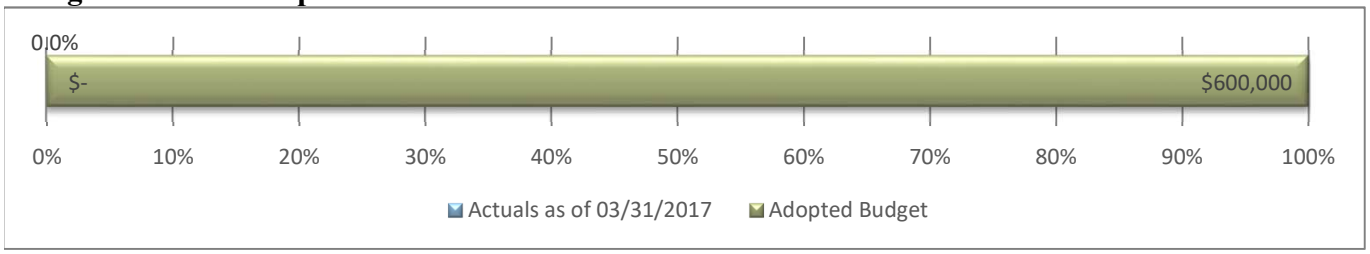
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 198,253	$ 460,887	$ 15,000	$ -	$ 674,140
Total	$ 198,253	$ 460,887	$ 15,000	$ -	$ 674,140

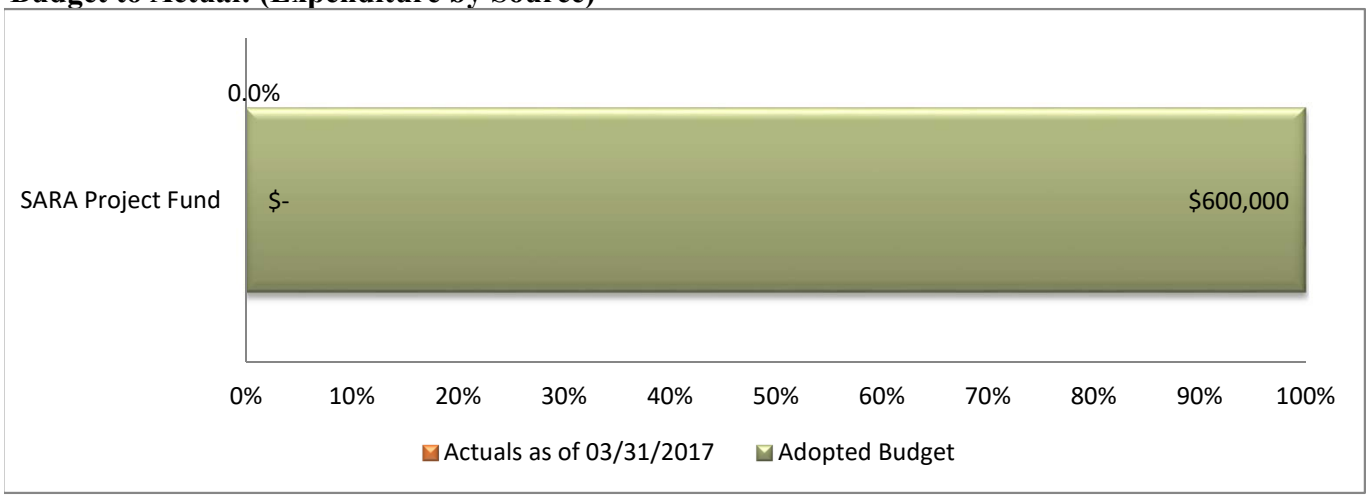
Project Name: **Facilities Acquistion and Improvements** **Project #** **0585**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Facilities Acquistion and Improvements**	**Project #**	**0585**
Managing Department:	Facilities		

		Adopted Budget:	$ 600,000
Project Start Date:	07/01/2017	Unfunded Plan:	$ -
Project Finish Date:	06/30/2020	Total Project:	$ 600,000

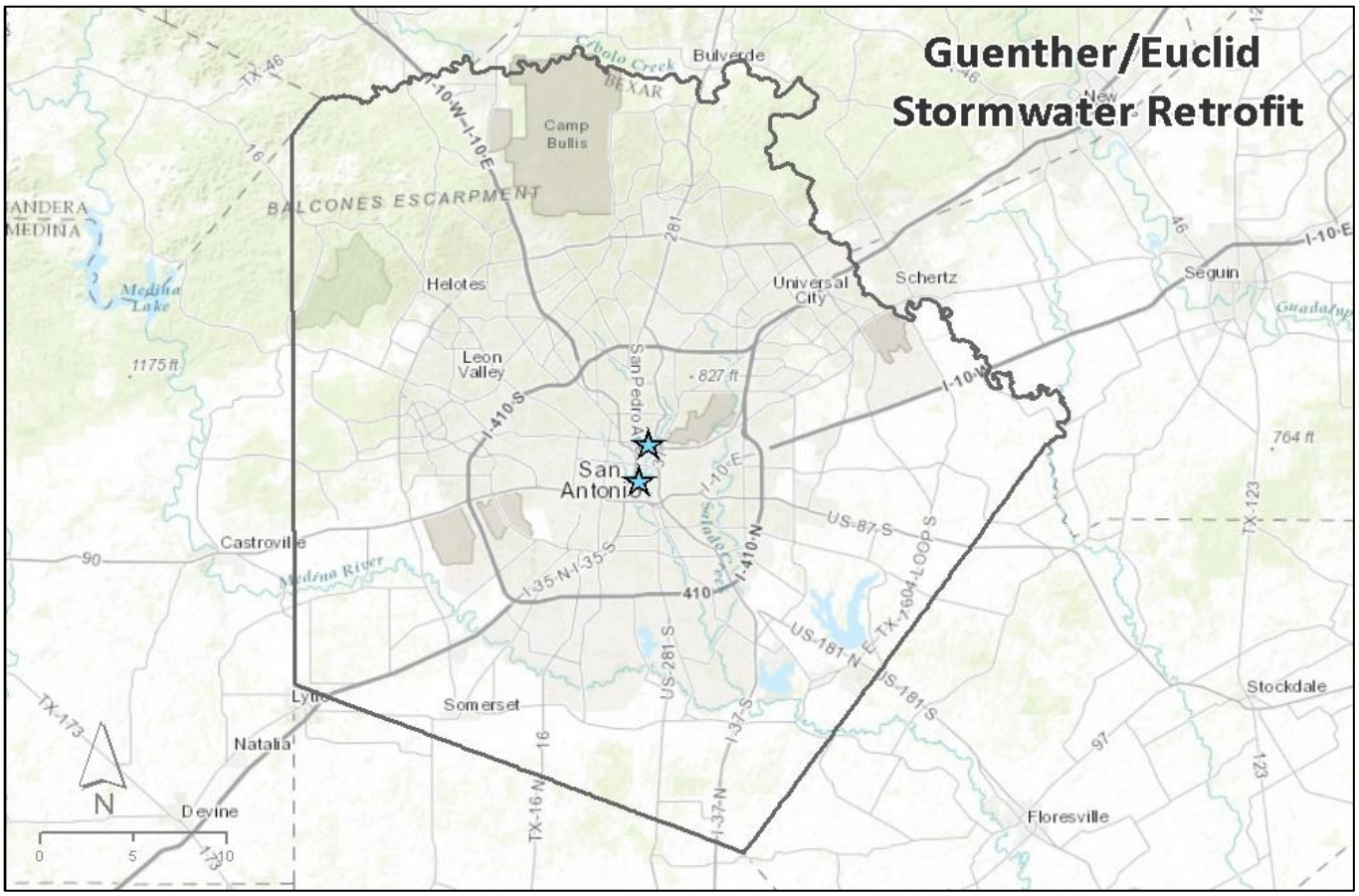
The River Authority has various needs and opportunities for facilities acquisition and improvements including additional administrative space, a location for Watershed and Park Operations staff to use to serve San Pedro Creek improvements once completed, and replacement of aging infrastructure in existing facilities. The River Authority is working to finalize a facilities expansion plan. This funding can help further the plan as well as improve the working environment.

A portion of the Unrestricted Reserve in the San Antonio River Authority Project Fund has been moved to the new Facilities Acquisition/Improvements Project. This funding will be used for three specific purposes during FY 2017/18 with additional funding available as projects and opportunities are pursued. Two of the purposes involve improvements to the heating and air conditioning (HVAC) systems at the Guenther and Euclid facilities. At the Guenther location, a study will be completed and recommendations will be made regarding the most efficient replacement system and the estimated cost. At the Euclid location, funding will be used to complete short term, cost effective system reconfigurations to provide appropriate room temperatures without major investments. In addition, funds from this project will be used for consulting services from a commercial real estate and development firm(s). The firm(s) will assist the River Authority in evaluating various options and proposals for an administrative facility. The HVAC systems improvements are anticipated to reduce operating expenditures by providing more efficient heating and cooling for the facilities. In the long term, acquisition and/or construction of a new, larger facility(s), will increase operating costs as a result of more square footage to heat, cool and maintain.

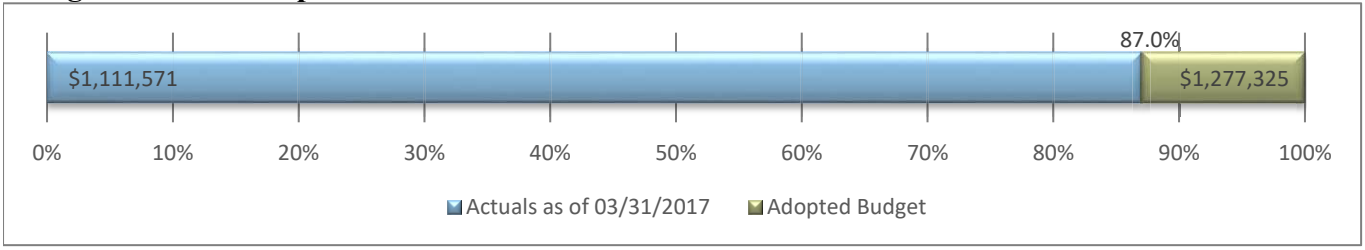
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Operations	$ -	$ 600,000	$ -	$ -	$ 600,000
Total	$ -	$ 600,000	$ -	$ -	$ 600,000

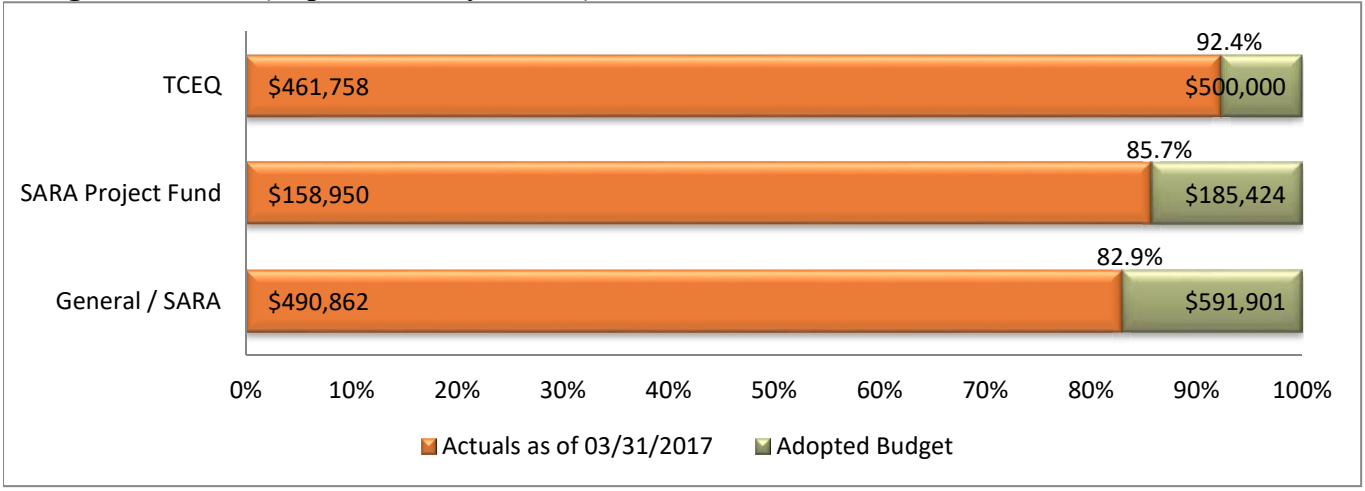
Project Name: **Guenther/Euclid Stormwater Retrofit** **Project #** **0358**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **Guenther/Euclid Stormwater Retrofit** **Project #** **0358**
Managing Department: Facilities

		Adopted Budget:	$ 1,277,325
Project Start Date:	10/08/2015	Unfunded Plan:	$ -
Project Finish Date:	09/04/2018	Total Project:	$ 1,277,325

Stormwater retrofits of River Authority facilities were constructed as demonstration projects in support of the Upper San Antonio Watershed Protection Plan best management practices (BMPs). These demonstration projects provide opportunities for the River Authority to educate the local development community and general public how best management practices can be implemented and managed. In addition, the project benefits the health and safety of the San Antonio River basin.

The Guenther and Euclid buildings were constructed before low impact development (LID) and other sustainable stormwater technologies were available. The Euclid building's stormwater runoff caused erosion on River Authority property, and the Guenther stormwater runoff drained into the Eagleland reach of the San Antonio River Improvements Project. This project retrofitted these facilities' stormwater infrastructure utilizing LID design and construction to improve runoff water quality, to capture all first-flush pollutants, and to increase on-site infiltration before the runoff reaches the San Antonio River and/or its tributaries. Funding to support this effort was provided in part by an Environmental Protection Agency (EPA) grant, administered through the Texas Commission on Environmental Quality (TCEQ).

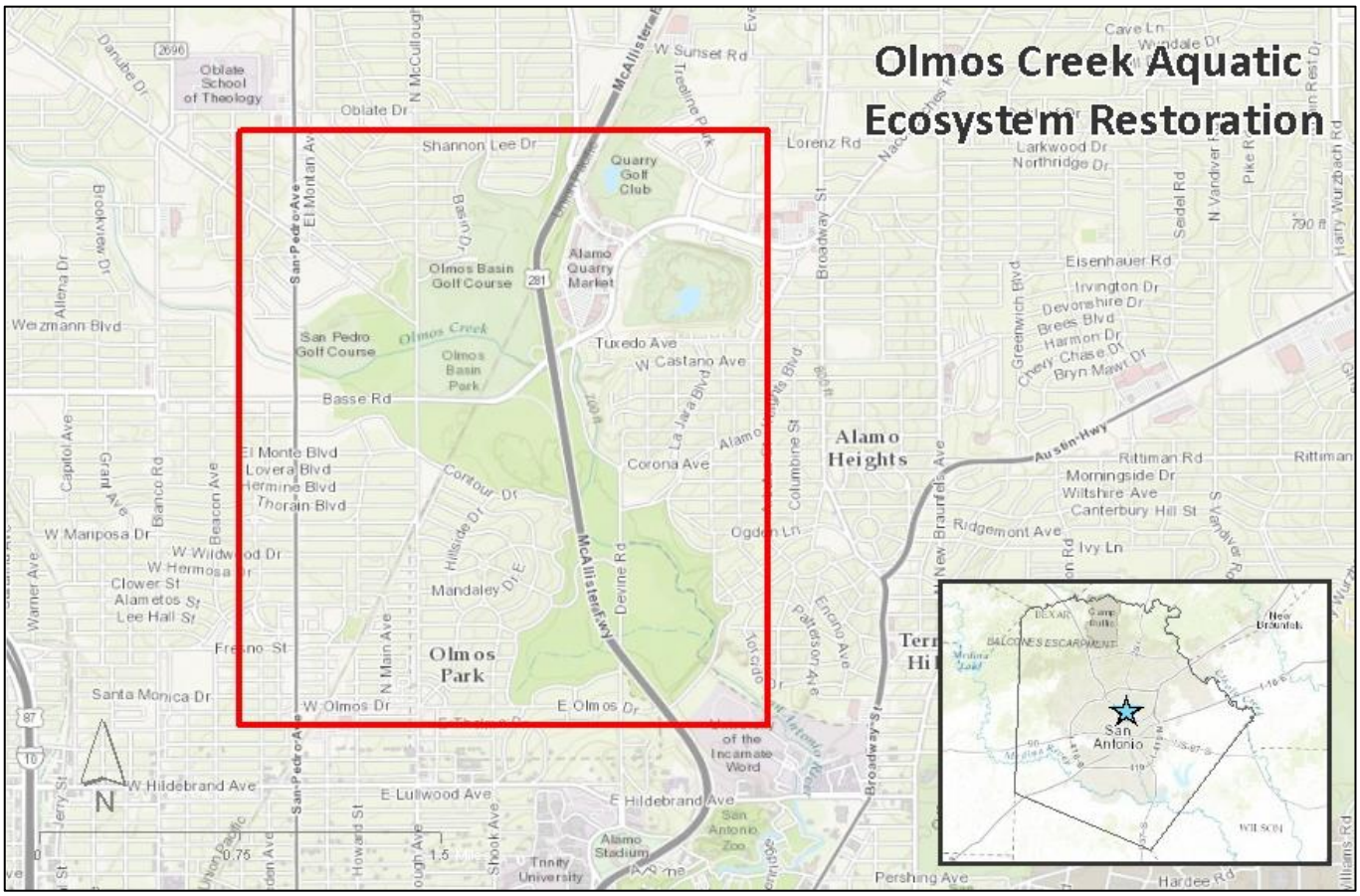
Contract negotiation began in FY 2015/16, as well as the design, review and permitting processes. Construction of the LID features was completed in FY 2016/17. Features include pervious cover parking areas, rainfall cisterns and reuse of rainfall into on-site irrigation systems. In FY 2017/18, monitoring of the BMPs and education will continue, as well installation of additional signage. Operations and maintenance costs for the funded improvements are included in the FY 2017/18 Adopted Budget.

Of the total $1,277,325 Adopted Budget, $268,184 is estimated labor contribution through the River Authority General Fund.

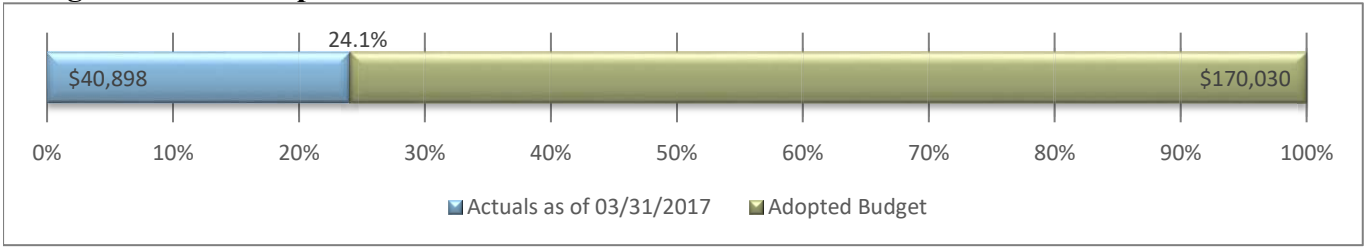
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Design	$ 273,057	$ 16,772	$ -	$ -	$ 289,829
Construction	591,104	32,320	-	-	623,424
Equipment	30,414	19,227	-	-	49,641
Administration	216,996	97,435	-	-	314,431
Total	$ 1,111,571	$ 165,754	$ -	$ -	$ 1,277,325

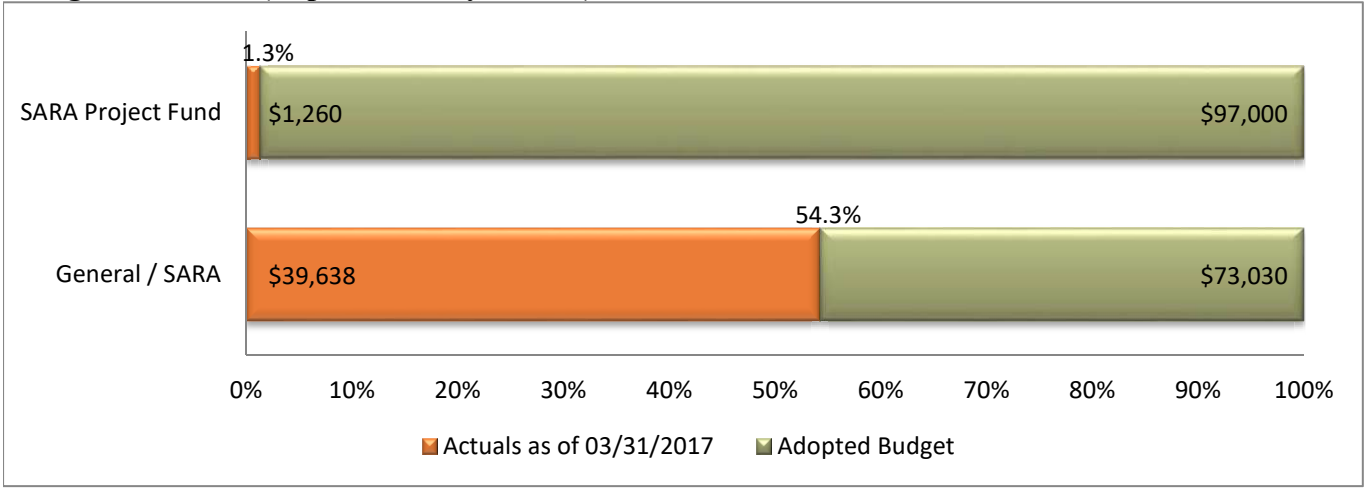
Project Name: **Olmos Creek Aquatic Ecosystem Restoration** **Project #** **0458**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **Olmos Creek Aquatic Ecosystem Restoration** **Project #** **0458**
Managing Department: Watershed Engineering

		Adopted Budget:	$	170,030
Project Start Date:	04/16/2014	Unfunded Plan:	$	-
Project Finish Date:	10/31/2019	Total Project:	$	170,030

The Olmos Creek Aquatic Ecosystem project includes restoration of the riparian corridor along three miles of Olmos Creek upstream of Olmos Dam. The project restores riparian habitat throughout the corridor through the removal of non-native invasive plant species and planting of native grasses, shrubs and trees. There are several partners that are leveraging funding for the project including the City of San Antonio, the City of Alamo Heights, the San Antonio River Authority and the United States Army Corps of Engineers.

This project is managed by the United States Army Corps of Engineers, and the City of San Antonio serves as the Local Sponsor. This project restores riparian habitat along Olmos Creek between San Pedro Avenue and Olmos Dam. Riparian corridor restoration is accomplished through the removal of non-native invasive plants and installation of native plants including woody and herbaceous species.

This project was presented to the River Authority in FY 2013/14. During that time, the City of San Antonio and the United States Army Corps of Engineers were working towards a funding agreement. Partners in the project signed on and the River Authority was designed the project manager. With partners on board and funding secured, the project is anticipated to begin construction in FY 2017/18. The River Authority will continue to manage the project in partnership with the City of San Antonio. Upon acceptance of constructed project areas by the City of San Antonio, the River Authority will begin limited ecosystem restoration maintenance activities in these locations per the agreement with the City of San Antonio. Construction is anticipated to end in FY 2018/19. The River Authority will incur no operations and maintenance costs as a result of this project.

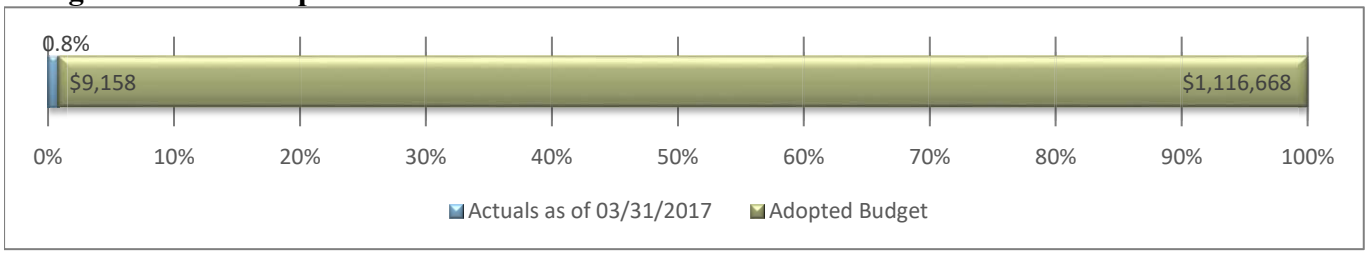
Of the total $170,030 Adopted Budget, $71,481 is estimated labor contribution through the River Authority General Fund.

Spending Plan of Total Project Budget

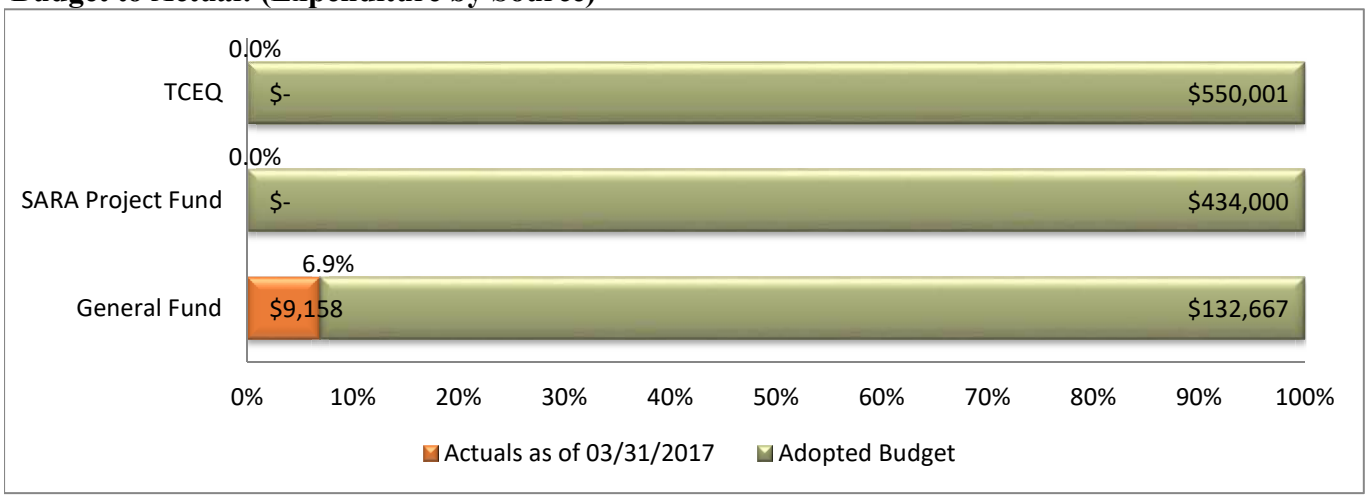
Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Right-of-Way Acquisition	$ 8,662	$ 82,221	$ -	$ -	$ 90,883
Administration	32,236	46,911	-	-	79,147
Total	$ 40,898	$ 129,132	$ -	$ -	$ 170,030

Project Name: River Road Stream Restoration **Project #** 0530

Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**River Road Stream Restoration**	**Project #**	**0530**
Managing Department:	Watershed Engineering		

		Adopted Budget:	$ 1,116,668
Project Start Date:	10/27/2016	Unfunded Plan:	$ -
Project Finish Date:	12/31/2020	Total Project:	$ 1,116,668

The River Authority received grant funding from the U.S. Environmental Protection Agency (EPA) to support stream restoration as a stormwater best management practice (BMP) to address non-point source pollution in the River Road area along the San Antonio River.

This project designs, constructs, and monitors restoration of a section of the Upper San Antonio River from Mulberry to Woodlawn Streets. Using this demonstration project, training will be developed and delivered to educate resource managers, designers, and contractors how to plan, manage, design, construct, and maintain stream restoration and stormwater BMPs. Funding to support this effort was provided in part by an Environmental Protection Agency (EPA) grant, administered through the Texas Commission on Environmental Quality (TCEQ).

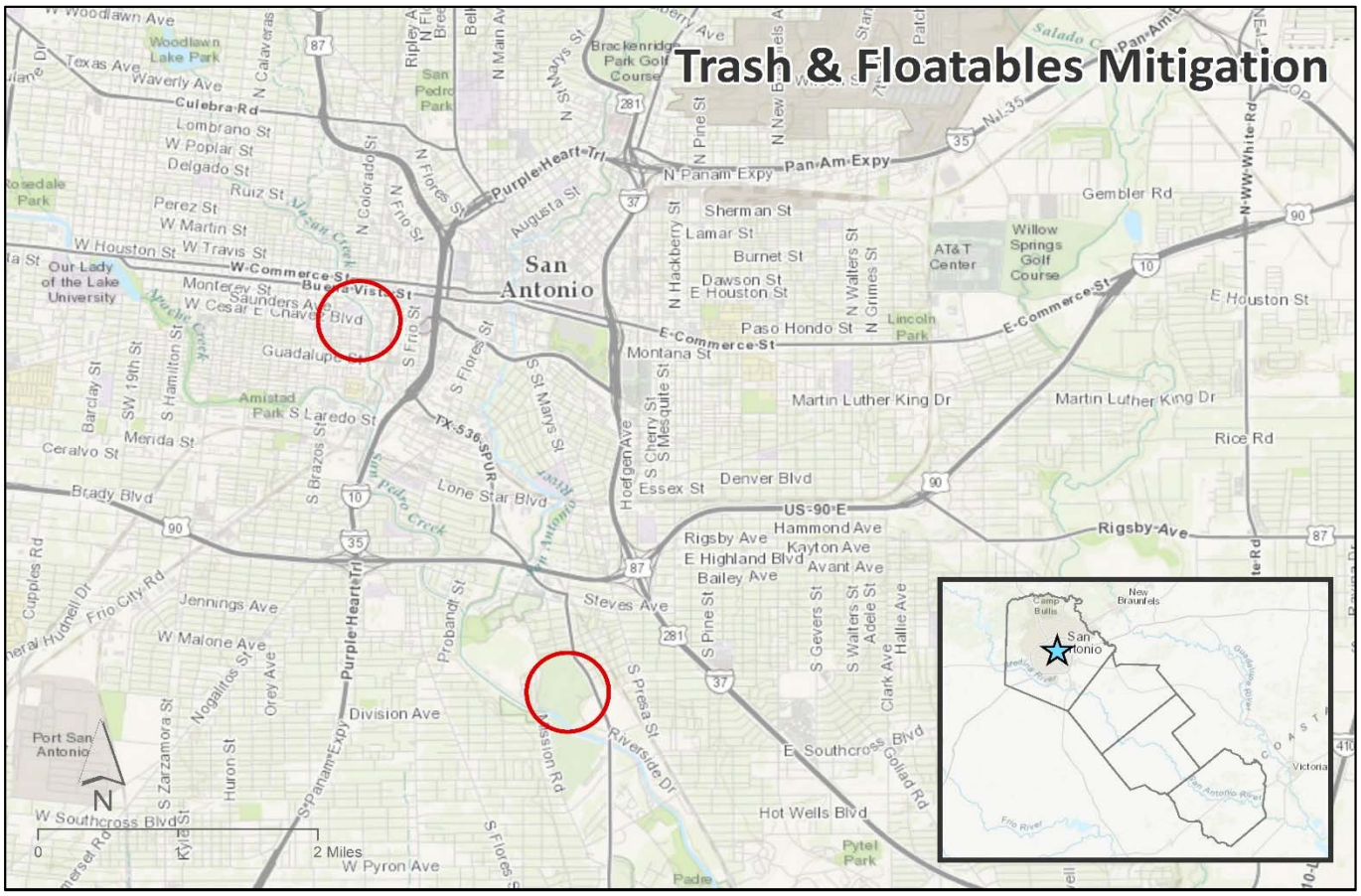
This project began in FY 2016/17 when the River Authority was awarded Environmental Protection Agency grant funds through the Texas Commission on Environmental Quality. Contract negotiations and preliminary efforts were conducted. In FY 2017/18, the River Authority will kick-off the project's initial phase. Stream restoration and stormwater BMPs will be designed using natural channel design and low impact development techniques. Once construction is completed, monitoring will begin and the project is anticipated to close in FY 2019/20. The River Authority will incur no operations and maintenance costs as a result of this project.

Of the total $1,116,668 Adopted Budget, $132,667 is estimated labor contribution through the River Authority General Fund.

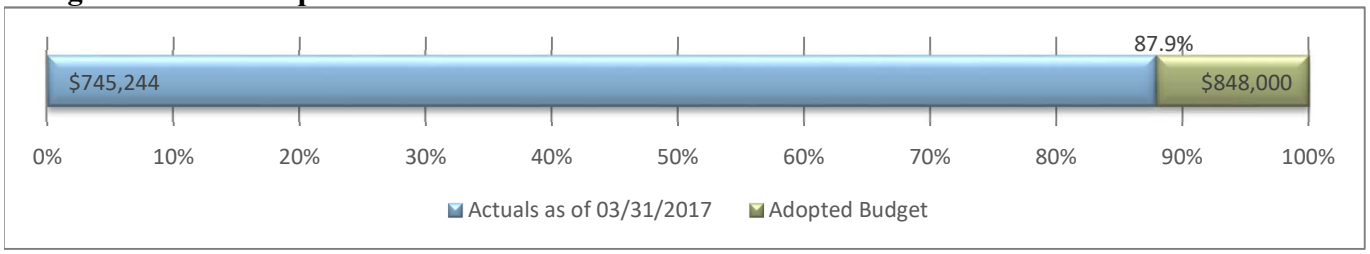
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Design	$ -	$ 510,001		$ -	$ 510,001
Construction	-	400,000	-	-	400,000
Equipment	-	44,000	-	-	44,000
Administration	9,158	153,509	-	-	162,667
Total	$ 9,158	$ 1,107,510	$ -	$ -	$ 1,116,668

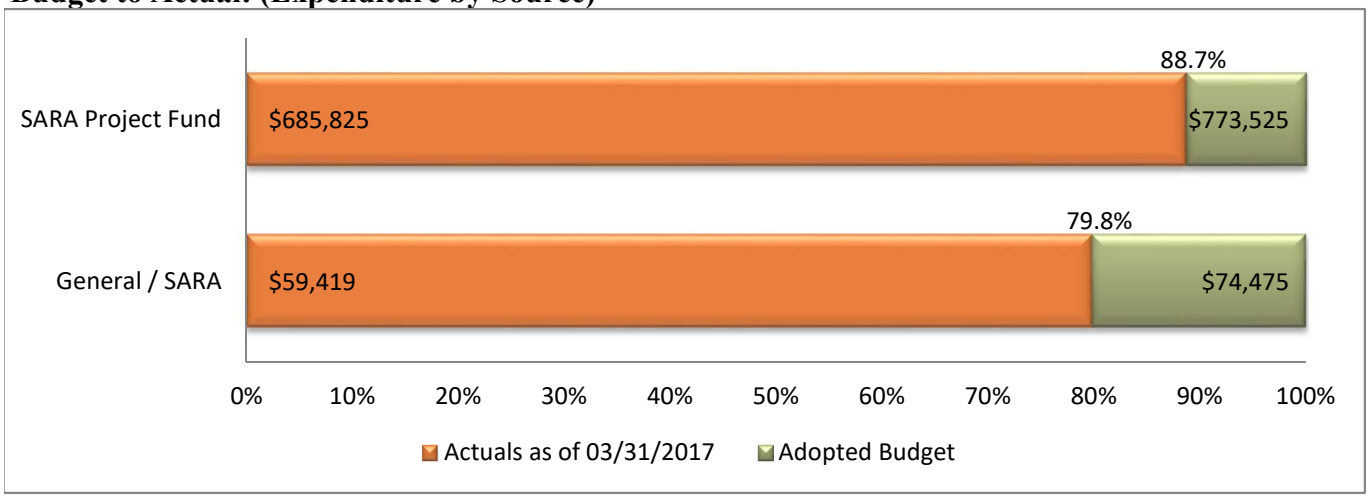
Project Name: **Trash and Floatables Mitigation** **Project #** **0515**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Trash and Floatables Mitigation**		**Project #**	**0515**
Managing Department:	Environmental Sciences			
		Adopted Budget:	$	848,000
Project Start Date:	07/01/2015	Unfunded Plan:	$	-
Project Finish Date:	08/31/2017	Total Project:	$	848,000

Trash and floatables are unsightly and require extensive labor by local government agencies and community volunteers to remove trash by hand. Trash and floatables also have adverse impacts on aquatic and riparian habitats and impede recreational use of local parks and waterways. By centralizing the collection of trash that is carried by stormwater runoff, this project will enhance the health, aesthetics, and recreational use of the creeks and rivers.

The Trash and Floatables Mitigation project builds on recent trash and floatable studies within the San Antonio River Basin and results in the implementation of in-stream trash collection systems.

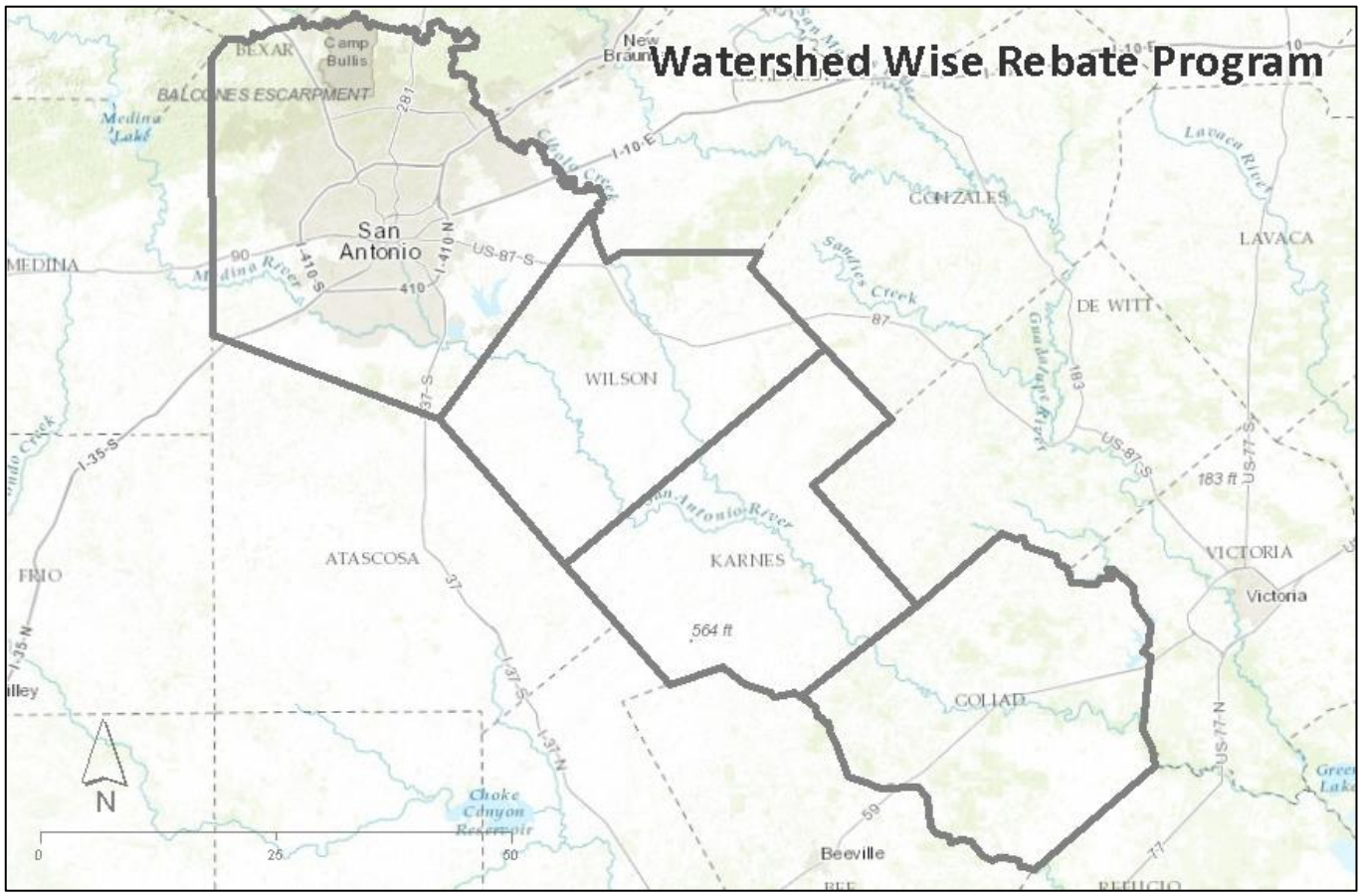
In FY 2016/17, the project constructed two trash collection systems, one on Riverside Creek by Riverside Golf Course and one on Alazan Creek between South Colorado and El Paso streets. After installation, a significant storm event damaged the Alazan Creek collection system. In FY 2017/18, the Alazan Creek trash collection system will be reinstalled with a redesigned system and equipment that is expected to function in storm/high water events. Operations and maintenance costs associated with this project are included in the FY 2017/18 Adopted Budget.

Of the total $848,000 Adopted Budget, $72,964 is estimated labor contribution through the River Authority General Fund.

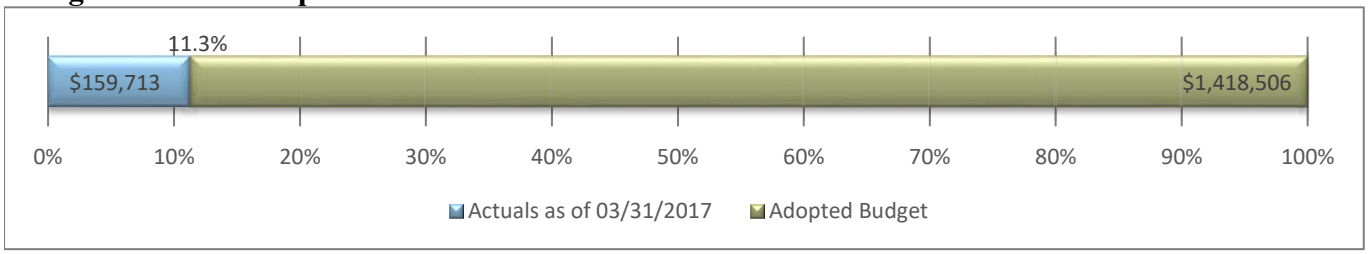
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Design	$ 77,939	$ 20,135	$ -	$ -	$ 98,074
Construction	535,536	52,765	-	-	588,301
Equipment	70,000	-	-	-	70,000
Administration	61,769	29,856	-	-	91,625
Total	$ 745,244	$ 102,756	$ -	$ -	$ 848,000

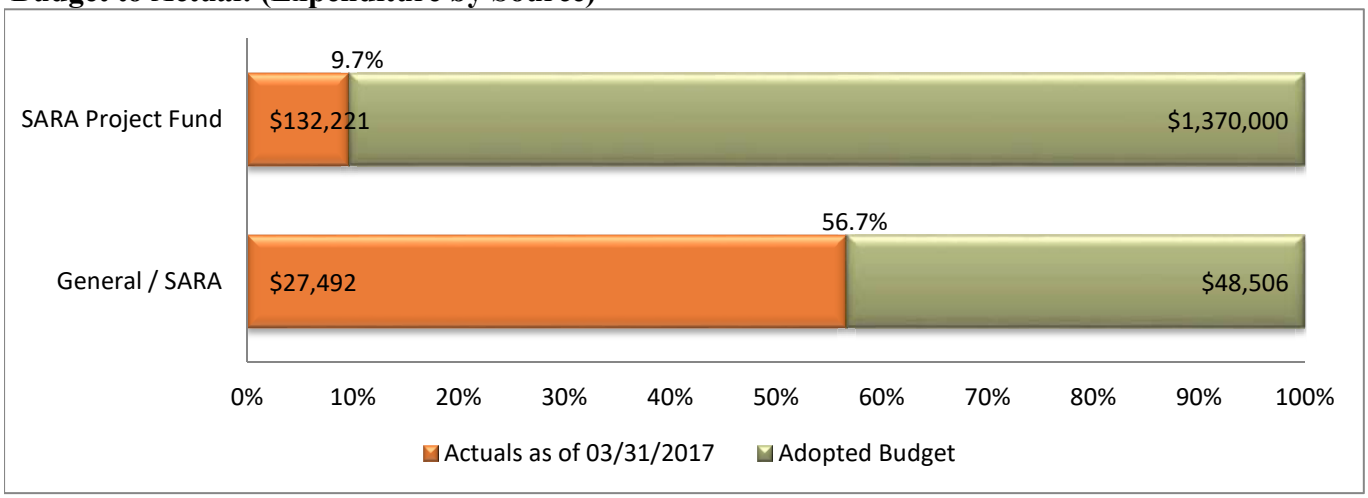
Project Name: **Watershed Wise Rebate Program** **Project #** **0513**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Watershed Wise Rebate Program**	**Project #**	**0513**
Managing Department:	Environmental Sciences		

		Adopted Budget:	$ 1,418,506
Project Start Date:	07/01/2015	Unfunded Plan:	$ -
Project Finish Date:	06/30/2018	Total Project:	$ 1,418,506

This project complements and enhances the results of the additional requirements included in the City of San Antonio's 2015 Unified Development Code (UDC) and is a tool by which to generate improvements to the health of the creeks and rivers.

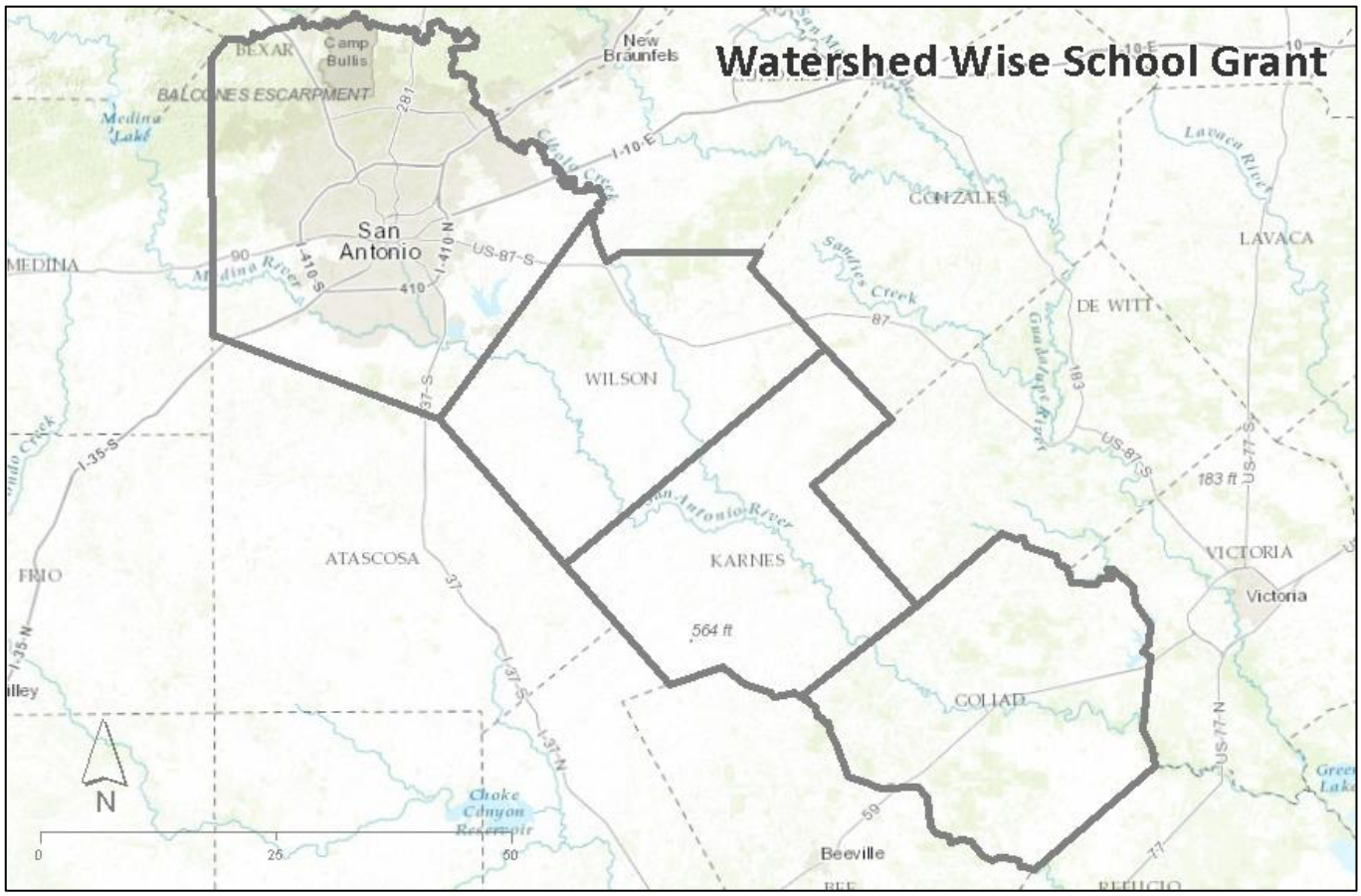
Low impact development (LID) is a new concept for many developers and design professionals. To provide an incentive for developers and designers to learn about and to incorporate LID into their design plans, the River Authority developed a rebate program. Through this program, the River Authority assists in covering LID costs where those costs reflect an increase over traditional design requirements.
Started in FY 2015/16, River Authority staff developed the rebate program's application requirements, marketed the program and began accepting applications. The first rebates were awarded in FY 2015/16 and continued into FY 2016/17. During FY 2017/18, the River Authority will continue to promote the rebate program, accept, evaluate and award rebates where LID is incorporated in the design plans. Also in FY 2017/18, the Watershed Wise School Grant program is included under this rebate program. Schools (K through 12) in the four counties served by the River Authority can apply for funding in this program to design and build a rain garden or select other green infrastructure best management practices for on-site stormwater management. The schools are responsible for operation and maintenance of the installed green infrastructure. No operations and maintenance expenditures are anticipated from this project.

Of the total $1,418,506 Adopted Budget, $48,506 is estimated labor contribution through the River Authority General Fund.

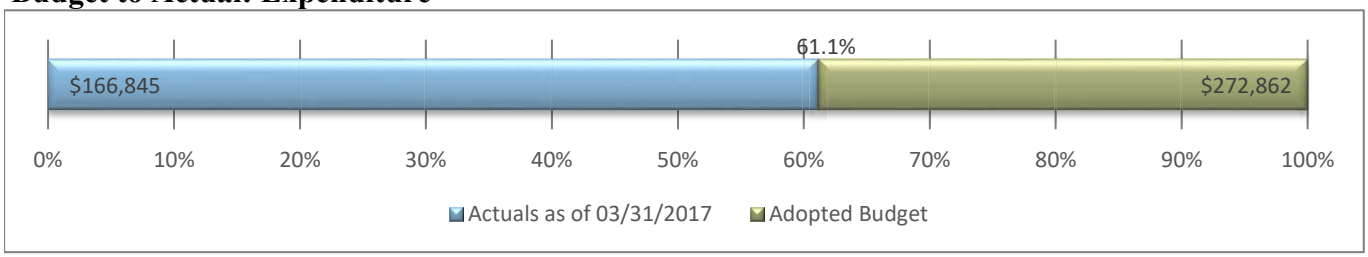
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 159,713	$ 1,258,793	$ -	$ -	$ 1,418,506
Total	$ 159,713	$ 1,258,793	$ -	$ -	$ 1,418,506

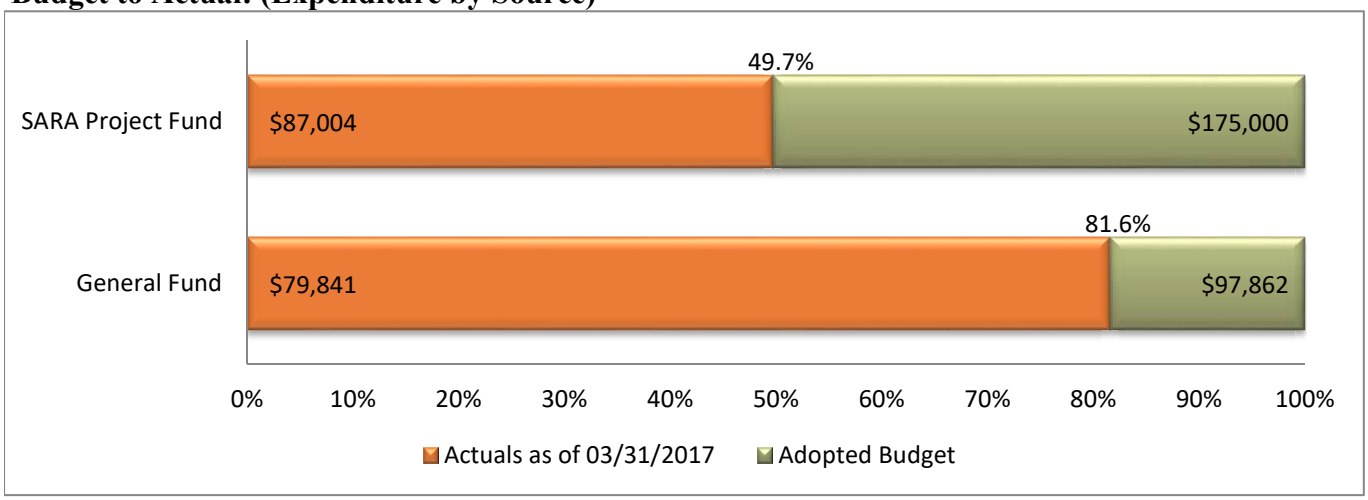
Project Name: **Watershed Wise School Grant** **Project #** **0474**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **Watershed Wise School Grant** **Project #** **0474**
Managing Department: Environmental Sciences

		Adopted Budget:	$	272,862
Project Start Date:	10/31/2014	Unfunded Plan:	$	-
Project Finish Date:	09/30/2017	Total Project:	$	272,862

This project provides an educational demonstration of watershed solutions with an emphasis on managing stormwater quality to enhance local creeks and rivers. These school grants have been consolidated with the Watershed Wise Rebate Program.

Up to $22,000 has been provided to each recipient school in the four counties served by the River Authority to design and build a rain garden or select other green infrastructure best management practices for on-site stormwater management. The winning schools are responsible for operation and maintenance of the installed green infrastructure.

This activity as a separate project will close out in FY 2017/18 with the completion of the FY 2016/17 school grant projects. In FY 2017/18, schools will apply for funding under the Watershed Wise Rebate Program. No operations and maintenance expenditures are anticipated from this project.

Of the total $272,862 Adopted Budget, $49,944 is estimated labor contribution through the River Authority General Fund.

Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 166,845	$ 106,017	$ -	$ -	$ 272,862
Total	$ 166,845	$ 106,017	$ -	$ -	$ 272,862

SAN ANTONIO
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Leaders in Watershed Solutions

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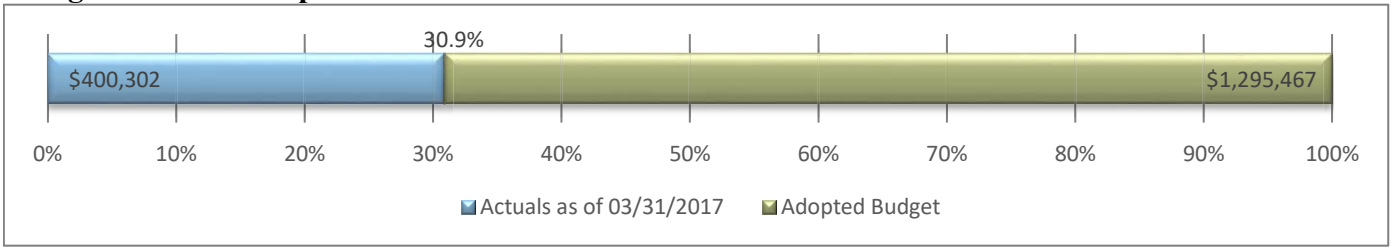
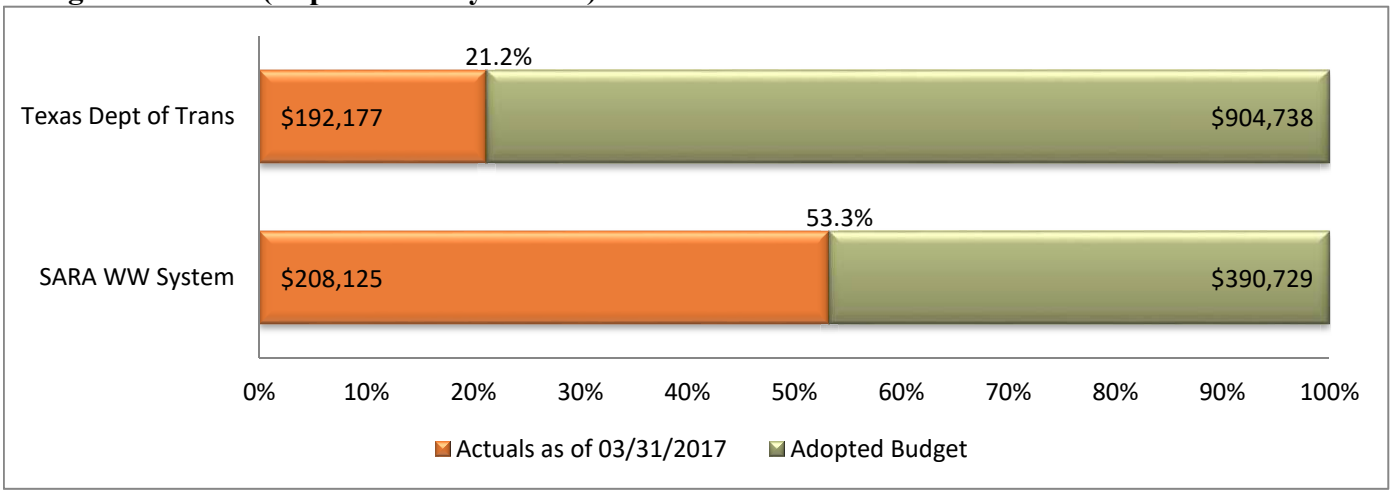
Project Name: IH 10 Martinez II Wastewater Line Relocation **Project #** 0522

Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**IH 10 Martinez II Wastewater Line Relocation**		**Project #**		**0522**
Managing Department:	Utilities				
		Adopted Budget:		$	1,295,467
Project Start Date:	07/01/2015	Unfunded Plan:		$	-
Project Finish Date:	08/01/2017	Total Project:		$	1,295,467

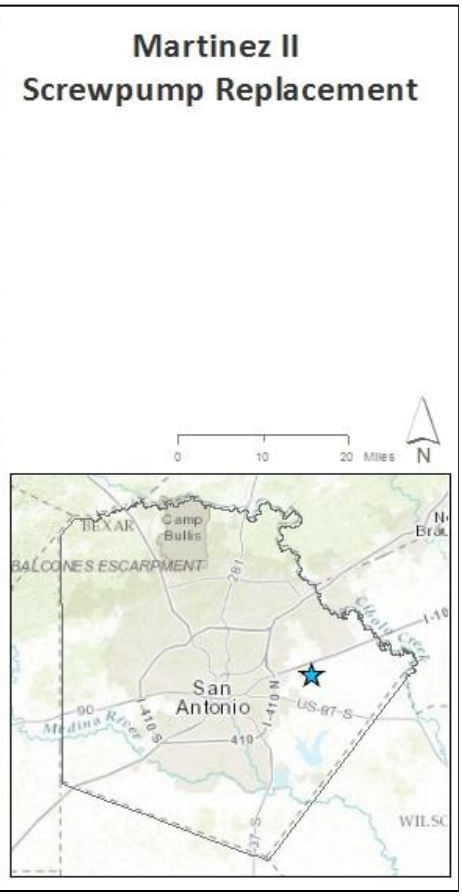
This project relocates approximately 1,800 feet of 21 inch diameter wastewater line located along Interstate Highway (IH) 10 in the Texas Department of Transportation (TxDOT) right of way, between Martinez Creek and FM 1516. TxDOT is making improvements to IH 10 requiring the line to be moved into private easements. The River Authority will be reimbursed by TxDOT for the design and construction expenses. However, all right-of-way acquisition costs are the responsibility of the SARA Wastewater System.

In FY 2016/17, the relocation and replacement of the existing thirty plus year old wastewater line was started to respond to the TxDOT project and to the growing demand for wastewater service in this area. Based on the timeline for construction, this project should be completed by the beginning of FY 2017/18. Operations and maintenance costs for this project are included in the FY 2017/18 Adopted Budget.

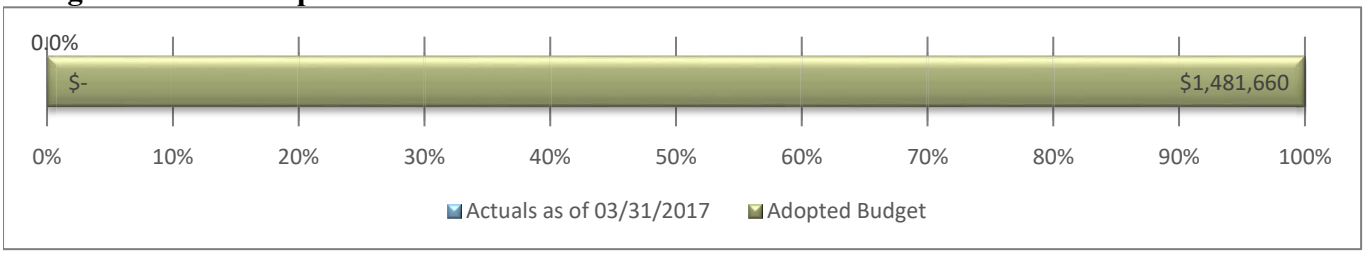
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Right-of-Way Acquisition	$ 208,125	$ 28,059	$ -	$ -	$ 236,184
Design	182,790	73,791	-	-	256,581
Construction	9,387	793,315	-	-	802,702
Total	$ 400,302	$ 895,165	$ -	$ -	$ 1,295,467

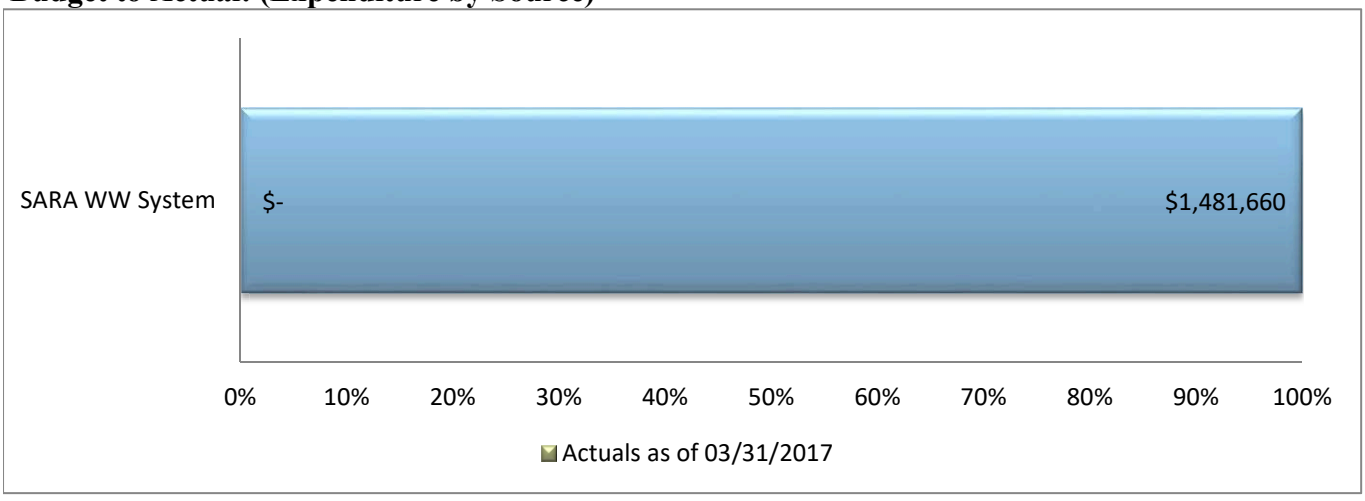
Project Name: **Martinez II WWTP Screw Pump Replacement** **Project #** **0582**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **Martinez II WWTP Screw Pump Replacement** **Project #** **0582**
Managing Department: Utilities

		Adopted Budget:	$ 1,481,660
Project Start Date:	07/01/2017	Unfunded Plan:	$ -
Project Finish Date:	06/30/2019	Total Project:	$ 1,481,660

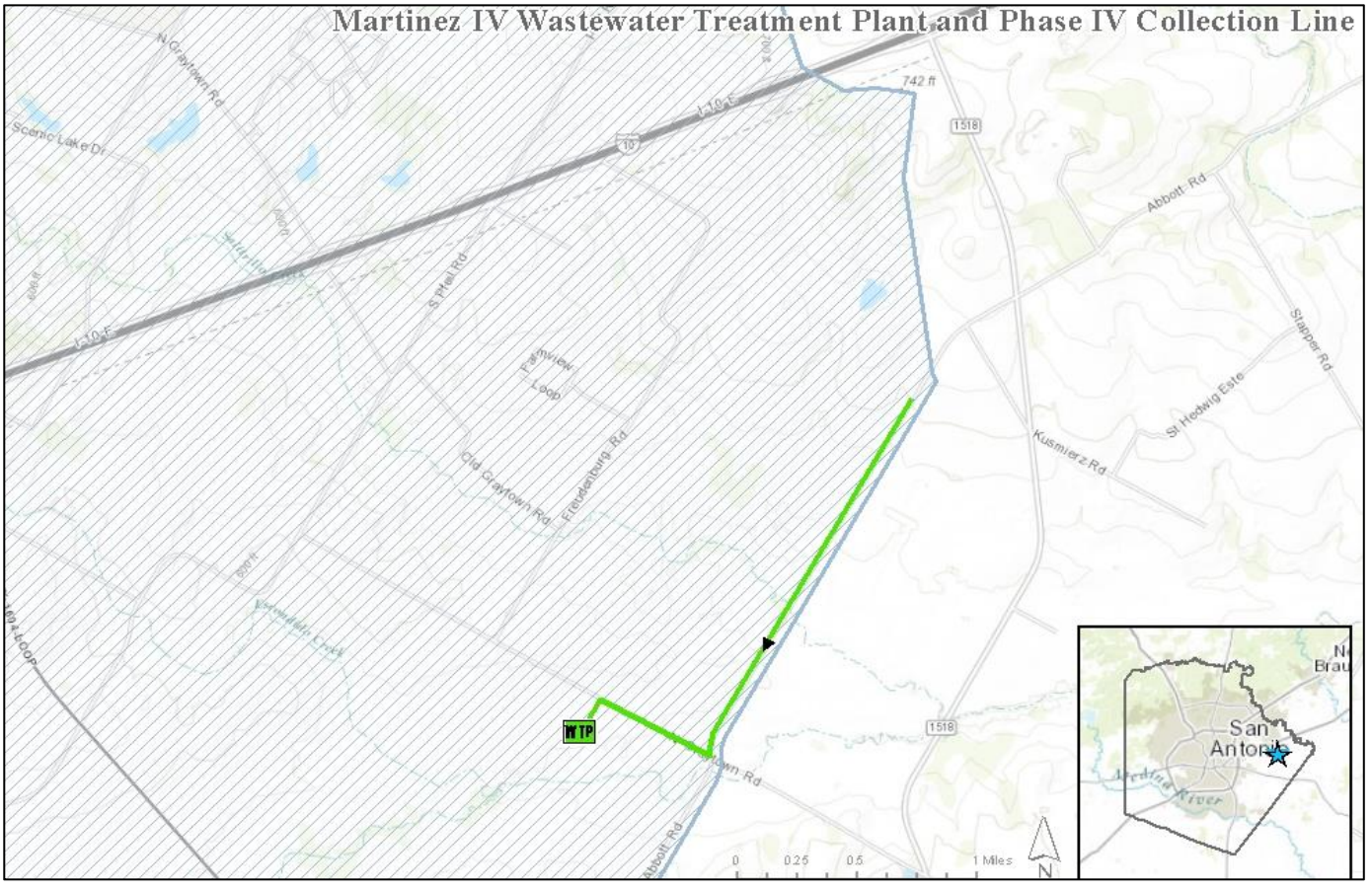
The Martinez II Screw Pump project designs and constructs the 48-inch screw pump and the 66-inch screw pump at the Martinez II Wastewater Treatment Plant. Both screw pumps were installed in 1986. The 48-inch screw pump is currently out of service and cannot be repaired. The 66-inch screw pump has had some final repairs and needs to be replaced due to the end of useful life.

For FY 2017/18, the project will have the design completed and a construction contract awarded. It is anticipated that equipment will be ordered and the project completed in FY 2018/19. Operations and maintenance expenditures could be reduced slightly as a result of new equipment being put into place.

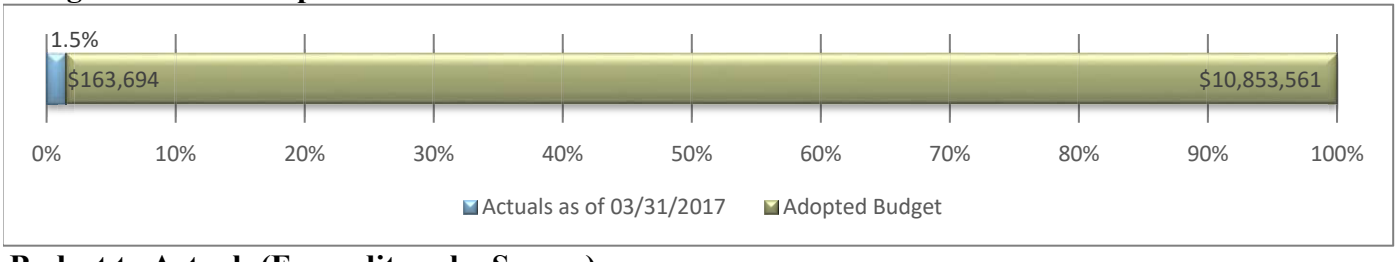
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Design	$ -	$ 65,949	$ -	$ -	$ 65,949
Construction	-	1,415,711	-	-	1,415,711
Total	$ -	$ 1,481,660	$ -	$ -	$ 1,481,660

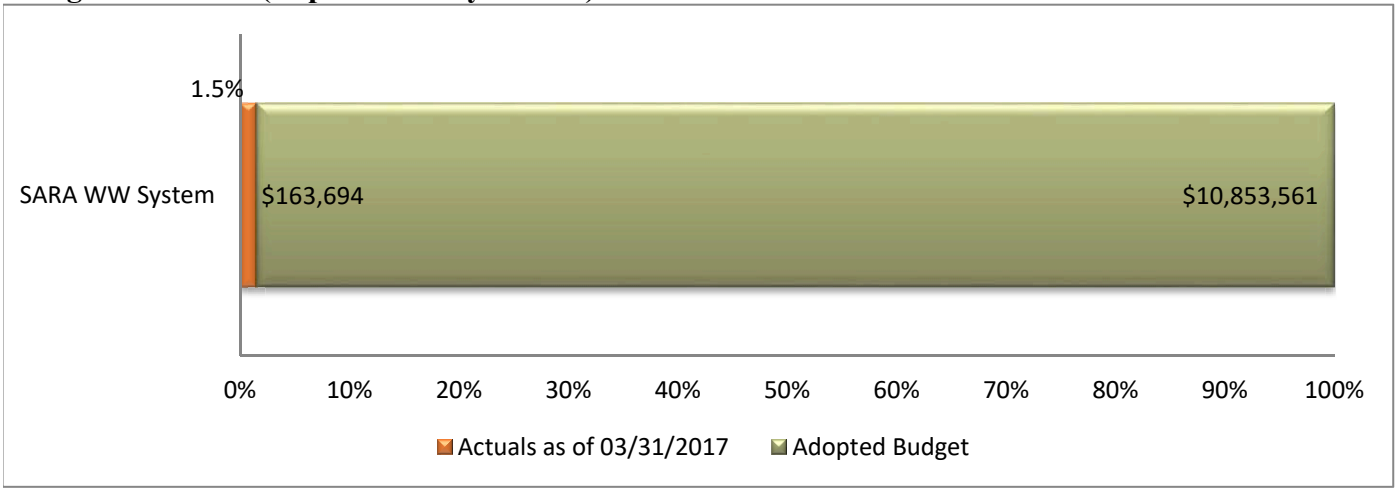
Project Name: **Martinez IV WWTP and Phase IV Collection Line** **Project #** **0107**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Martinez IV WWTP and Phase IV Collection Line**	**Project #**	**0107**
Managing Department:	Utilities		

		Adopted Budget:	$ 10,853,561
Project Start Date:	11/16/2006	Unfunded Plan:	$ -
Project Finish Date:	06/30/2020	Total Project:	$ 10,853,561

The River Authority continues to receive requests for sewer service in the Martinez IV service area as development expands into eastern Bexar County. The demand has reached a point where it is necessary to begin construction of a regional wastewater treatment plant to serve the existing Martinez IV wastewater collection system. The River Authority constructed the collection system's segments 1 to 6 (Phase IIa) in FY 2008/09 and segments 11 and 12 (or Phase III) in FY 2013/14. In FY 2016/17, staff was approached for wastewater service by developers in the Phase IV area located east of the proposed treatment plant.

The Martinez III Wastewater Treatment Plant (WWTP), a temporary package treatment plant that serves development in the northern portion of the Martinez IV service area system, has a treatment capacity of 150,000 gallons per day (GPD) and will likely be at or near capacity in the near future. With the temporary package plant nearing capacity and continued growth in residential development, it has become necessary to implement the design and construction of the Martinez IV WWTP.

In FY 2016/17, the design/build contract for construction of this plant was awarded. Staff has also applied to a Texas Water Development Board program that provides below market interest rates for debt issued for wastewater plant construction. This funding is expected to be approved.

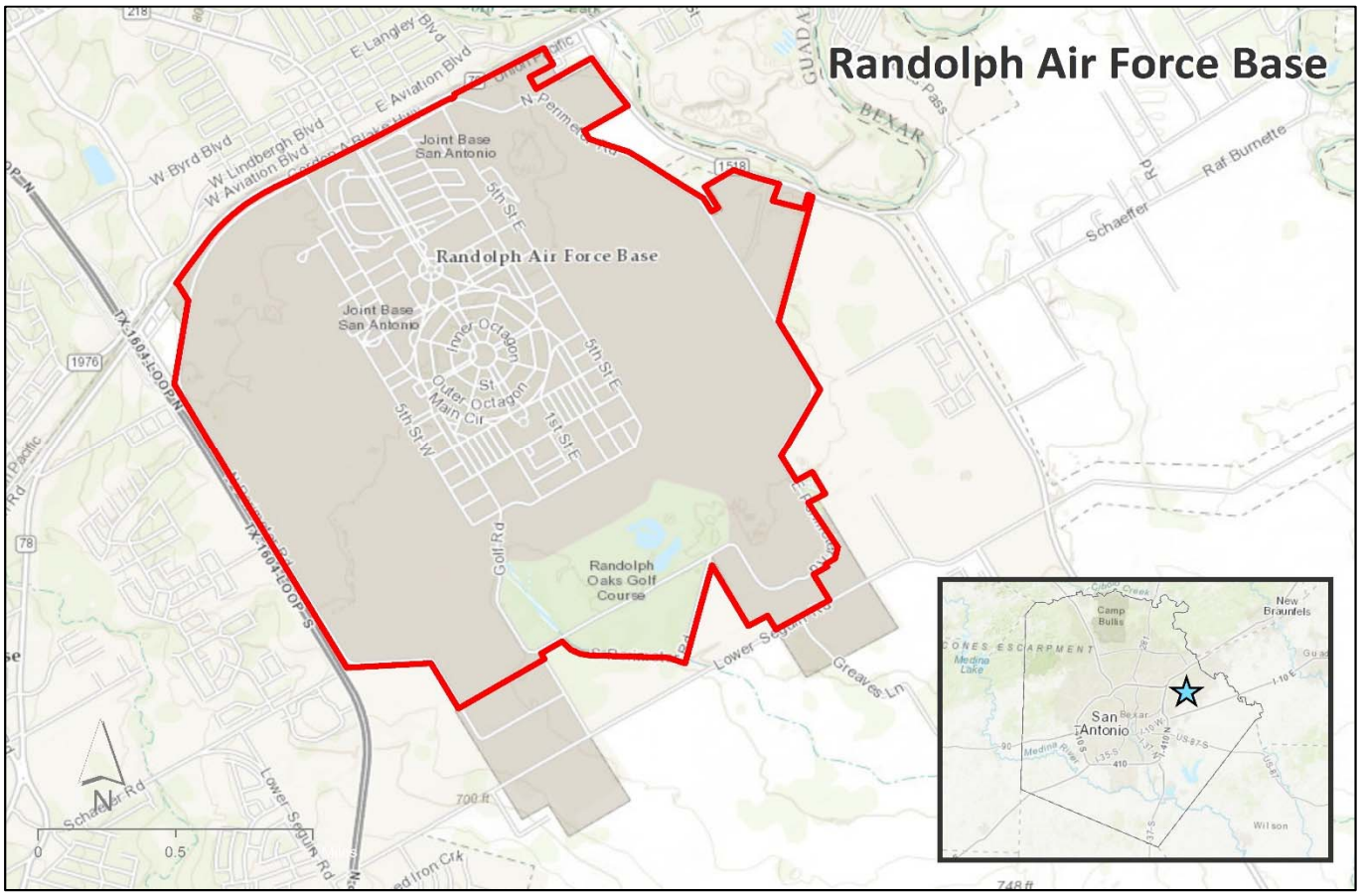
For FY 2017/18, the first phase (Phase IV) of the new 250,000 GPD treatment plant will be designed and constructed. Additionally, 14,000 linear feet of wastewater collection line will be completed to serve new development east of the WWTP. The overall final permitted flow rate for the system is 2.0 MGD. Initial operating costs are anticipated to be around $80,000 annually. As flow increases and future plant expansions are completed operating costs will increase. Upon completion it is anticipated that the Martinez IV WWTP will replace the need for Martinez III, which will eventually be decommissioned.

Staff labor costs are included in the project budget.

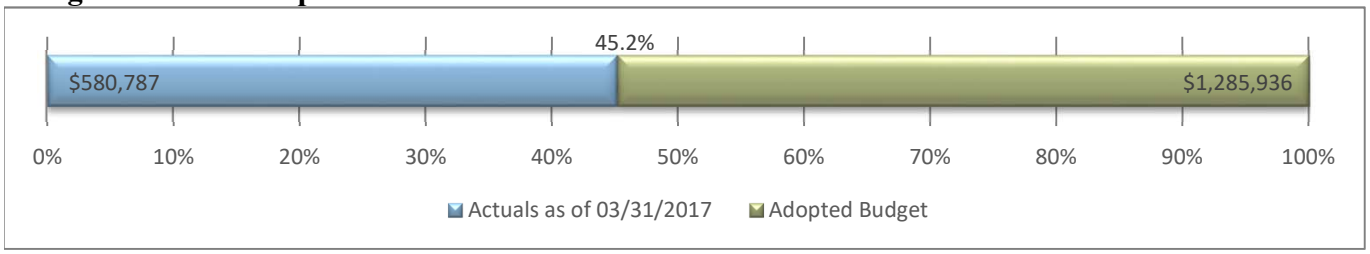
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Right-of-Way Acquisition	$ -	$ 50,000	$ -	$ -	$ 50,000
Construction	163,694	10,639,867	-	-	10,803,561
Total	$ 163,694	$ 10,689,867	$ -	$ -	$ 10,853,561

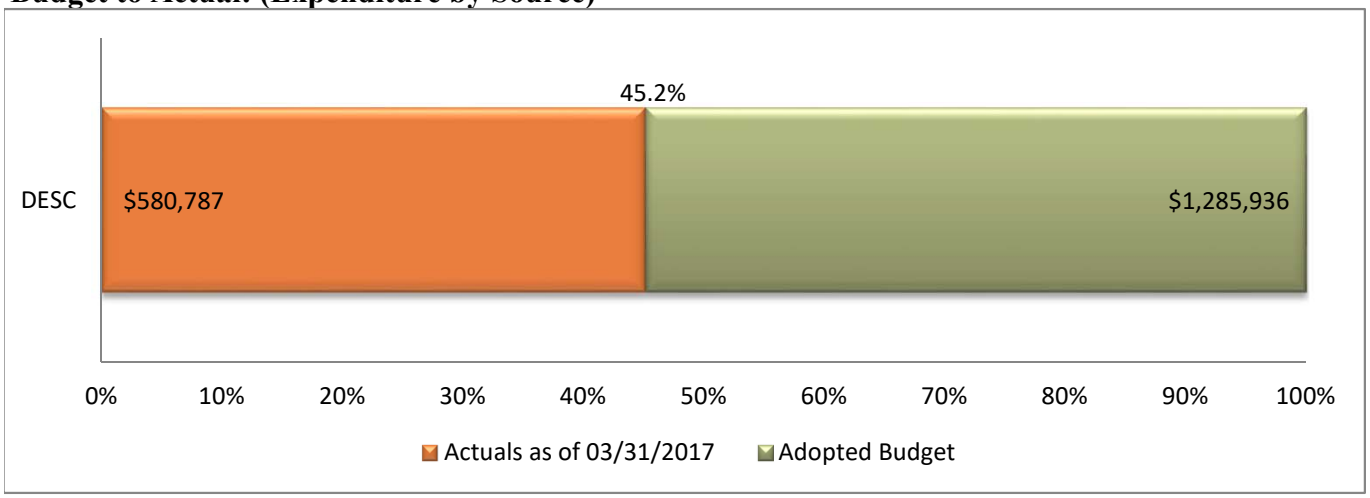
Project Name: **Randolph Air Force Base Years 11-15** **Project #** **9999**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Randolph Air Force Base Years 11-15**	**Project #**	**9999**
Managing Department:	Utilities		

		Adopted Budget:	$ 1,285,936
Project Start Date:	07/01/2003	Unfunded Plan:	$ -
Project Finish Date:	07/01/2052	Total Project:	$ 1,285,936

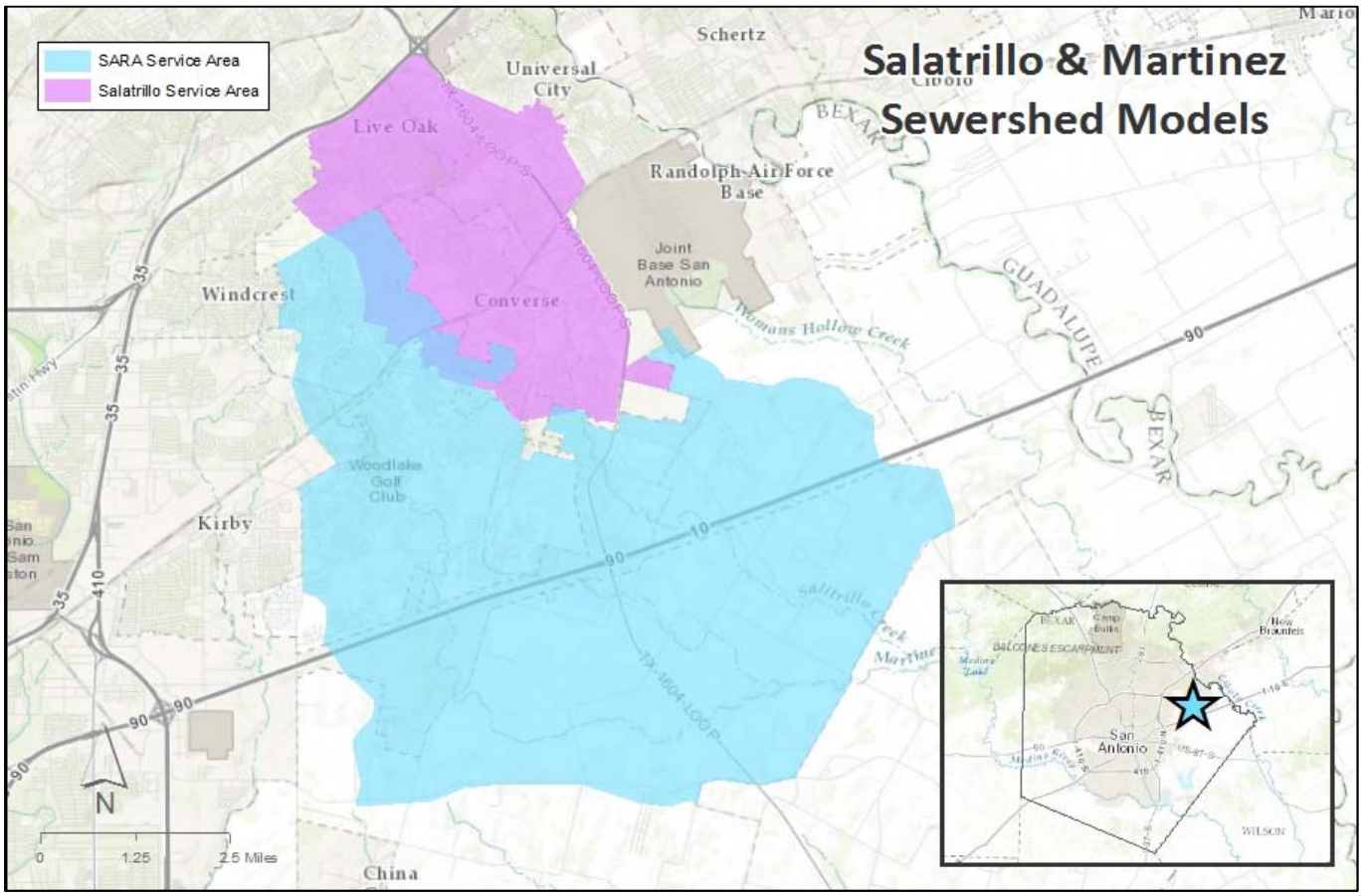
Every year, the River Authority rehabilitates portions of the Randolph Air Force Base (RAFB) collection system based on a 50 year plan. The River Authority reassesses the sewer lines by closed circuit television to determine lateral locations which are in poor condition, as well as determine the best type of rehabilitation. Repairs and improvements are then completed for the identified line, and the manholes involved are coated.

In FY 2017/18, the River Authority will complete year 14 (2017) projects. This includes rehabilitation of 976 linear feet of 15 inch pipe by cast in place pipe (CIPP) and rehabilitations of six manholes by installing new rings and covers and spraying the manhole's interior with epoxy liner. Additionally, year 14 includes rehabilitation of two lift stations by installing new pumps, electrical panels and spraying the interior of the lift stations with epoxy liner. The projects slated to begin in year 15 (2018) include rehabilitation of 2,085 linear feet of eight inch pipe by CIPP, rehabilitation of six manholes by installing new rings and covers and spraying the manhole's interior with epoxy liner, and the installation of one new manhole. Operations and maintenance expenditures for these improvements are included in the FY 2017/18 Adopted Budget.

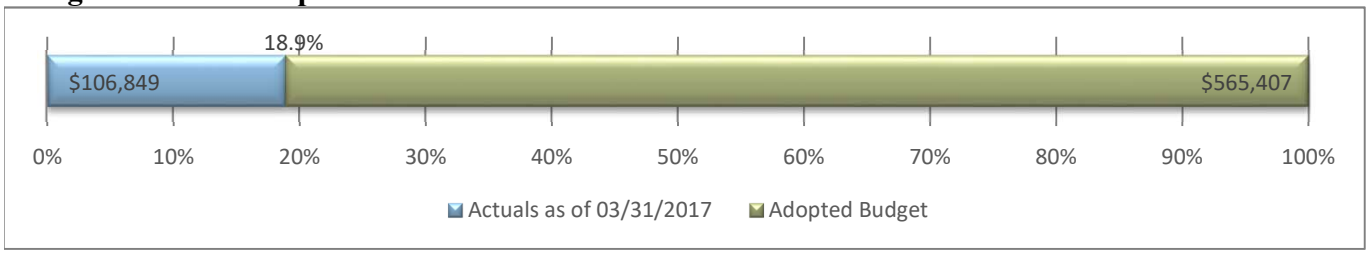
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Labor	$ 20,095	$ 12,887	$ -	$ -	$ 32,982
Construction	560,692	692,262	-	-	1,252,954
Total	$ 580,787	$ 705,149	$ -	$ -	$ 1,285,936

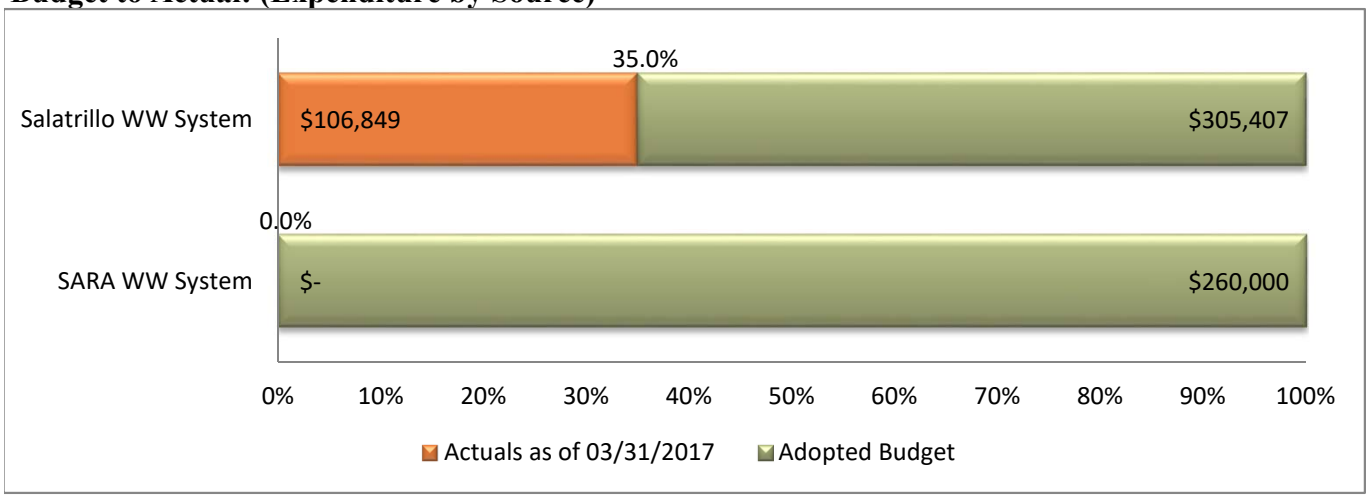
Project Name: **Salatrillo & Martinez Sewershed Models** **Project #** **0535**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Salatrillo & Martinez Sewershed Models**	**Project #**	**0535**
Managing Department:	Utilities		

		Adopted Budget:	$ 565,407
Project Start Date:	07/01/2016	Unfunded Plan:	$ 800,000
Project Finish Date:	06/30/2021	Total Project:	$ 1,365,407

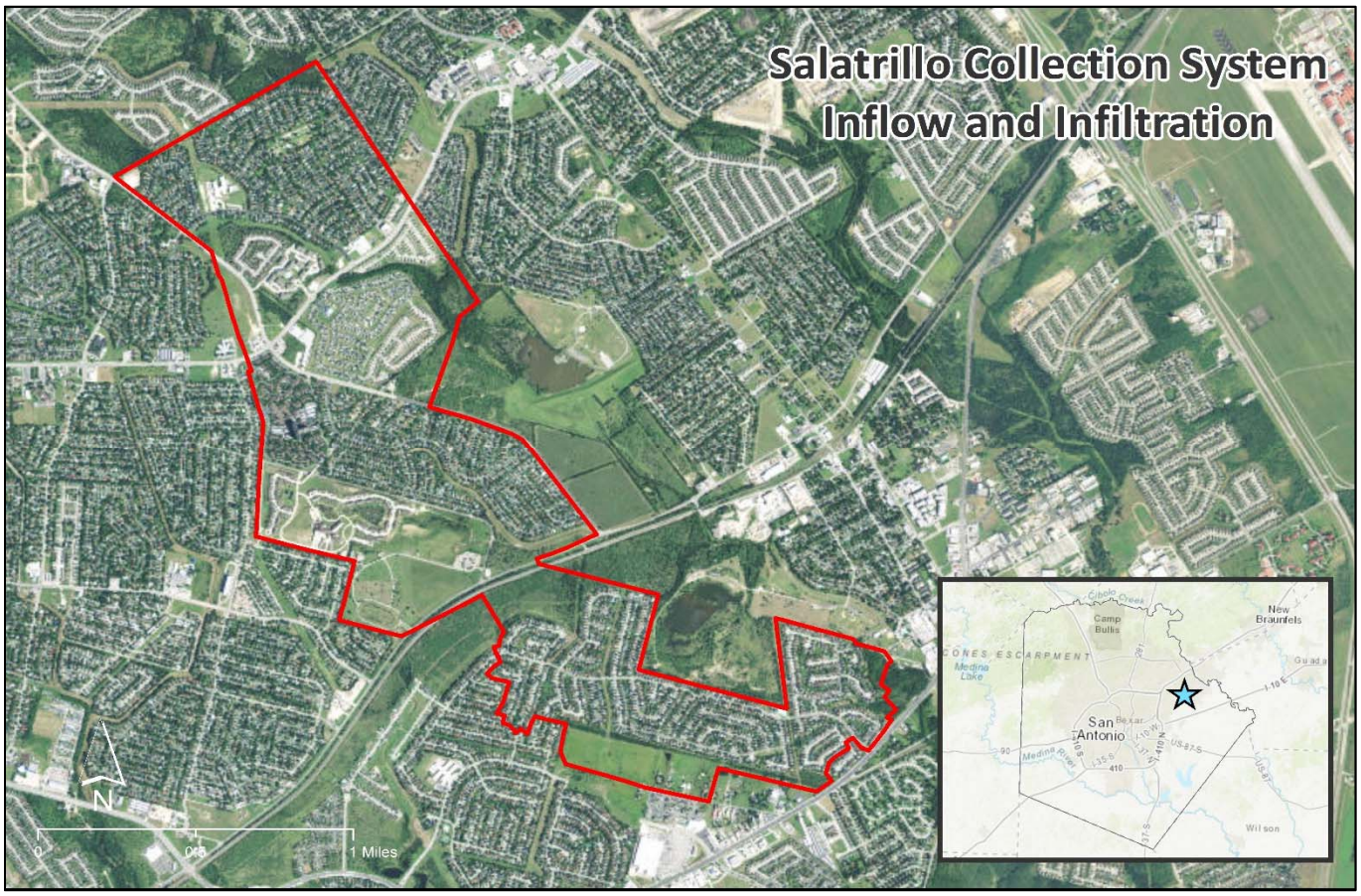
This project develops comprehensive and dynamic sewershed system models for the Salatrillo and Martinez Wastewater Treatment Plants (WWTP). The models help to quantify available system capacity and identify inefficiencies that require attention. The projected 20-year growth demands are simulated throughout the Salatrillo and Martinez WWTP wastewater collection systems and treatment plants to identify infrastructure improvements that will be required to meet flow projections.

The project began in FY 2016/17 with the creation of a baseline model of the collection. In FY 2017/18, the deliverables include updated hydraulic models for the Salatrillo and Martinez WWTPs and planning documents that identify issues, as well as phased improvement and expansion projects. This project will not require any future operations and maintenance expenditures.

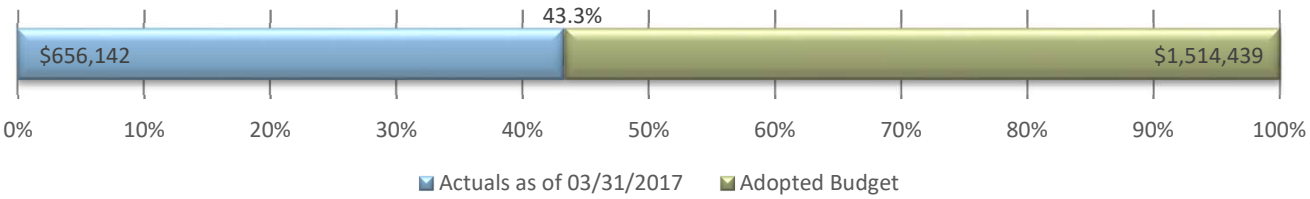
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Operations	$ 106,849	$ 458,558	$ 360,000	$ 440,000	$ 1,365,407
Total	$ 106,849	$ 458,558	$ 360,000	$ 440,000	$ 1,365,407

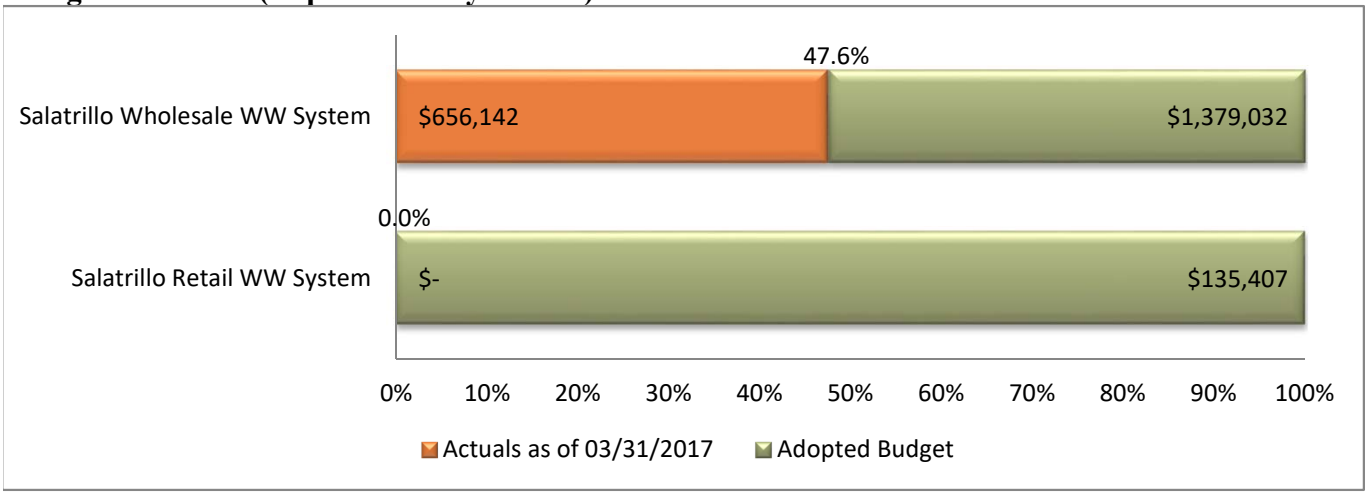
Project Name: Salatrillo Collection System Inflow and Infiltration **Project #** 0314



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Salatrillo Collection System Inflow and Infiltration**	**Project #**	**0314**
Managing Department:	Utilities		

		Adopted Budget:	$ 1,514,439
Project Start Date:	05/04/2011	Unfunded Plan:	$ 1,796,924
Project Finish Date:	06/30/2021	Total Project:	$ 3,311,363

The River Authority has an on-going commitment to improve inflow and infiltration (I&I) into the various collection systems owned and operated by the River Authority. This includes the Salatrillo Wastewater System. Reducing I&I, which is water that enters into the collection system through leaks in the pipes and manholes, reduces flow into the treatment plant. The flow into the plant determines when additional plant capacity is required. Therefore, investment in reducing I&I postpones plant expansion – a more expensive investment than improving the collection system to reduce I&I.

The I&I project repairs defective manholes and defective lines in the system according to a 1 to 5 rating system, with 5 being the worst condition. Repairs throughout the system are occurring over a ten year period.

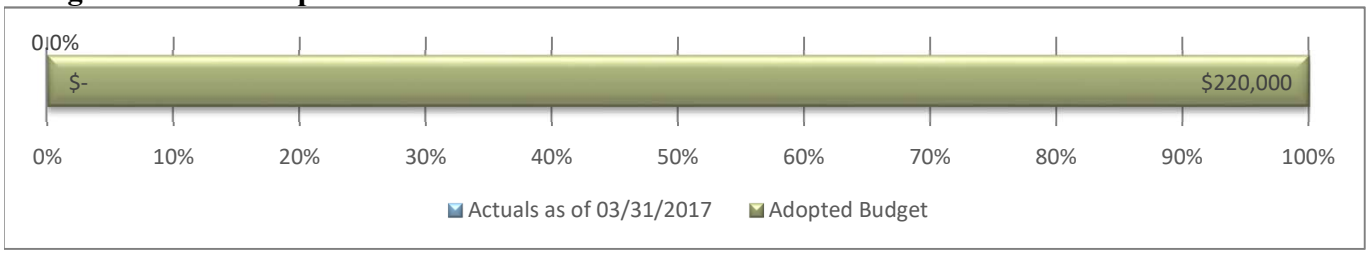
In FY 2017/18, $569,297 is expected to be expended on this project to repair defective lines and manholes. $433,890 is budgeted for the wholesale system where River Authority staff will work with a contractor to rehabilitate 544 linear feet of 24 inch pipe by cast in place pipe (CIPP) and four manholes by installing new rings and covers and spraying the manhole's interior with epoxy liner. The retail system's budget is $135,407 for the rehabilitation of 11 manholes by installing new rings and covers and spraying the manhole's interior with epoxy liner. Future operations and maintenance expenditures could be reduced as a result of repair and replacement of aging pipe infrastructure.

Spending Plan of Total Project Budget

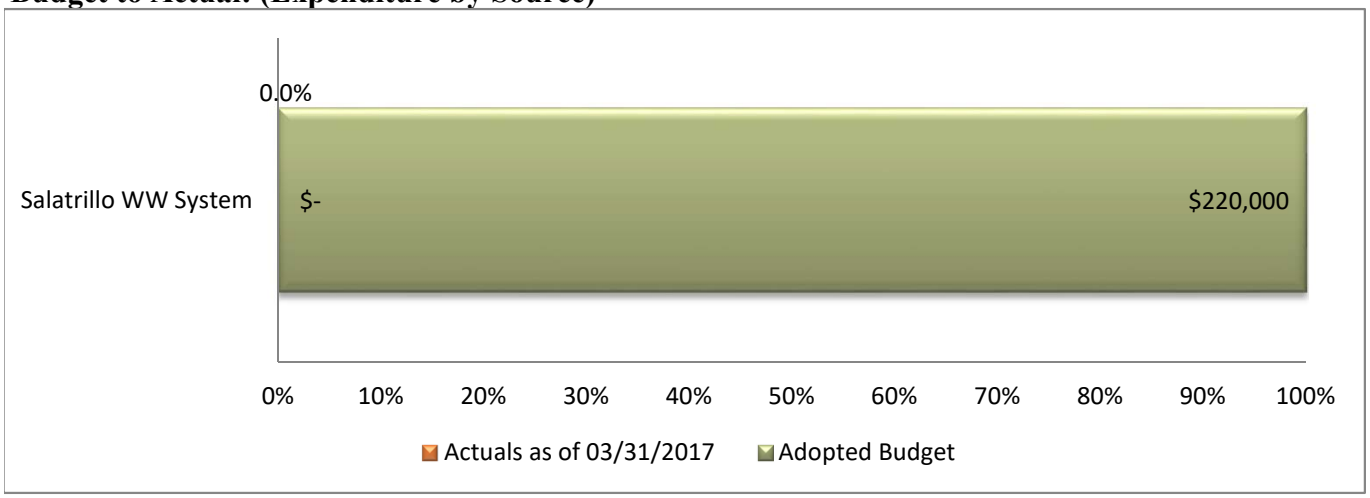
Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Construction	$ 656,142	$ 858,297	$ 441,365	$ 1,355,559	$ 3,311,363
Total	$ 656,142	$ 858,297	$ 441,365	$ 1,355,559	$ 3,311,363

Project Name: **Salatrillo WWTP Capital Improvements** **Project #** **0579**

Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



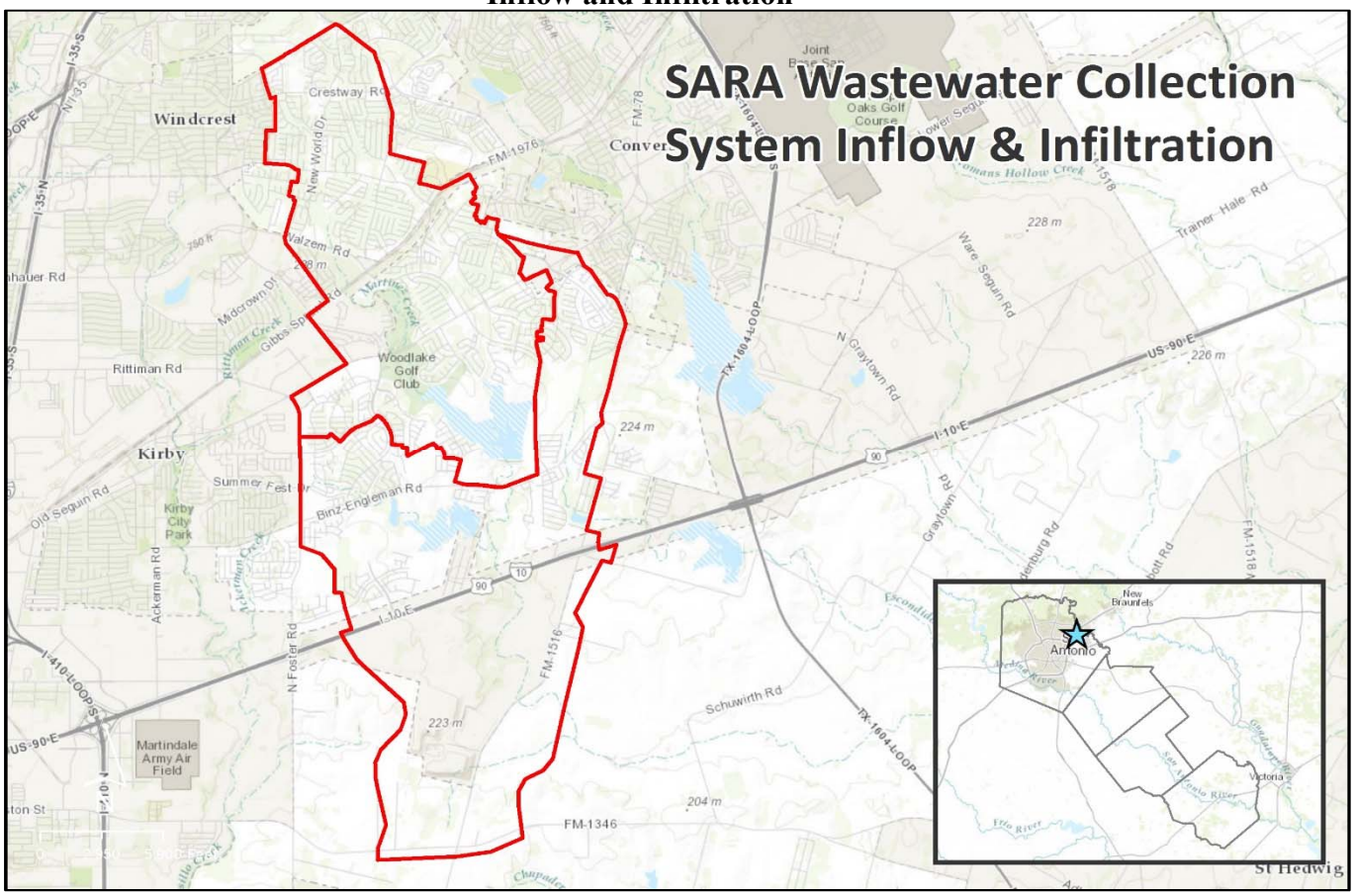
Project Name:	**Salatrillo WWTP Capital Improvements**		**Project #**		**0579**
Managing Department:	Utilities				
		Adopted Budget:	$	220,000	
Project Start Date:	07/01/2017	Unfunded Plan:	$	-	
Project Finish Date:	06/30/2022	Total Project:	$	220,000	

As part of the Capital Improvement Plan and Renewal and Replacement Plan, staff has identified various improvements needed at the Salatrillo Wastewater Treatment Plant based on age and condition of the equipment. For FY 2017/18, staff will replace electrical cubicle boxes and four brush aerators due to age and continuous repairs. Future operations and maintenance expenditures could be reduced as a result of repair and replacement of this equipment.

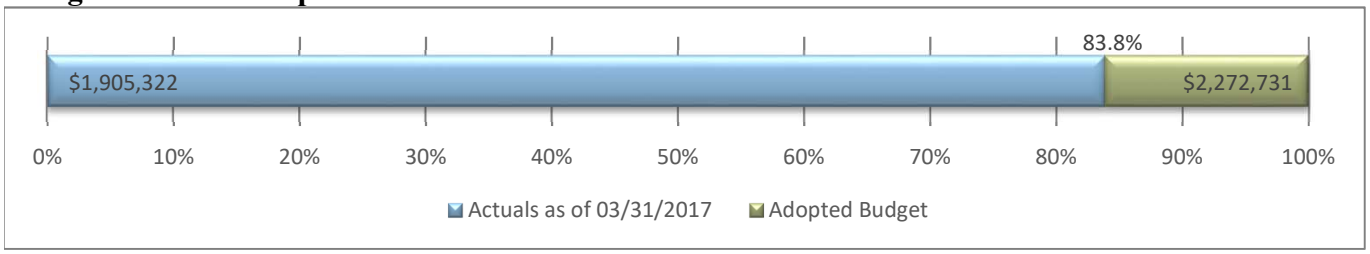
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Construction	$ -	$ 220,000	$ -	$ -	$ 220,000
Total	$ -	$ 220,000	$ -	$ -	$ 220,000

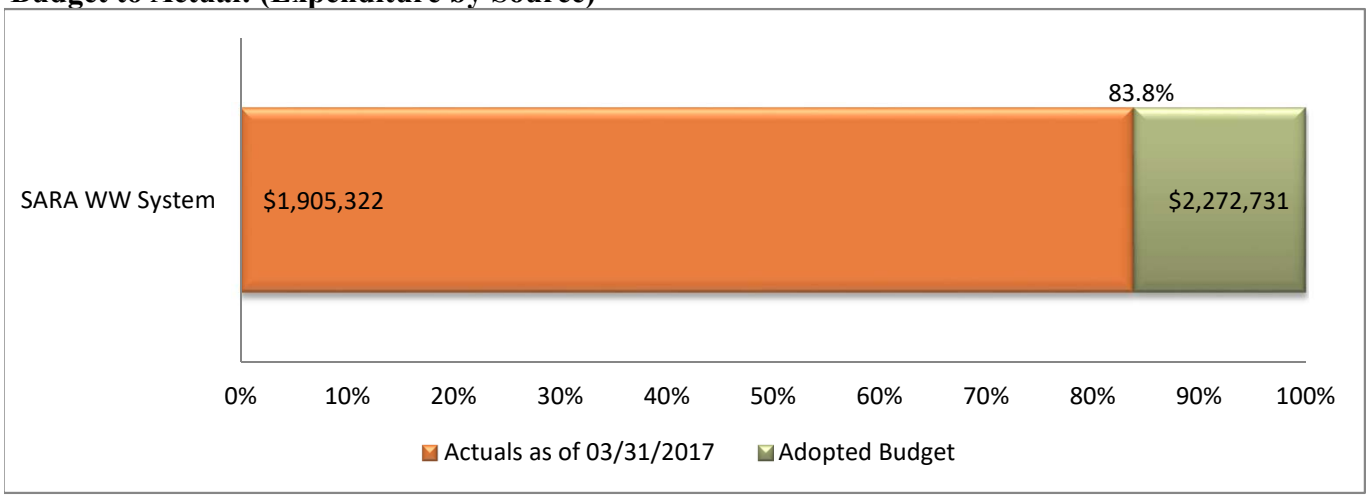
Project Name: SARA Wastewater Collection System Inflow and Infiltration **Project #** 0315



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **SARA Wastewater Collection System Inflow and Infiltration** **Project #** **0315**

Managing Department: Utilities

		Adopted Budget:	$ 2,272,731
Project Start Date:	05/04/2011	Unfunded Plan:	$ 1,243,476
Project Finish Date:	06/30/2021	Total Project:	$ 3,516,207

The River Authority has an on-going commitment to improve inflow and infiltration (I&I) into the various collection systems owned and operated by the River Authority. This includes the San Antonio River Authority Wastewater System. Reducing I&I, which is water that enters into the collection system through leaks in the pipes and manholes, reduces flow into the treatment plants. The flow into the plant determines when additional plant capacity is required. Therefore, investment in reducing I&I postpones plant expansion – a more expensive investment than improving the collection system to reduce I&I.

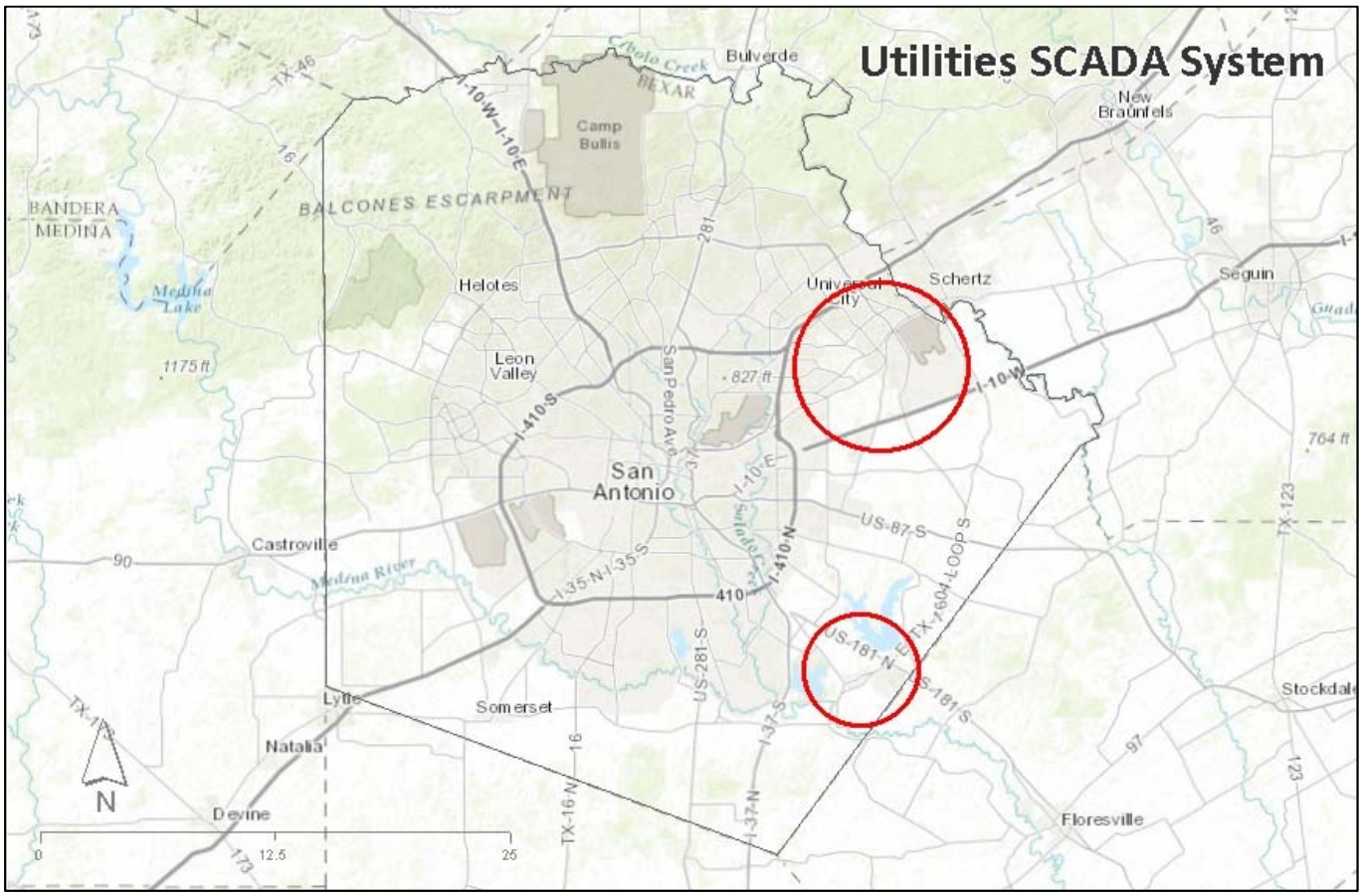
Beginning in FY 2011/12, the I&I project repairs defective manholes and defective lines in the system according to a 1 to 5 rating system, with 5 being the worst condition. Repairs throughout the system are occurring over a ten year period.

In FY 2017/18, $367,409 is expected to be expended on this project to repair defective lines and manholes. River Authority staff will work with a contractor to rehabilitate 372 linear feet of 8 inch pipe and 892 linear feet of 15 inch pipe by cast in place pipe (CIPP) and 2 manholes by installing new rings and covers and spraying the manhole's interior with epoxy liner. This program is expected to continue through FY 2020/21. Future operations and maintenance expenditures could be reduced as a result of repair and replacement of aging pipe infrastructure.

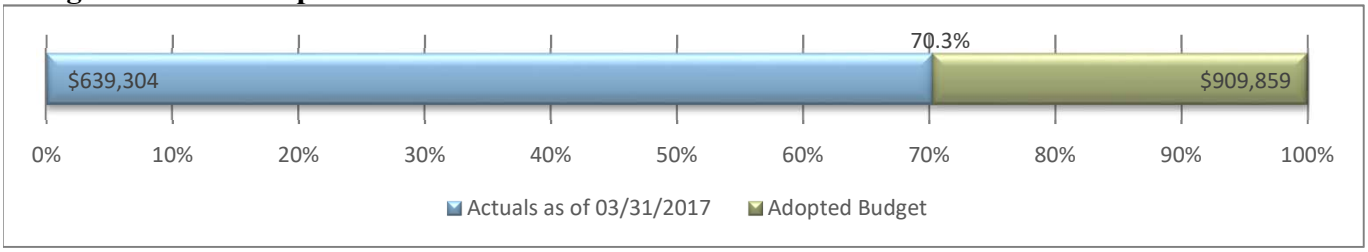
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Construction	$ 1,905,322	$ 367,409	$ 485,018	$ 758,458	$ 3,516,207
Total	$ 1,905,322	$ 367,409	$ 485,018	$ 758,458	$ 3,516,207

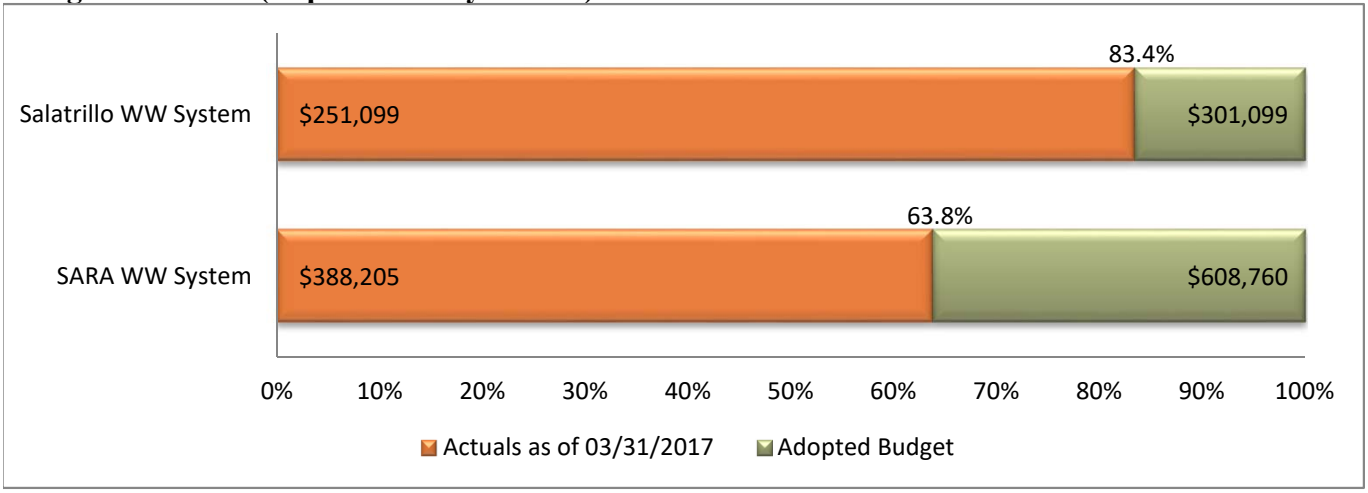
Project Name: **Utilities SCADA System** **Project #** **0101**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Utilities SCADA System**		**Project #**	**0101**
Managing Department:	Utilities			
		Adopted Budget:	$	909,859
Project Start Date:	04/02/2007	Unfunded Plan:	$	-
Project Finish Date:	08/01/2017	Total Project:	$	909,859

The Supervisory Control and Data Acquisition (SCADA) program provides communications and controls for the River Authority wastewater and water systems from one central computer system, creating better control over these systems. This application helps to comply with homeland security within the region; it also provides a real-time monitoring and control system to improve efficiency. Utilities will eventually share data through the SCADA system with Watershed and Park Operations, Watershed Management, and Environmental Sciences departments.

Since the kick-off of this project in FY 2007/08, several of the utility's major and package treatment plants, as well as lift stations have become fully functional in the SCADA system with installations completed in prior fiscal years. In FY 2017/18, additional improvements that have been identified will be completed to the Salatrillo Wastewater Treatment Plant SCADA system, including real-time monitoring of clarifier sludge depths that will provide utility operators with the ability to better monitor treatment conditions remotely.

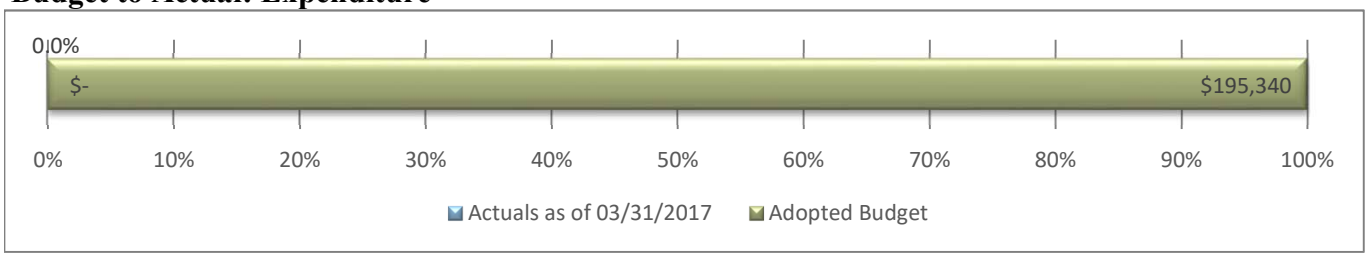
These expenditures will total $220,555 in FY 2017/18 for the San Antonio River Authority wastewater system. The total project budget for both the Martinez system and the Salatrillo system is $909,859. The San Antonio River Authority Wastewater System Construction and Improvements Fund contributed ($608.760) and Salatrillo Construction and Improvement Fund contributed ($301,099). Operations and maintenance costs could be reduced as a result of full use of this system as it creates system management efficiencies.

Spending Plan of Total Project Budget

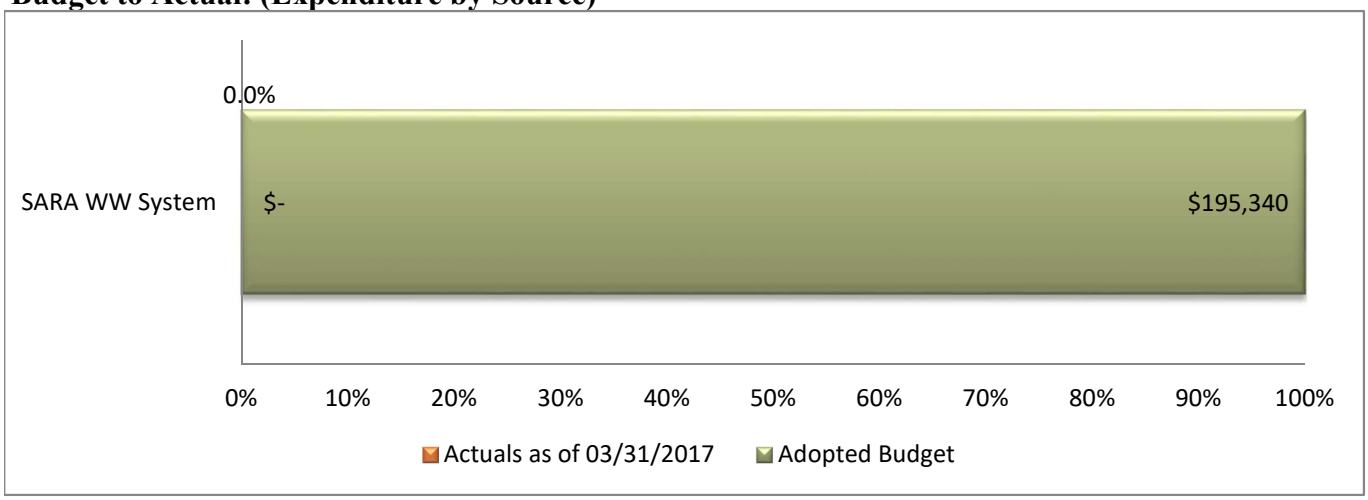
Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Construction	$ 639,304	$ 270,555	$ -	$ -	$ 909,859
Total	$ 639,304	$ 270,555	$ -	$ -	$ 909,859

Project Name: Wastewater Treatment Plant Roadway Improvements **Project #** 0581

Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **Wastewater Treatment Plant Roadway Improvements** **Project #** **0581**
Managing Department: Utilities

		Adopted Budget:	$ 195,340
Project Start Date:	07/01/2017	Unfunded Plan:	$ 469,339
Project Finish Date:	06/30/2020	Total Project:	$ 664,679

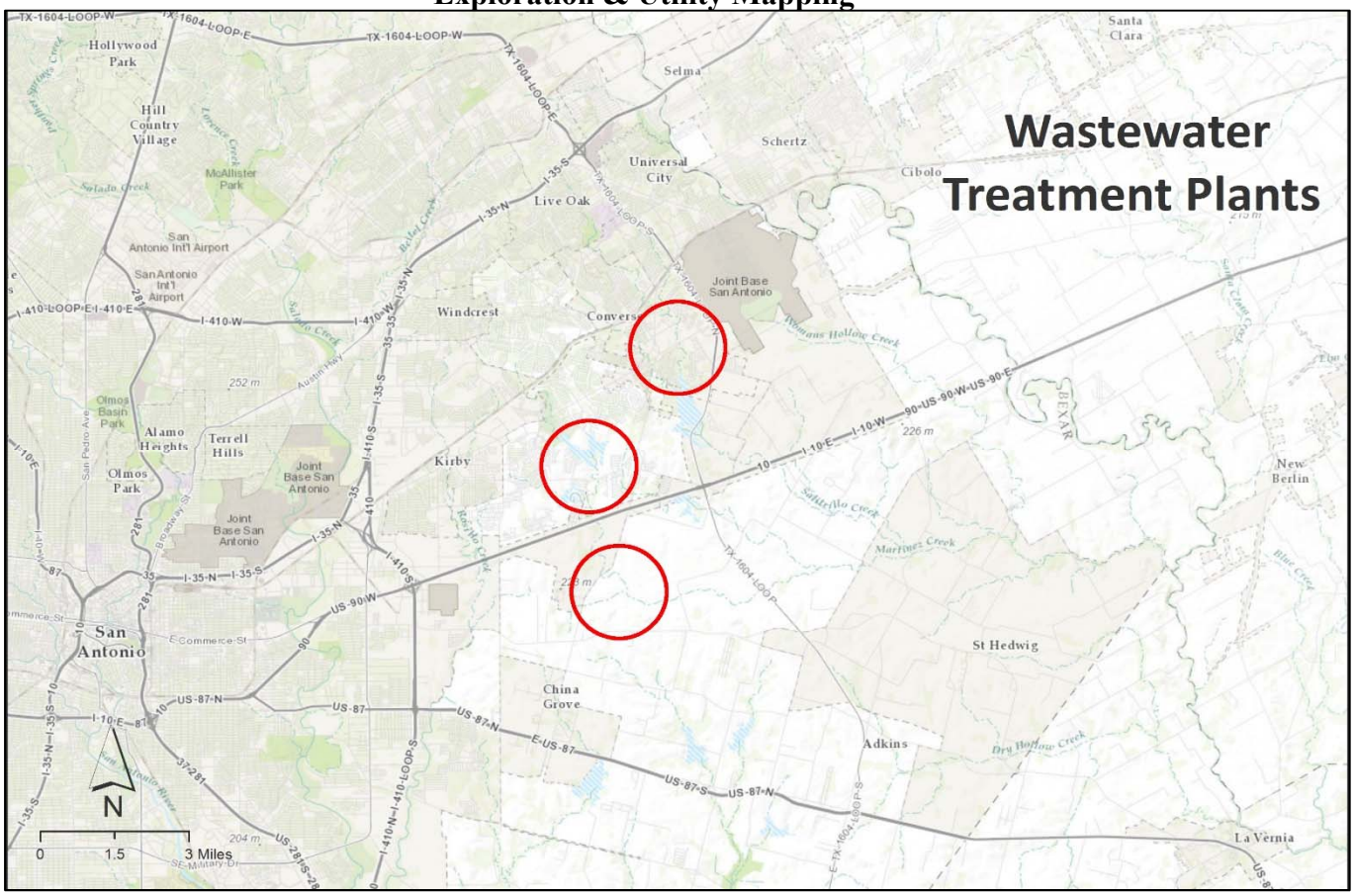
This project completes roadway improvements at Upper Martinez and Martinez II Wastewater Treatment Plants (WWTPs). Upper Martinez needs a new concrete apron tie into Binz Engleman Road. This entrance was built in 1984 and supports the WWTP and the hay storage area for the Watershed and Park Operations Department. Martinez II has a new subgrade in the shop area that needs to be chip sealed to control dust, and the entrance road constructed in 2010 needs to have cracks addressed that were caused by the highly expansive clays that have been influenced by drought then rains causing the asphalt movement and cracking.

In FY 2017/18, these roadway projects will be designed, bid, and constructed. Future operations and maintenance costs could be reduced as the newer roadway will require less maintenance and repair.

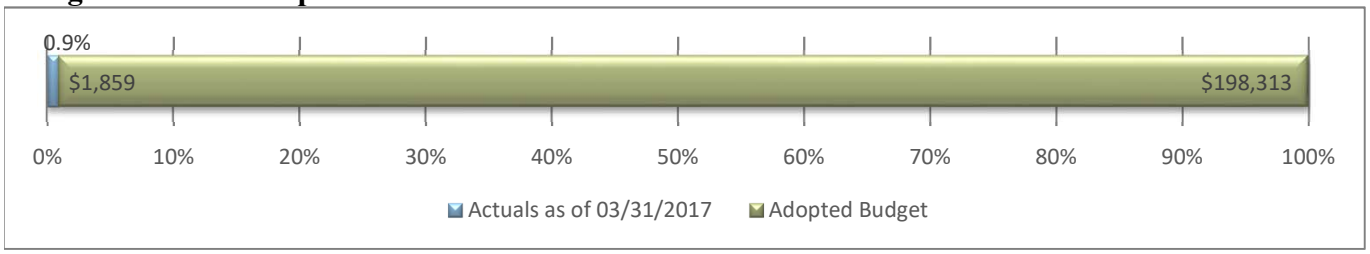
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Construction	$ -	$ 195,340	$ -	$ 469,339	$ 664,679
Total	$ -	$ 195,340	$ -	$ 469,339	$ 664,679

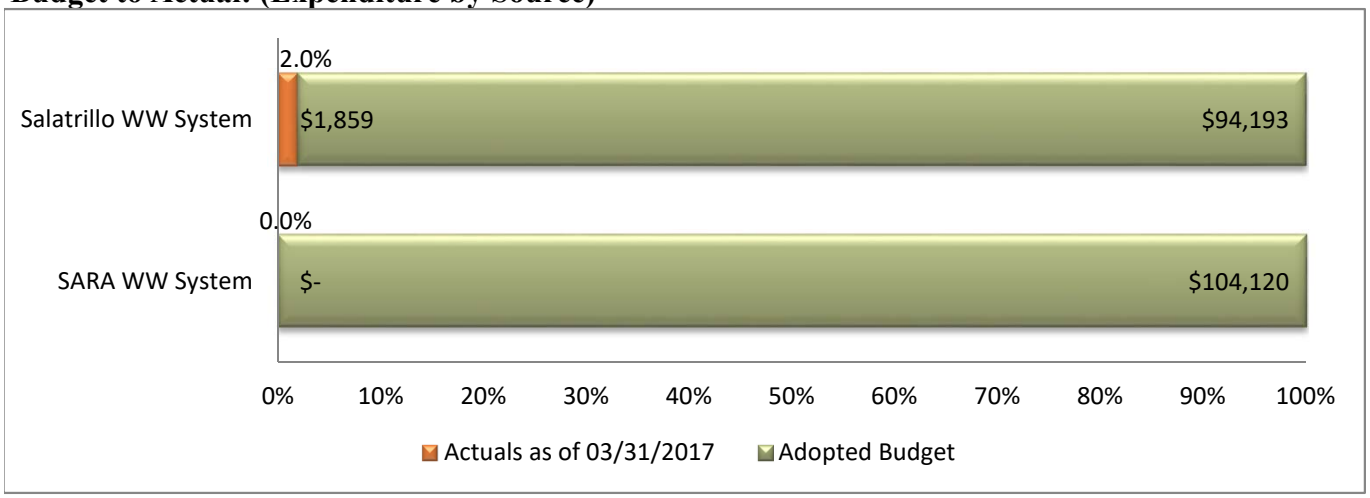
Project Name: WWTP Subsurface Utility Exploration & Utility Mapping **Project #** 0548



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **WWTP Subsurface Utility Exploration & Utility Mapping** **Project #** **0548**

Managing Department: Utilities

		Adopted Budget:	$ 198,313
Project Start Date:	07/01/2016	Unfunded Plan:	$ 54,619
Project Finish Date:	06/28/2019	Total Project:	$ 252,932

The Subsurface Utility Exploration and Utility Mapping Project provides better information on the existing utility lines at the River Authority's treatment plants. This project supports future utility projects and expansions at Upper Martinez, Martinez II and Salatrillo Wastewater Treatment Plants (WWTP). This mapping effort is being performed in phases. In FY 2017/18, the Phase I mapping and conflict analysis of the Salatrillo WWTP will be completed. The consultant will use existing maps and use both above and below ground methods and equipment to fill in the gaps. Some of the exploration methods and equipment that may be used are digging test holes, magnetic finders, and metal detectors. This project will not require any future operations and maintenance expenditures.

Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Operations	$ 1,179	$ 197,134	$ 54,619	$ -	$ 252,932
Total	$ 1,179	$ 197,134	$ 54,619	$ -	$ 252,932

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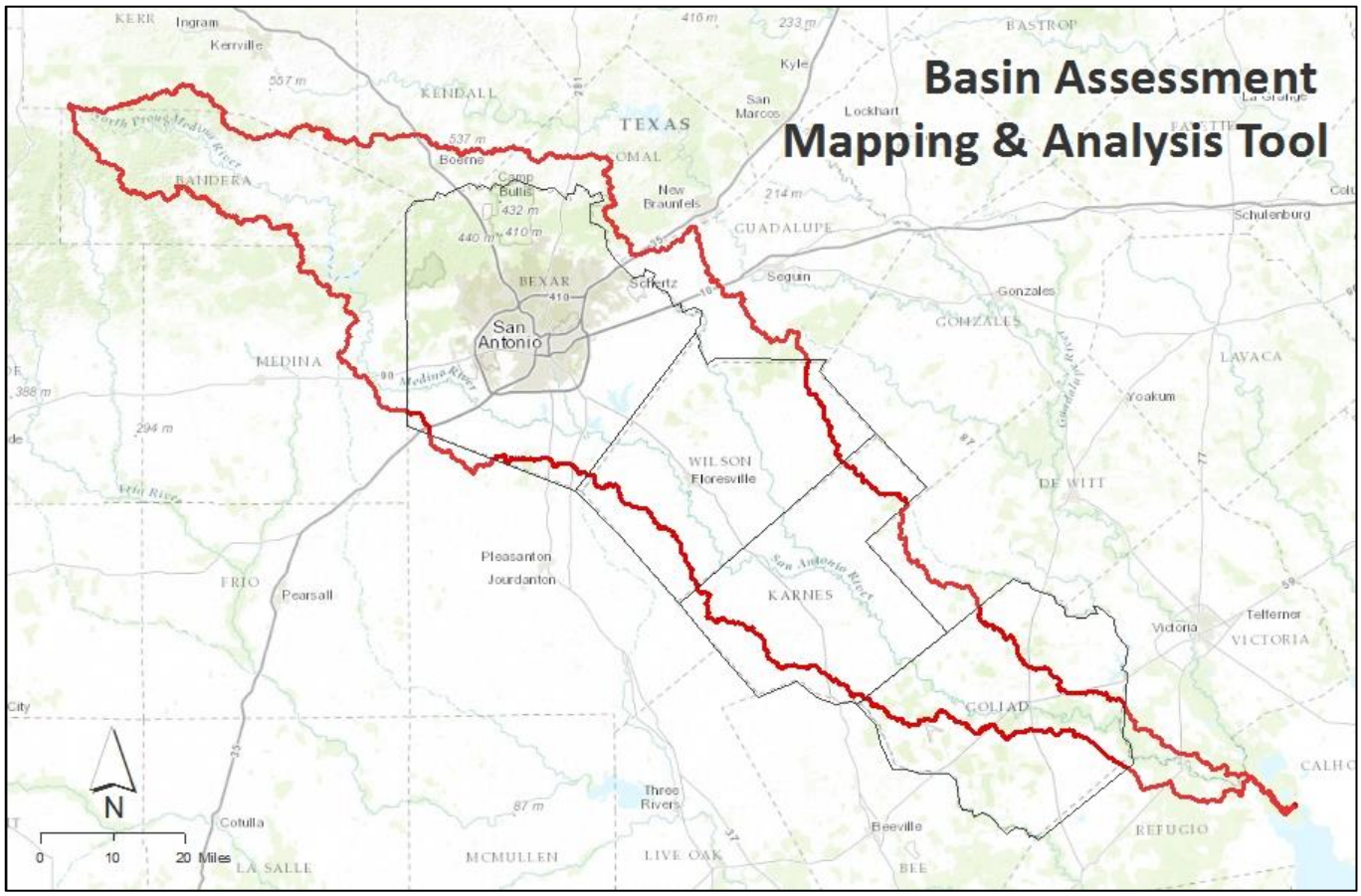
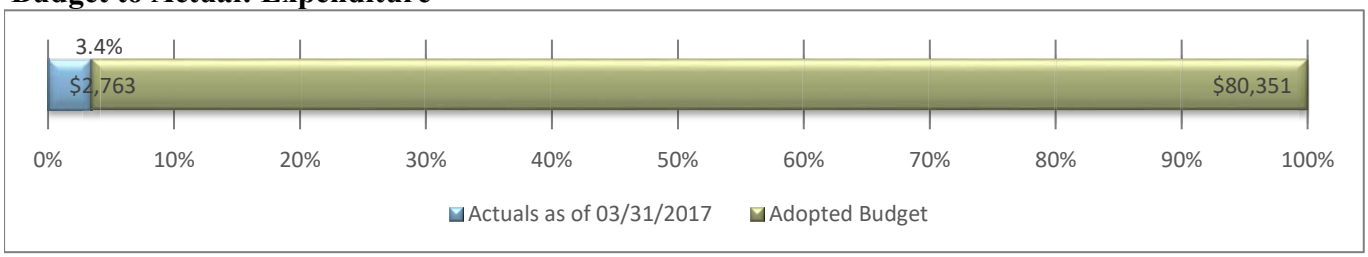
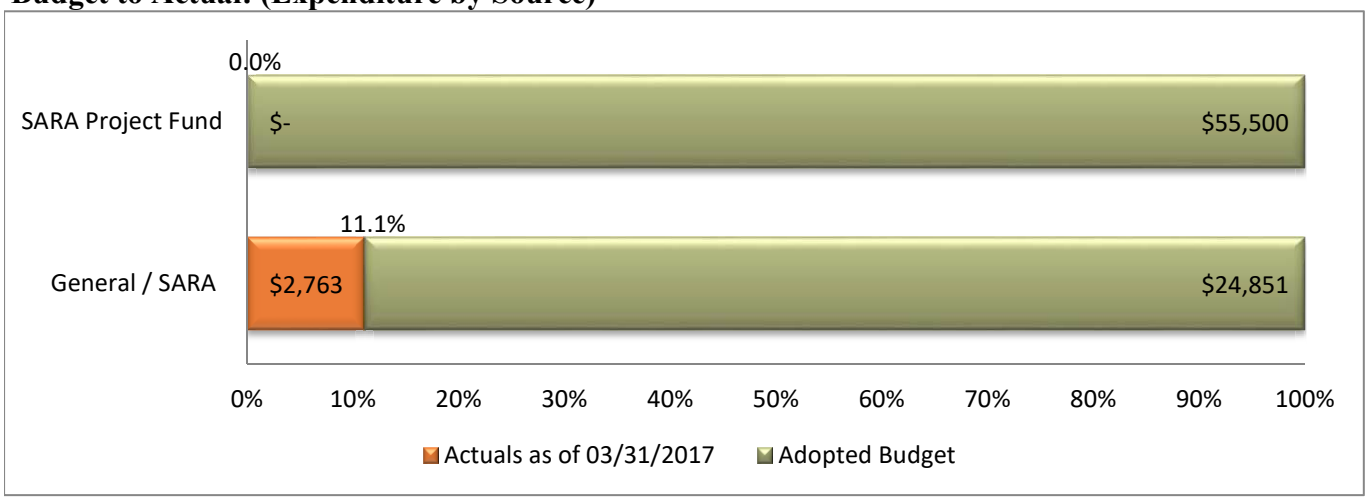
Project Name: **Basin Assessment Mapping & Analysis Tool** **Project #** **0540**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **Basin Assessment Mapping & Analysis Tool** **Project #** **0540**
Managing Department: Information Technology

		Adopted Budget:	$	80,351
Project Start Date:	07/01/2016	Unfunded Plan:	$	9,754
Project Finish Date:	06/30/2019	Total Project:	$	90,105

The primary goal of the Basin Assessment Mapping and Analysis Tool project is to compile, review and assess existing and current spatial data, models and analysis from both the River Authority and external sources to provide key indicators of watershed condition/health. Additionally, assessment results and associated data are being visualized and made available in an intuitive and interactive web mapping application, to aid in decision support and prioritization of target areas for holistic watershed improvement activities.

This project supports the strategic plan by providing a graphic display of the River Authority's data and analysis in one comprehensive and centralized web platform allowing River Authority staff access to valuable spatial information about the watershed to support planning for the best use of River Authority resources and to answer questions and communicate information about the San Antonio River Basin.

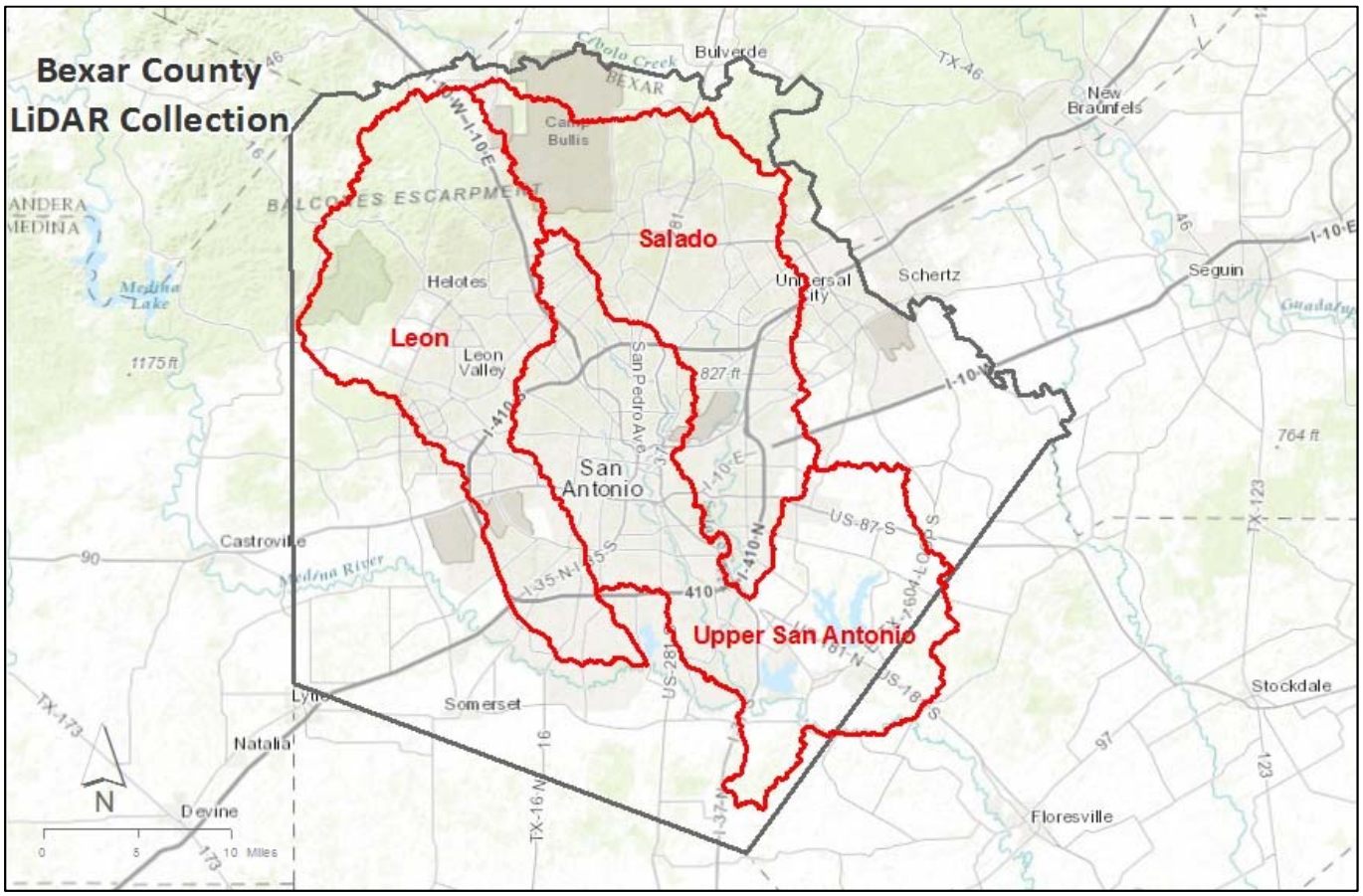
This project started in FY 2016/17 with collecting and updating spatial data, and finalizing the assessment methodology and results. In FY 2017/18, the Basin Assessment Tool will be finalized by River Authority staff and released for public and River Authority use. Training will be provided on use of the tool, and input gathered to identify additional functionality or data needs that would continue to make the tool more useful. Custom widgets will also be developed as well as a convenient dashboard to make use of the mapping application more intuitive for everyone. Several key datasets will be compiled basin-wide and provided in the tool for analysis. A conservation potential model will be developed for the basin, and an index will be created highlighting key target areas for both River Authority and other watershed stakeholders. In FY 2018/19, the tool will continue to be marketed and advanced visualizations, such as 3D, and other imagery data products will be incorporated as they become available. Operation and maintenance will be similar to other GIS data and applications, and will be accomplished through regular GIS maintenance activities by existing staff.

Of the total $80,351 Adopted Budget, $24,851 is estimated labor contribution through the River Authority General Fund.

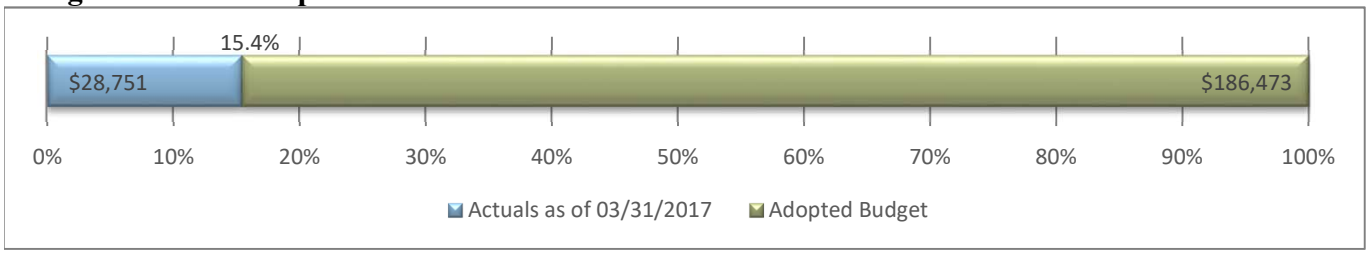
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 2,763	$ 77,588	$ 9,754	$ -	$ 90,105
Total	$ 2,763	$ 77,588	$ 9,754	$ -	$ 90,105

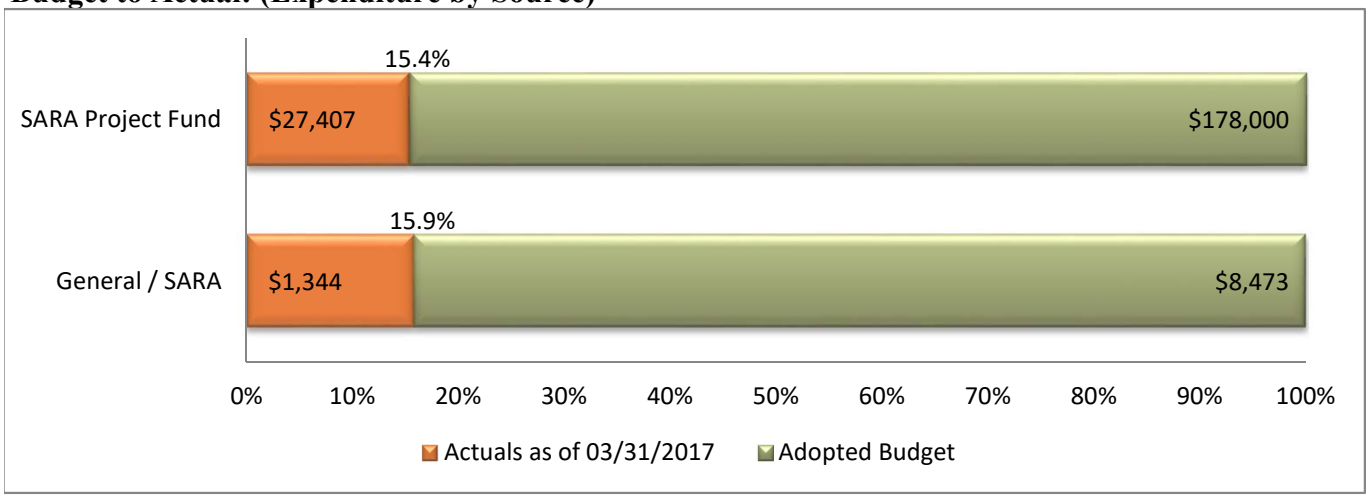
Project Name: **Bexar County LiDAR Collection** **Project #** **0541**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Bexar County LiDAR Collection**	**Project #**	**0541**
Managing Department:	Watershed Engineering		

		Adopted Budget:	$ 186,473
Project Start Date:	06/20/2016	Unfunded Plan:	$ -
Project Finish Date:	01/19/2018	Total Project:	$ 186,473

Light Detection and Ranging (LiDAR) is a surveying technology used to make high-resolution maps. This mapping technology supports the River Authority's efforts to develop watershed solutions within Bexar County by better understanding how land uses impact our creeks and rivers during storm events.

This Bexar County LiDAR Collection collects high-resolution elevation data for the County. The data supports hydraulic and hydrologic modeling, water quality modeling, flood modeling and other uses.

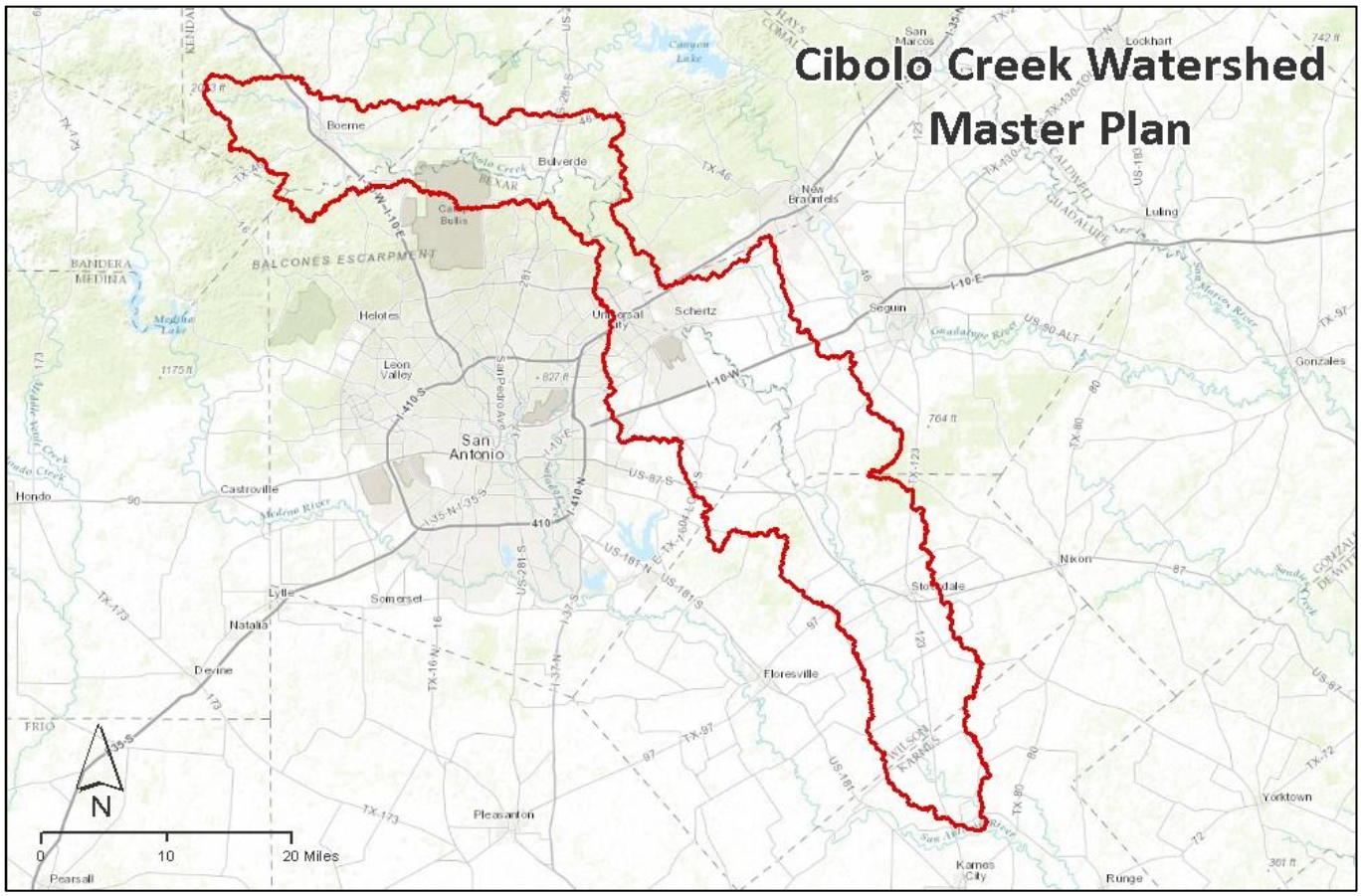
This two year project began in FY 2016/17 through a contract with Texas Natural Resources Information System (TNRS). A vendor was selected to collect, process, and provide independent quality assurance/quality control reviews. Phases I and II were completed, which consisted of pre-flight planning and LiDAR aerial images collection. For FY 2017/18, this project will focus on completing Phases III and IV which include aerial imaging data processing and final product development. The final product will include digital elevation models (DEM), classified LiDAR points (e.g. buildings, bare earth, high-vegetation, etc.), hydrobreaklines, and intensity imagery that are used to support the River Authority's various modeling efforts. Operation and maintenance will be similar to other GIS data and applications, and will be accomplished through regular GIS maintenance activities by existing staff.

Of the total $186,473 Adopted Budget, $8,473 is estimated labor contribution through the River Authority General Fund.

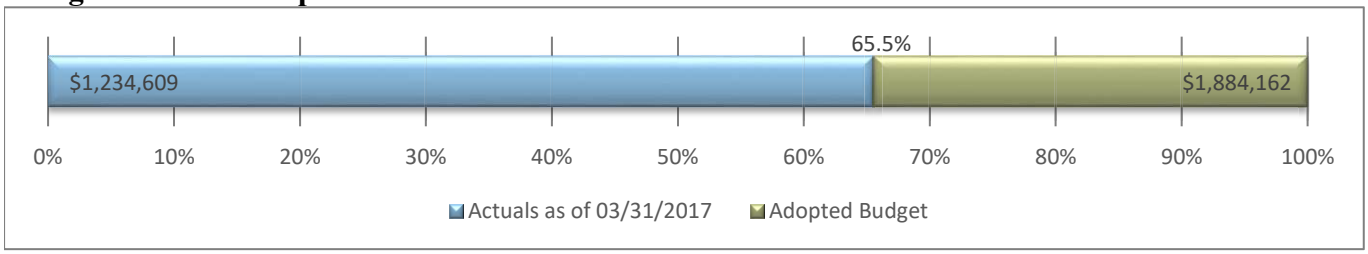
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Operations	$ 27,407	$ 150,593	$ -	$ -	$ 178,000
Administration	1,344	7,129	-	-	8,473
Total	$ 28,751	$ 157,722	$ -	$ -	$ 186,473

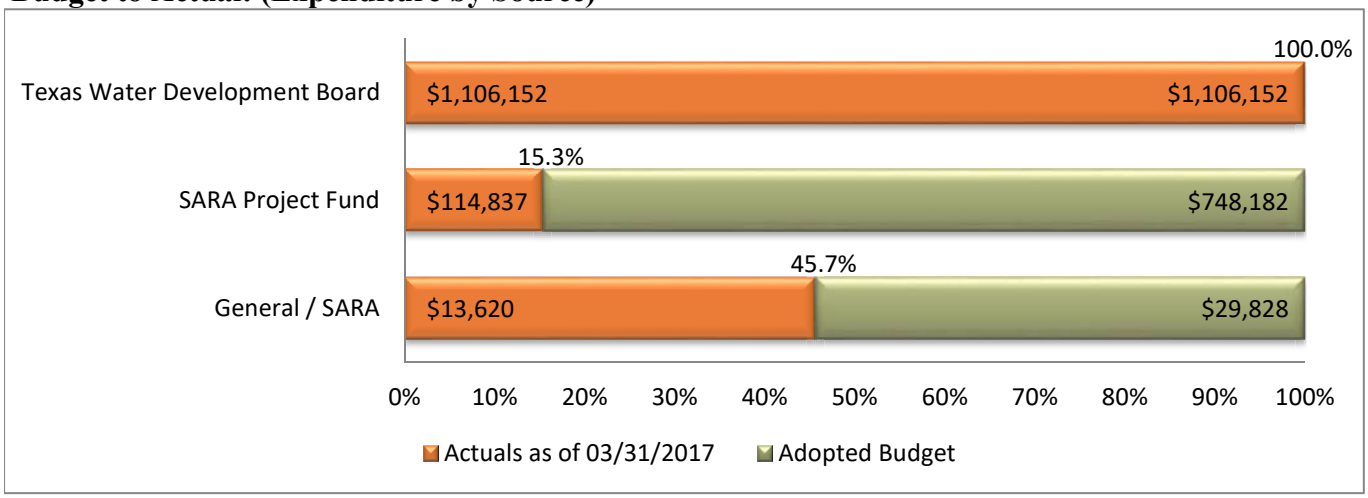
Project Name: Cibolo Creek Watershed Master Plan **Project #** 0305



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Cibolo Creek Watershed Master Plan**	**Project #**	**0305**
Managing Department:	Watershed Engineering		

		Adopted Budget:	$ 1,884,163
Project Start Date:	07/01/2013	Unfunded Plan:	$ -
Project Finish Date:	09/22/2017	Total Project:	$ 1,884,163

A holistic watershed master plan is being developed for the Cibolo Creek Watershed. The plan focuses on flood issues (hydrologic and hydraulic analysis), stream restoration, water quality modeling, water quality best management practices, GIS/mapping/remote sensing, low impact development, Municipal Separate Storm Water Sewer System (MS4) permitting, conservation easements, mitigation banking, and nature-based park planning.

Description

The activities of this project include identification of major flooding reaches, stream characterization and identification of the restoration potential, point and non-point pollutant sources that impact water quality, and development of holistic solutions to address identified risk centers and to meet multiple objects and goals.

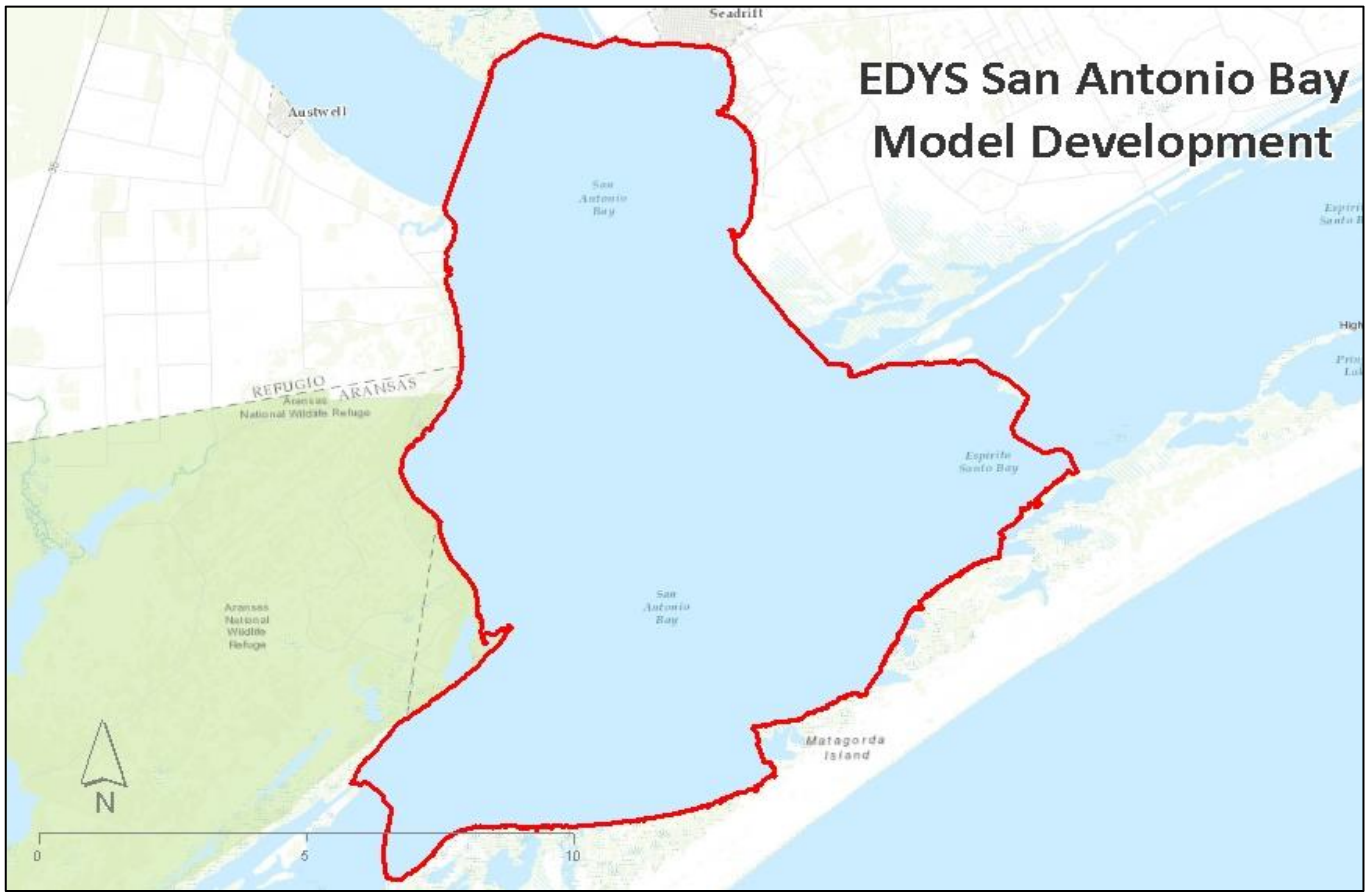
In FY 2012/13, Phase I of the project was scoped and consisted of data collection and stakeholder engagement meetings. In FY 2013/14, Phase I was completed and Phase II started consisting of hydrologic and hydraulics (H&H) modeling, water quality modeling and identifying nature-based park and stream restoration sites. Phase II was completed in FY 2016/17 and results were reviewed and shared with stakeholders for input. In FY 2017/18, the mitigation action plan will be developed based on modeling results, risk identification, and stakeholder input. The master plan, once completed, has no operations and maintenance cost impact. The project is funded by the San Antonio River Authority Project Fund ($748,182) and a Clean Water State Revolving Fund grant (budgeted in the Grant Fund) ($1,106,152).

Of the total $1,884,163 Adopted Budget, $29,828 is estimated labor contribution through the River Authority General Fund.

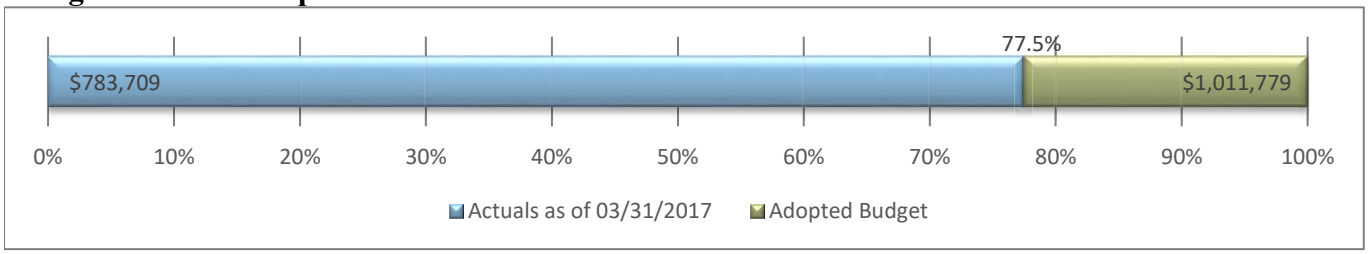
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Labor	$ 67,626	$ 16,208	$ -	$ -	$ 83,834
Other	1,166,983	633,346	-	-	1,800,329
Total	$ 1,234,609	$ 649,554	$ -	$ -	$ 1,884,163

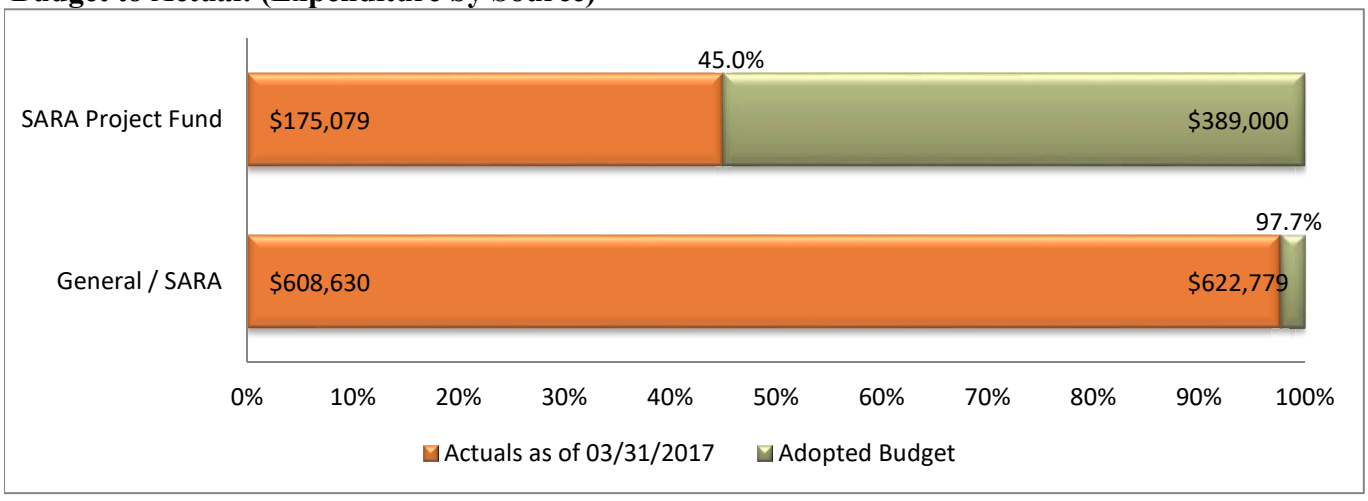
Project Name: **EDYS San Antonio Bay Model Development** **Project #** **0296**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**EDYS San Antonio Bay Model Development**	**Project #**	**0296**
Managing Department:	Watershed Engineering		

		Adopted Budget:	$ 1,011,779
Project Start Date:	03/31/2011	Unfunded Plan:	$ -
Project Finish Date:	06/29/2018	Total Project:	$ 1,011,779

This ecological modeling project provides the tool to improve understanding of the complex dynamics of the San Antonio Bay system, which is a necessary component for supporting conservation efforts, namely for the whooping crane management.

The purpose of this Ecological Dynamic Simulation (EDYS) application is to develop an integrated model for the San Antonio Bay. The model combines multiple parameters and simulates salinity and sediment gradient dynamics resulting from outflows of freshwater from the river and tidal inputs of brackish water from the bay and the effects of these gradients on the marsh vegetation. The model can serve as a tool that would be of substantial benefit for decision making in the San Antonio River-San Antonio Bay complex and is a dynamic ecological simulation model that can integrate hydrological and ecological responses in a practical and scientifically valid manner.

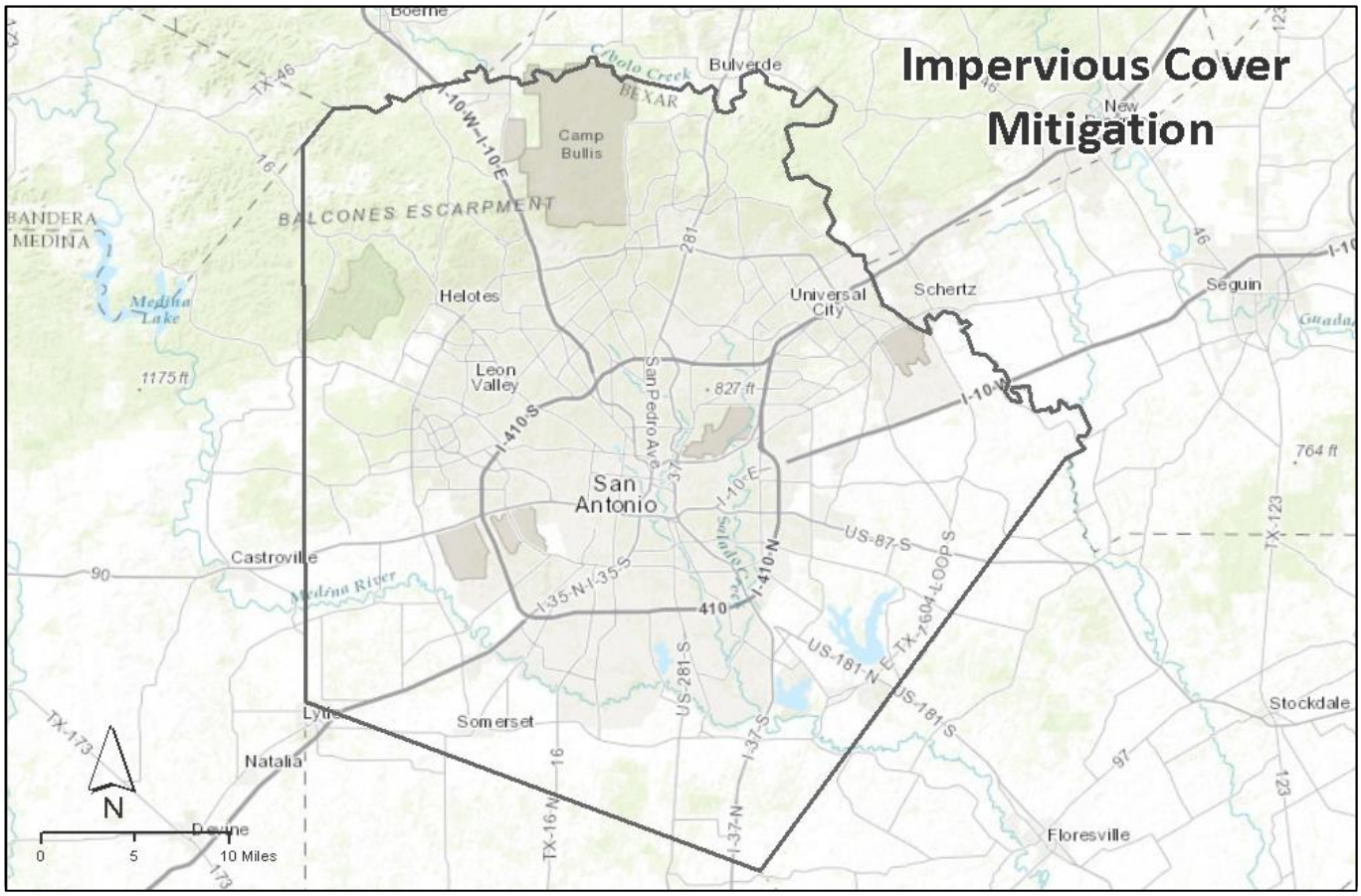
In FY 2011/12, contracts were negotiated and efforts began to develop the integrated model. Over the ensuing fiscal years, a spatial footprint of the San Antonio Bay and surrounding area was created, plant communities' data collected, the hydrology aspects including river discharge, tidal and wind action on bay waters collected, as well as data on salinity, sediment, and climate fluctuations. A second phase then added data on saltwater, freshwater, and terrestrial animal components, followed by nutrients, water chemistry, pollutants and microbial components. In FY 2017/18, the project tasks include continuation of sampling on the validation sites for vegetation and salinity data and running up to eight environmental and management practices to see the changes in the marshes and adjacent communities based on inundation and salinity of the Bay ecosystem. Operations and maintenance costs associated with this project are included in the FY 2017/18 Adopted Budget.

Of the total $1,011,779 Adopted Budget, $29,621 is estimated labor contribution through the River Authority General Fund.

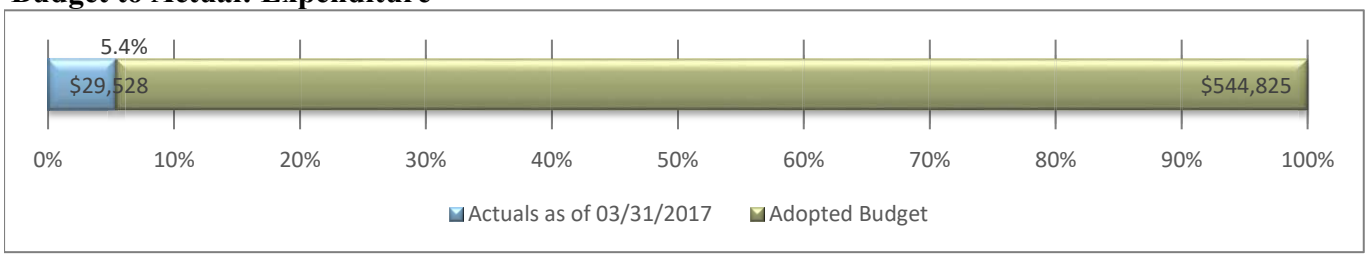
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 783,709	$ 228,070	$ -	$ -	$ 1,011,779
Total	$ 783,709	$ 228,070	$ -	$ -	$ 1,011,779

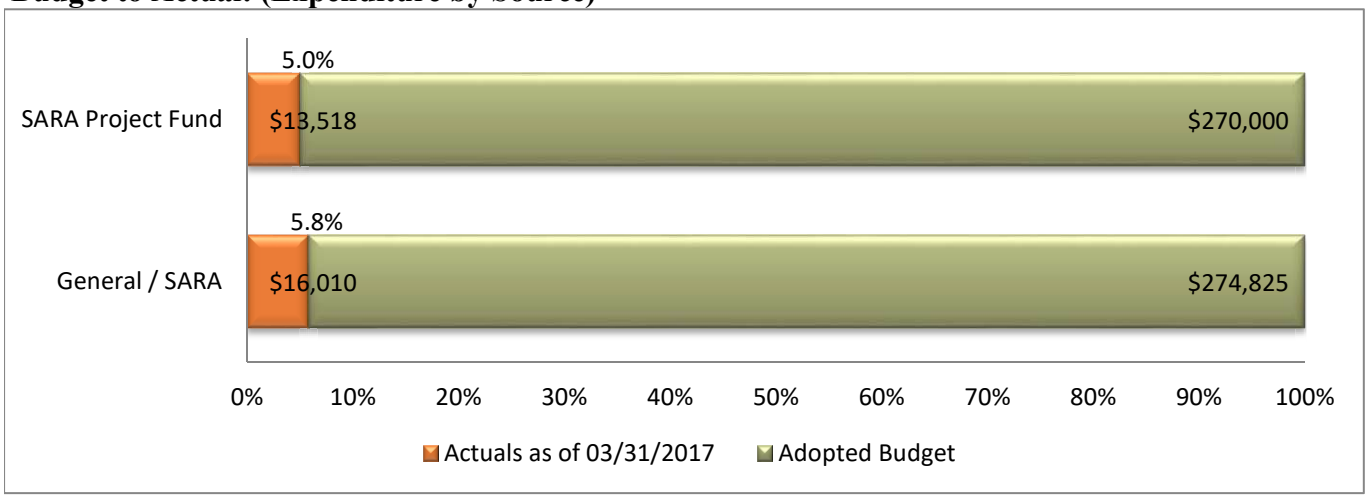
Project Name: **Impervious Cover Mitigation** **Project #** **0564**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Impervious Cover Mitigation**	**Project #**	**0564**
Managing Department:	Environmental Sciences		

		Adopted Budget:	$ 544,825
Project Start Date:	11/18/2016	Unfunded Plan:	$ 1,140,891
Project Finish Date:	12/31/2021	Total Project:	$ 1,685,716

To lead the technical analysis of impervious cover impacts and stormwater runoff to influence mitigation and policy decisions, the River Authority utilizes GIS impervious cover data layers, historic water quality and flow data, water quality and hydrology and hydraulic models, and economic analyses to quantify impacts of unmitigated and mitigated development on receiving watersheds. The River Authority's work will result in technical and economic assessments and mitigation, messaging, and policy recommendations. The River Authority's results will contribute to the City of San Antonio's SA Tomorrow Comprehensive and Sustainability Plan discussions.

In August 2016, the City of San Antonio City Council approved a Comprehensive Plan, a Sustainability Plan, and a Transportation Plan under the name SA Tomorrow. SA Tomorrow identifies 13 regional centers throughout the City that will see significant growth in the upcoming 23 years and addresses the new development within those centers to accommodate a projected 1.1 million new residents. SA Tomorrow addresses to impervious cover, its potential impacts on flood management and water quality, and potential policy changes that may result as the SA Tomorrow plan moves into its implementation phase. The River Authority is uniquely qualified to provide science-based technical data and analyses to foster the City's efforts in establishing sound policy to mitigate any impacts of increased impervious cover on San Antonio watersheds.

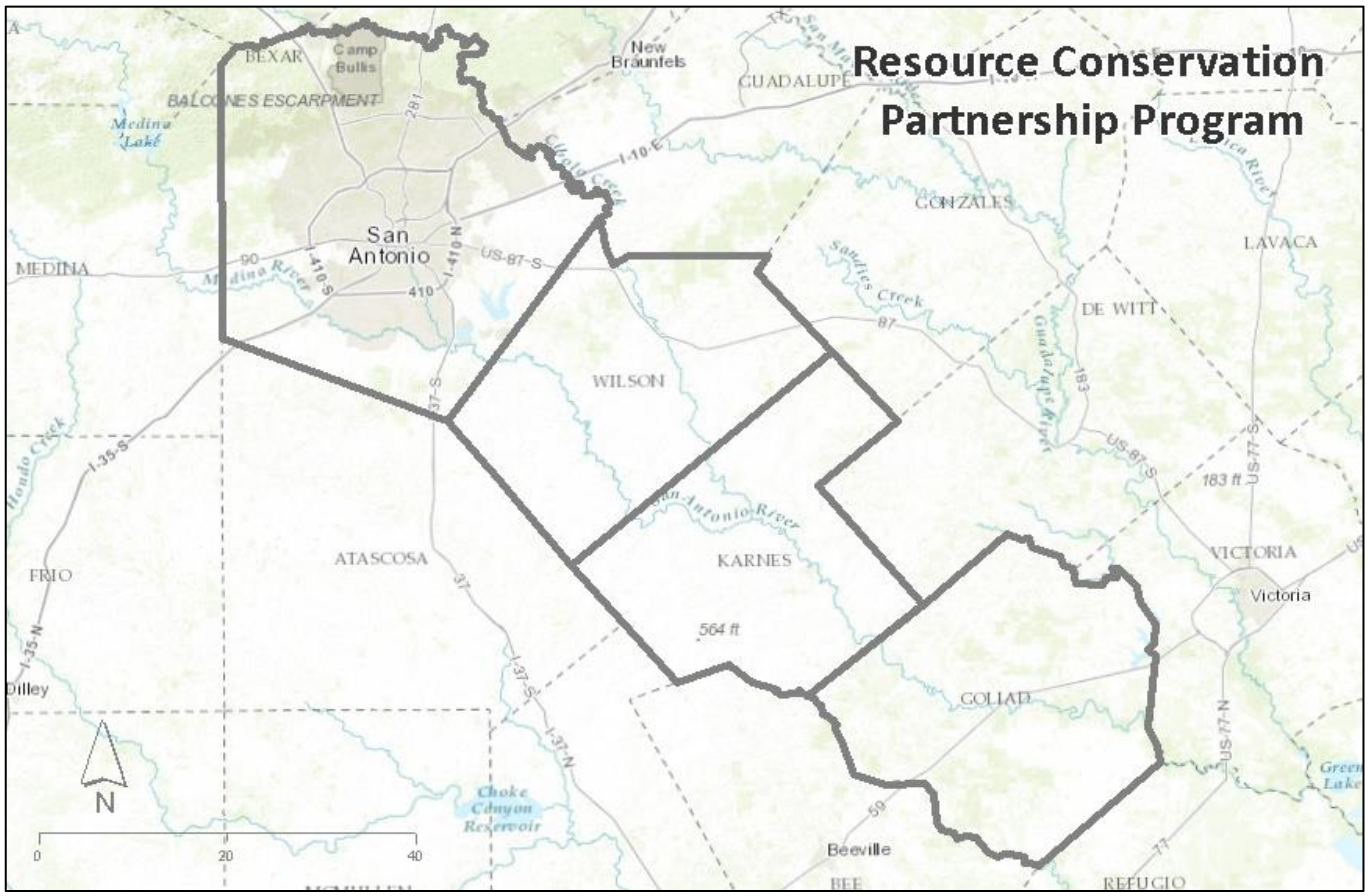
In FY 2017/18, funding will allow River Authority staff to conduct technical and economic analyses and flood management and/or water quality mitigation, messaging, and policy recommendations on two of the City's four Year One priority regional centers. Operations and maintenance costs are included in the FY 2017/18 Adopted Budget.

Of the total $544,825 Adopted Budget, $274,825 is estimated labor contribution through the River Authority General Fund.

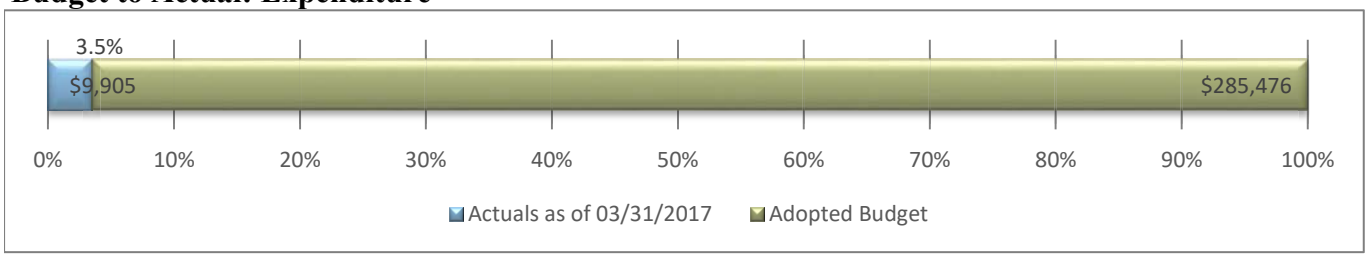
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 29,528	$ 515,297	$ 897,098	$ 243,793	$ 1,685,716
Total	$ 29,528	$ 515,297	$ 897,098	$ 243,793	$ 1,685,716

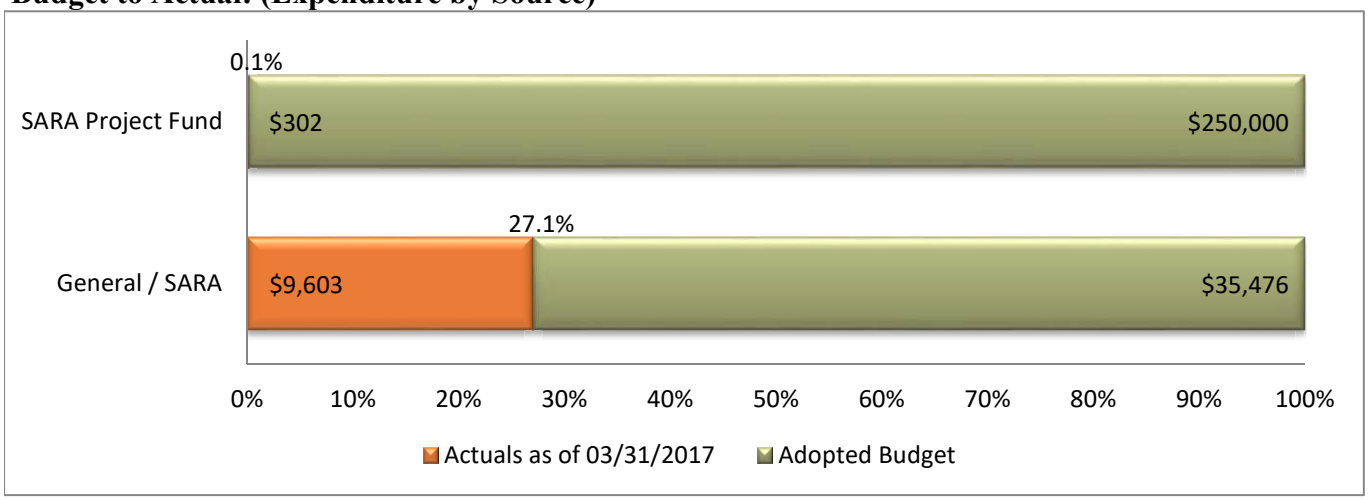
Project Name: **Resource Conservation Partnership Program** **Project #** **0503**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Resource Conservation Partnership Program**	**Project #**	**0503**
Managing Department:	Watershed Engineering		
		Adopted Budget:	$ 285,476
Project Start Date:	07/11/2016	Unfunded Plan:	$ 600,000
Project Finish Date:	06/30/2019	Total Project:	$ 885,476

The River Authority is leveraging technical assistance and outreach to assist land owners to implement conservation measures throughout the basin to improve the long term resiliency of the watershed. Through collaboration with multiple public and private partners, the River Authority assists with implementation of a Natural Resources Conservation Services (NRCS) program that allows land owners to conserve and restore riparian areas and to implement stream restoration and water quality related land management practices.

The River Authority is a partner in the Texas Gulf Coast Initiative (TGCI) of the U.S. Department of Agriculture Resource Conservation Partnership Program (RCPP). The TGCI is a large-scale effort to improve water quality, water quantity, and soil health throughout a 43 county area of the Texas Gulf Coast. The TCGI region is one of the fastest growing areas in the United States and nearly half of all United States coastal wetlands are located along the Gulf. The TGCI focuses on the restoration and protection of headwater stream and wetland systems on agricultural cropland, grassland, rangeland, pastureland, and forestland within the region, to improve function and provide protections to these systems against future development impacts.

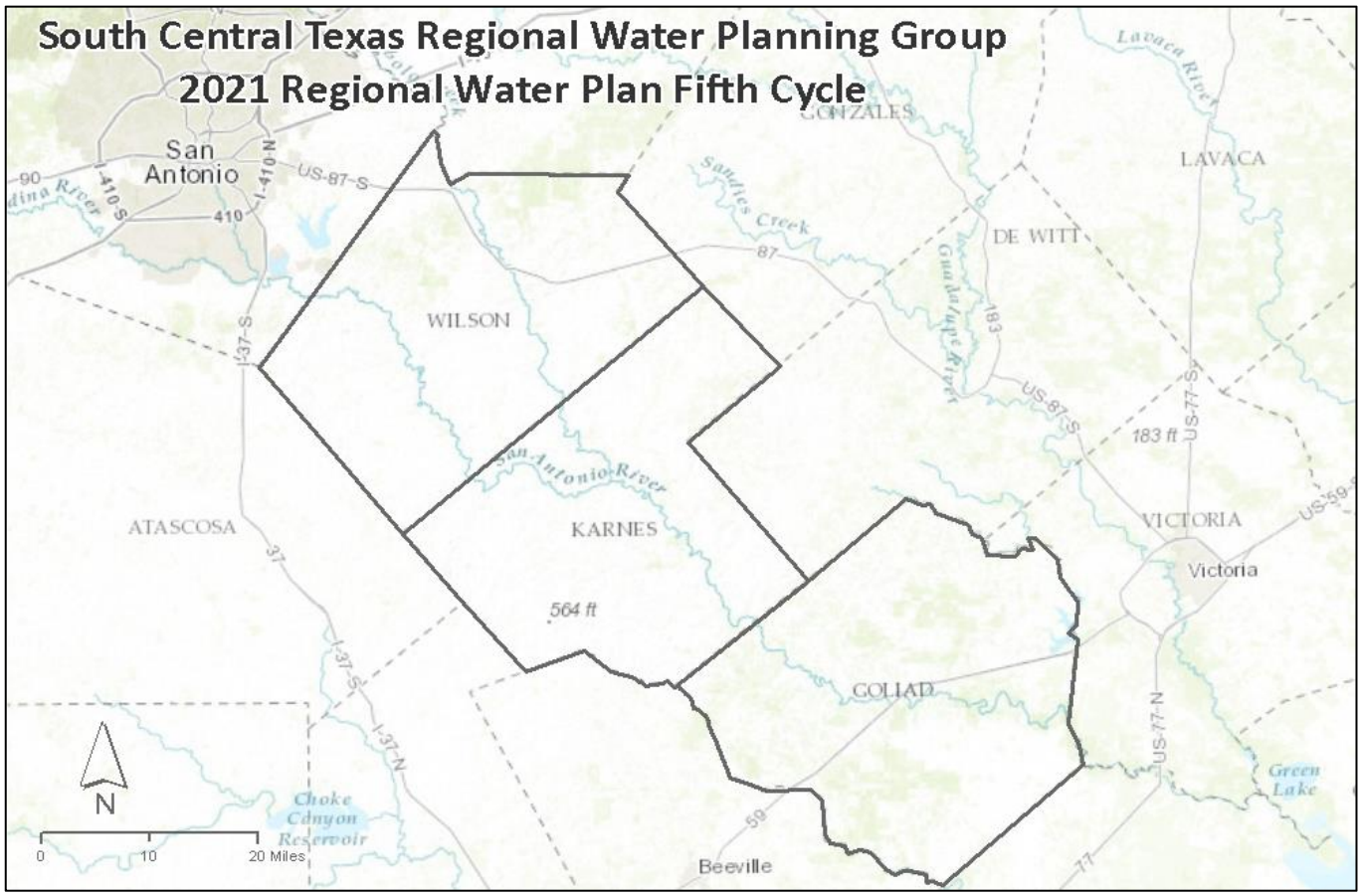
Sediment from stream erosion is a major source of pollution into stream and wetland systems. Funds are used in the River Authority's four county jurisdiction for stream/wetland restoration, best management practices, riparian/habitat enhancement, improvements to agricultural practices and other land conservation efforts. The River Authority provides matching local funds and in-kind services by coordinating efforts with the local, state, and national activities of the partnership program.

The River Authority’s partnerships began in FY 2016/17, as did the efforts to identify and collaborate with potential participants. In FY 2017/18, the River Authority will continue to identify and collaborate with potential landowners/producer participants, assist with providing public outreach services as needed, help identify potential projects, provide technical assistance and support, and collaborate with the partners to develop project activities. These services will continue through FY 2018/19. The River Authority is not responsible for the operations and maintenance costs related to this project.

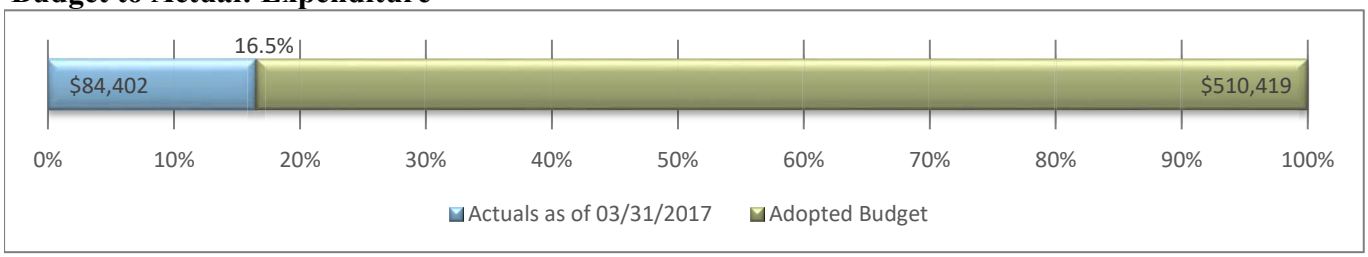
Of the total $285,476 Adopted Budget, $35,476 is estimated labor contribution through the River Authority General Fund.

Spending Plan of Total Project Budget

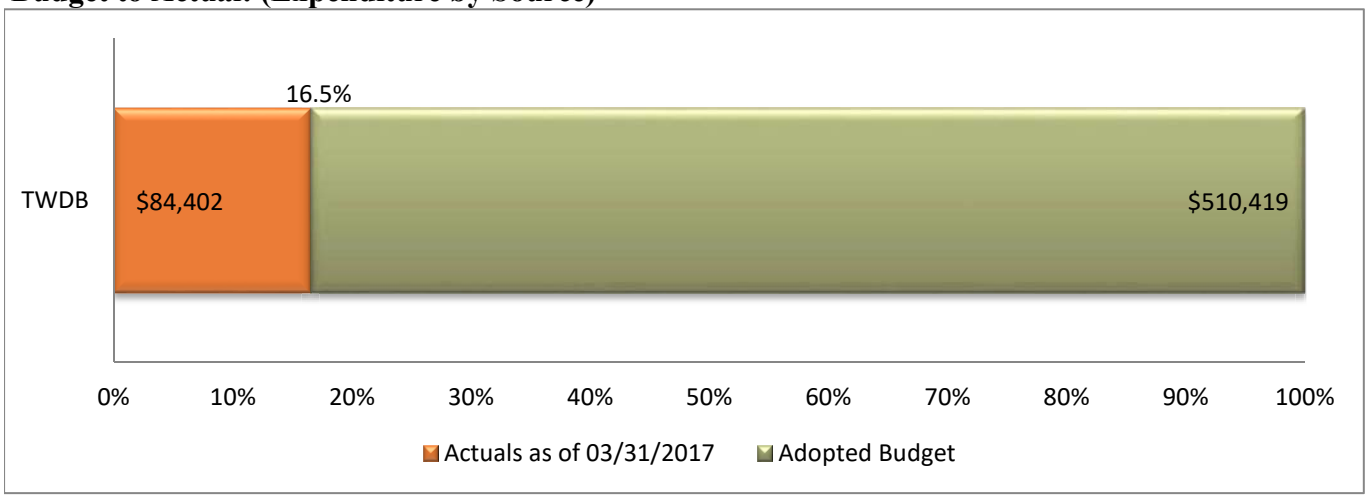
Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Operations	$ 302	$ 249,698	$ 200,000	$ 400,000	$ 850,000
Administration	9,603	25,873	-	-	35,476
Total	$ 9,905	$ 275,571	$ 200,000	$ 400,000	$ 885,476



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**SCTRWPG 2021 RWP Fifth Cycle**	**Project #**	**0524**
Managing Department:	Intergovernmental and Community Relations		

		Adopted Budget:	$ 510,419
Project Start Date:	08/31/2015	Unfunded Plan:	$ -
Project Finish Date:	03/31/2021	Total Project:	$ 510,419

In FY 2017/18, the River Authority will provide administrative services to the South Central Texas Regional Water Planning Group (SCTRWPG) ensuring that planning tasks are performed and completed through 2021, leading to the development of the 2021 Regional Water Plan which will be incorporated into the 2022 State Water Plan.

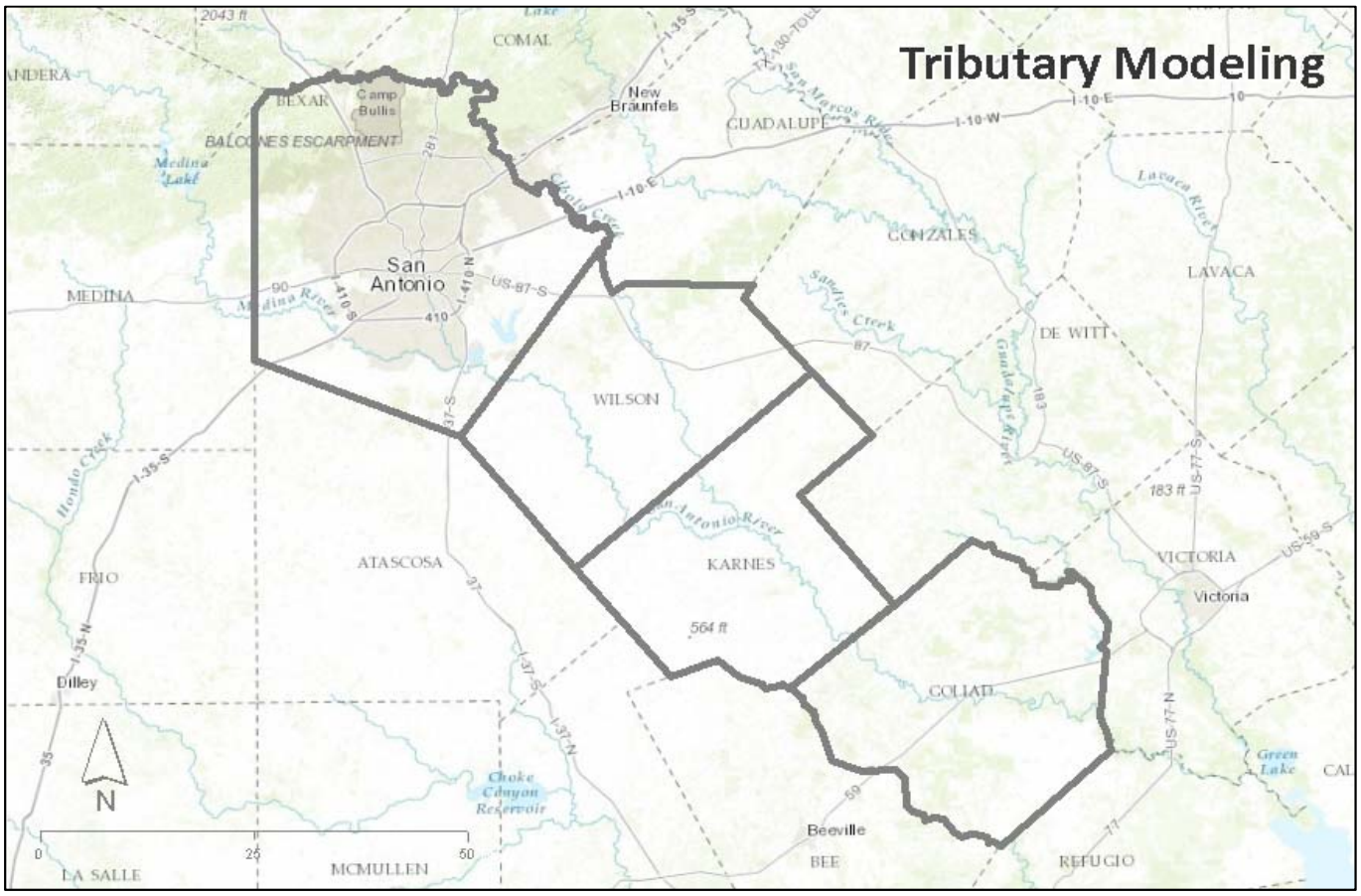
The South Central Texas Regional Water Planning Group (SCTRWPG) is in its fifth cycle of regional water planning. Funding from the Texas Water Development Board will be used for development of the 2021 Regional Water Plan (RWP), which includes evaluation of population and population-related water demand projections through 2075; evaluation of non-population related water demand projections including irrigation, livestock, mining, steam electric, and manufacturing through 2075; assessment of existing water supplies for water user groups (WUGs) and wholesalers including impacts of recently established Managed Available Groundwater numbers; identification of water needs of WUGs and wholesale suppliers; identification of potentially feasible water management strategies for evaluation; preparation and submittal of a Technical Memorandum summarizing activities and data; and, subject to findings in the Technical Memorandum, evaluation of potential water management strategies to meet identified water needs.

The River Authority is the administrator for the SCTRWPG and manages the consulting services and general administrative costs associated with developing the five year water plan via an interlocal agreement that sets out the governance for the group. Through this project, the River Authority is able to advance the goals of implementing watershed solutions, strengthening employee expertise and dedication, and diversifying and leveraging funding.

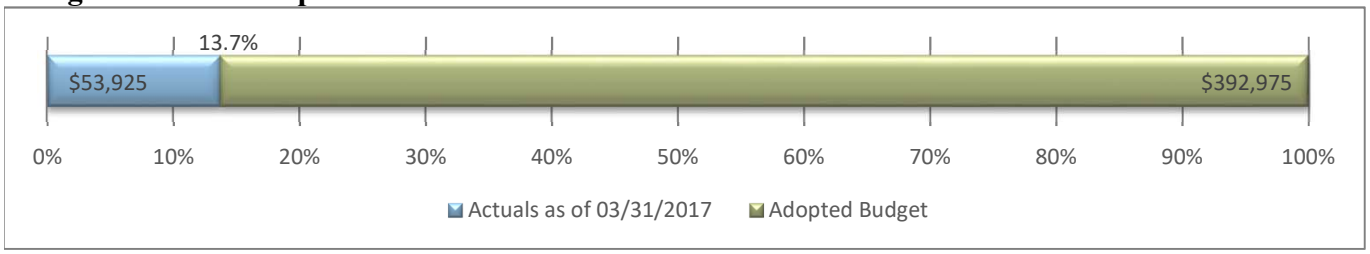
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 84,402	$ 426,017	$ -	$ -	$ 510,419
Total	$ 84,402	$ 426,017	$ -	$ -	$ 510,419

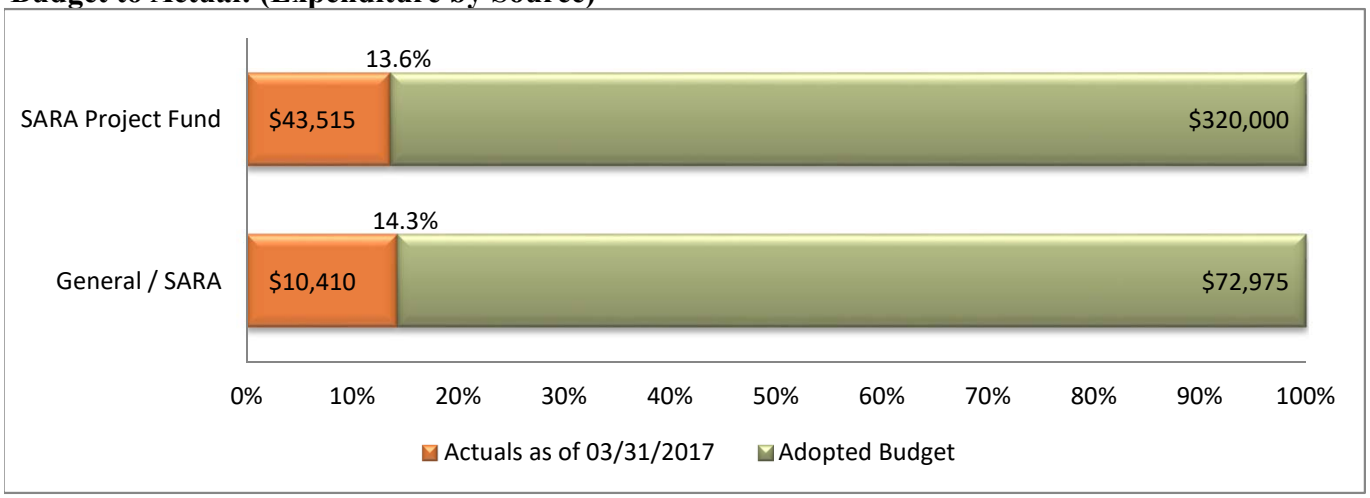
Project Name: **Tributary Modeling** **Project #** **0074**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Tributary Modeling**	**Project #**	**0074**
Managing Department:	Watershed Engineering		

		Adopted Budget:	$ 392,975
Project Start Date:	03/18/2008	Unfunded Plan:	$ -
Project Finish Date:	06/28/2019	Total Project:	$ 392,975

The Digital Flood Insurance Rate Map (DFIRM) effort in Bexar, Wilson, Karnes, and Goliad counties generated detailed computer models of the primary and some secondary streams within the San Antonio River Watershed. The models were used to estimate and map the one-percent annual chance flood event. Although over 1,000 stream miles were modeled, many streams were not modeled through that project and do not have Federal Emergency Management Agency (FEMA) DFIRM floodplains developed.

The Tributary Modeling project creates floodplain models for the unstudied streams within the River Authority's district to serve as base models for developing Zone A floodplain boundaries for the unmapped areas and to serve as the basis for more detailed studies as needed. These new models integrate into the River Authority's flood monitoring and response efforts as they become available and advance the science of watershed management by developing and using data and innovative models and analysis to impact decision making.

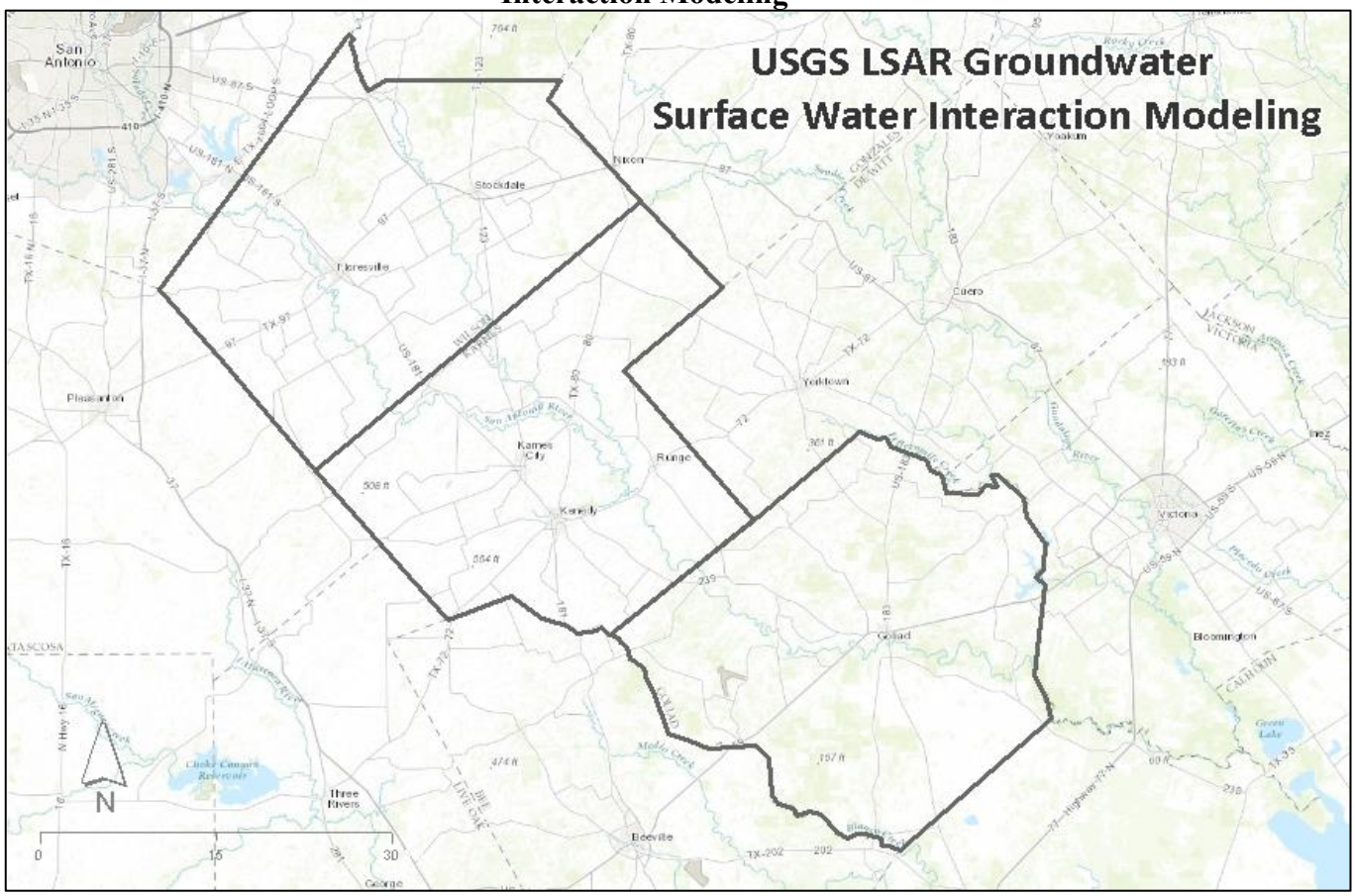
Since FY 2007/08, efforts to model unstudied streams has taken place. In FY 2016/17, the project completed studies on Tributary 9 to Ojo de Agua Watershed, Seguin Branch, and Millers Creek. The studies included the creation of floodplain models and detailed floodplain delineations. The project also began new studies on State Hospital Creek, Calaveras Creek (from US 87 to FM 1516), Unnamed Tributary 27 in Calaveras Creek, China Grove Creek, Unnamed Tributary 6 in New Sulphur Springs Creek, Calaveras Creek (from confluence with the SAR to the Bexar County line), and Unnamed Tributary 1 in Calaveras Creek. These studies will be completed in FY 2017/18. Operations and maintenance costs associated with this project are included in the FY 2017/18 Adopted Budget.

Of the total $392,975 Adopted Budget, $72,975 is estimated labor contribution through the River Authority General Fund.

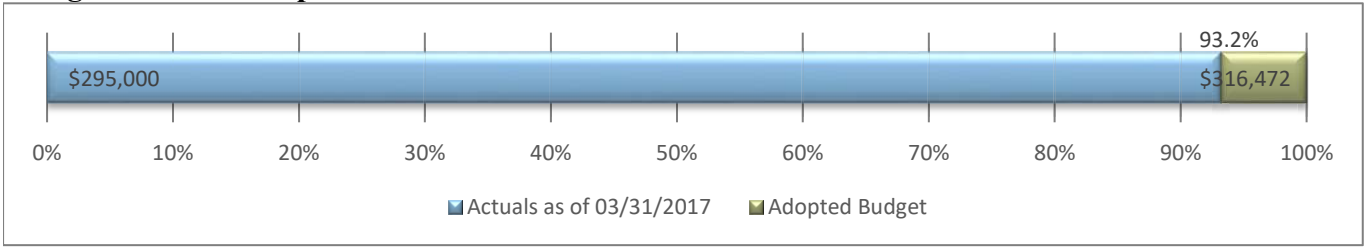
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 53,925	$ 339,050	$ -	$ -	$ 392,975
Total	$ 53,925	$ 339,050	$ -	$ -	$ 392,975

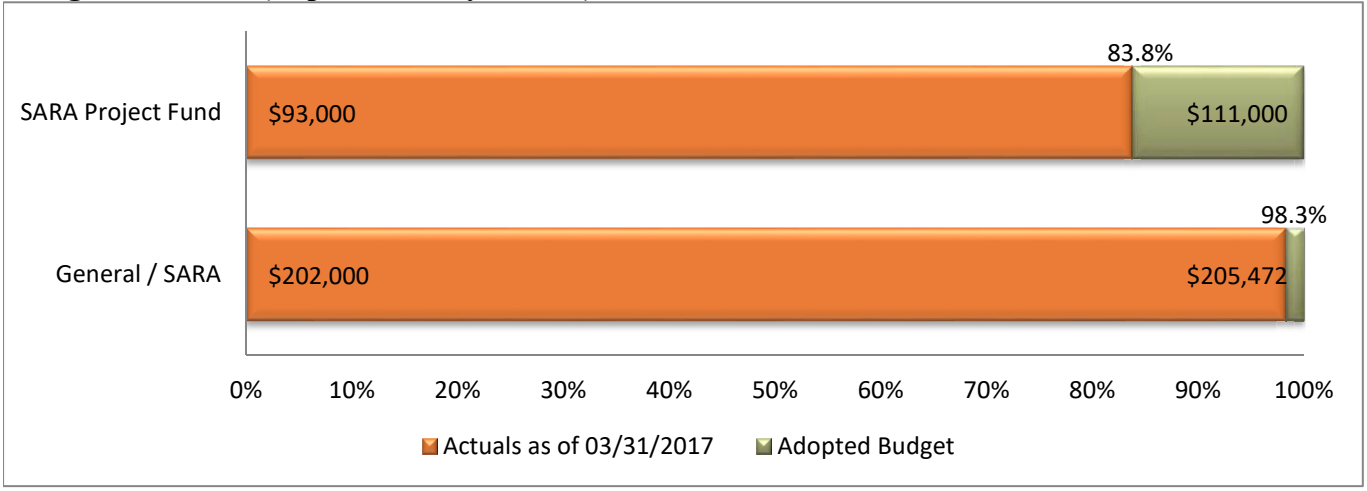
Project Name: USGS LSAR Groundwater Surface Water Interaction Modeling **Project #** 0411



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **USGS LSAR Groundwater Surface Water Interaction Modeling** **Project #** **0411**

Managing Department: Watershed Engineering

		Adopted Budget:	$	316,472
Project Start Date:	10/31/2013	Unfunded Plan:	$	-
Project Finish Date:	06/25/2018	Total Project:	$	316,472

This collaborative study with the United States Geological Survey (USGS) develops a groundwater/surface water model, which is a tool for understanding the interaction between groundwater and surface water resources of the Lower San Antonio River Basin. This provides the River Authority with the avenue to understand and plan for the implications of changing infiltration and exploitation of groundwater resources on the surface waters of the lower basin.

This project addresses the impact of groundwater use and decreased recharge by compiling appropriate datasets and, if sufficient data are available, developing a groundwater model to simulate stream-aquifer interactions and potential contaminant pathways to surface waters. The project is being conducted in cooperation with the USGS and produces an analysis of various scenarios that can be used for both planning and assessment purposes.

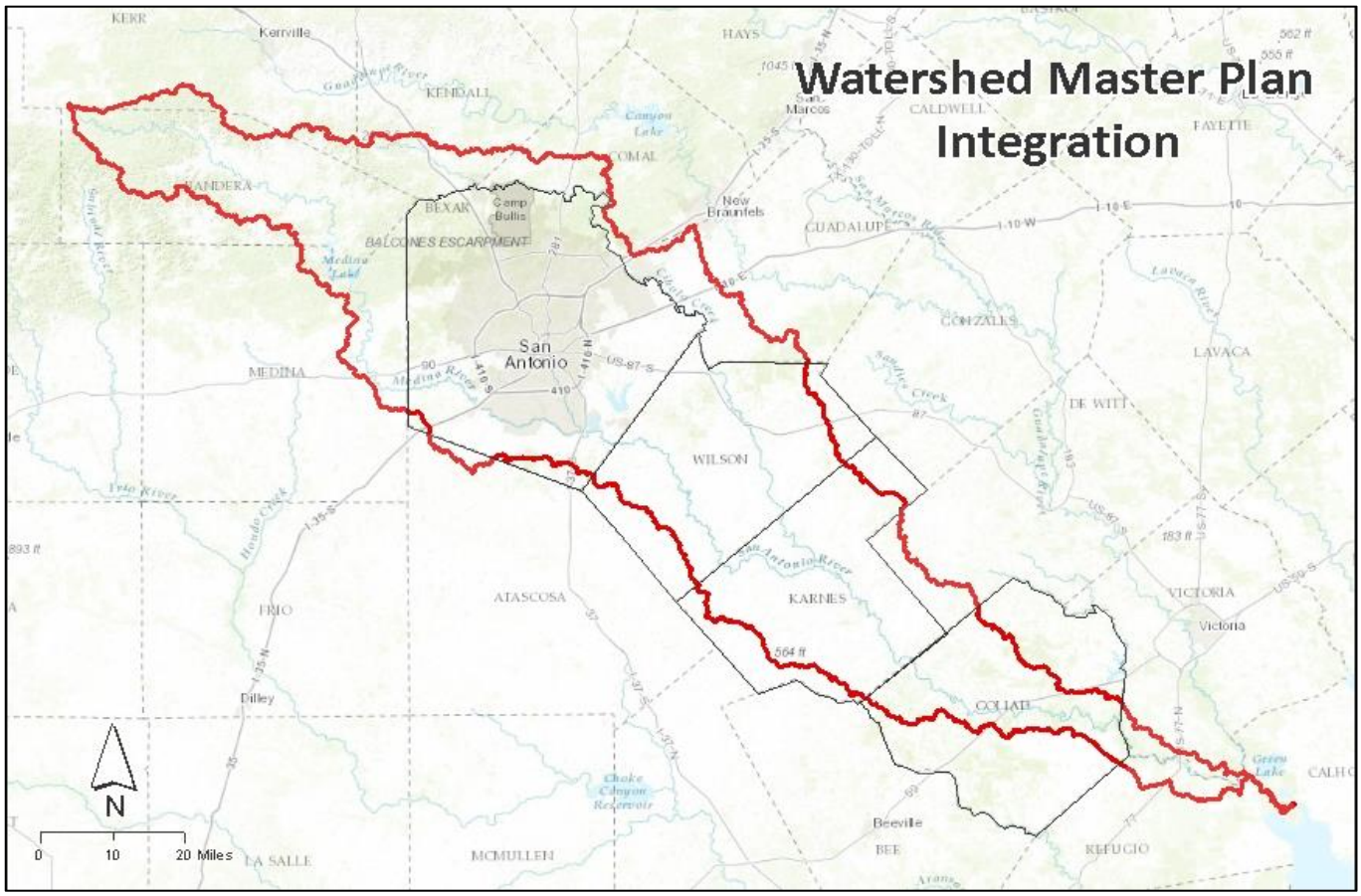
Beginning in FY 2013/14, this project began development of a groundwater model to simulate groundwater interaction with surface water. In FY 2017/18, the project will use the groundwater model previously developed to simulate groundwater interaction with surface water under multiple scenarios representing both changes in recharge and increases in groundwater exploitation. The simulations will be analyzed to identify the potential impacts on the lower basin streams and river. These results will be interpreted and published in scientific literature. No operations and maintenance expenditures are anticipated from this project.

Of the total $316,472 Adopted Budget, $3,472 is estimated labor contribution through the River Authority General Fund.

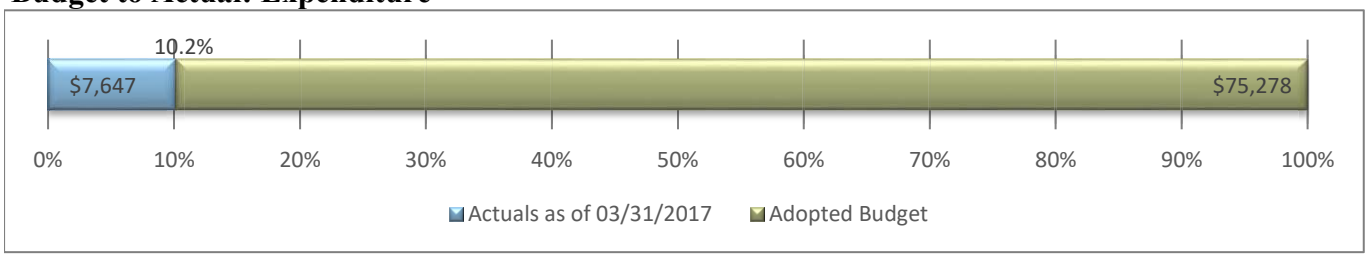
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 295,000	$ 21,472	$ -	$ -	$ 316,472
Total	$ 295,000	$ 21,472	$ -	$ -	$ 316,472

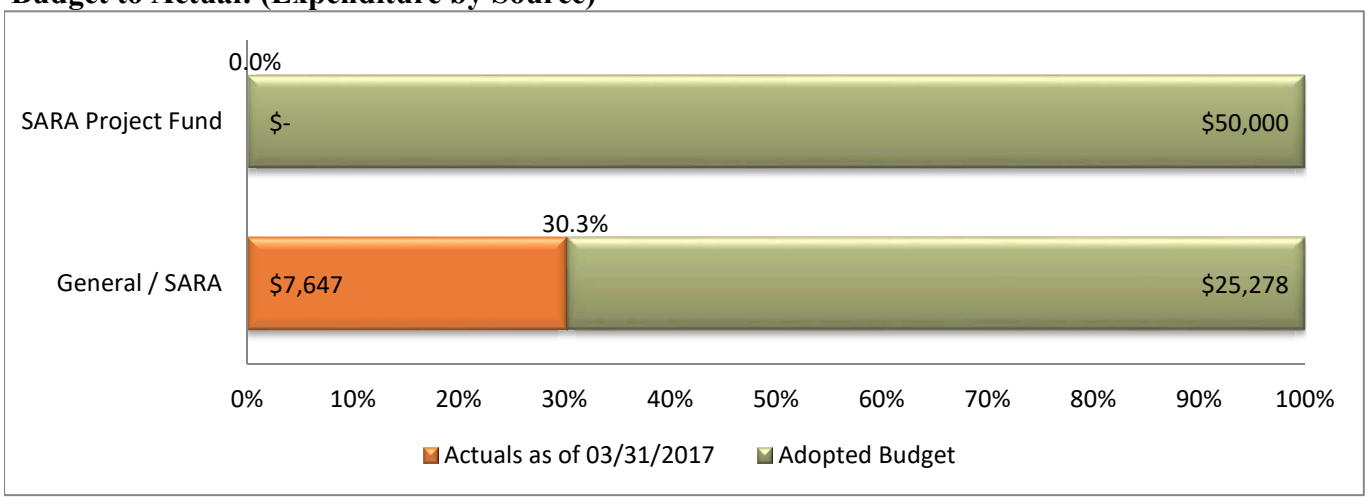
Project Name: **Watershed Master Plans Integration** **Project #** **0536**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Watershed Master Plans Integration**		**Project #**	**0536**
Managing Department:	Watershed Engineering			
		Adopted Budget:	$	75,278
Project Start Date:	06/22/2016	Unfunded Plan:	$	-
Project Finish Date:	07/10/2018	Total Project:	$	75,278

The Watershed Master Plans Integration project supports the implementation of watershed solutions and the advancement of the science of watershed management through the use of geographic information systems' (GIS) tools and modeling data.

This project combines the analysis and recommendations from various watershed master plans developed by the River Authority to strategically identify and target watershed solutions. A multi-departmental team reviews the recommendations, standardizes the data, determines how to incorporate recommendations into existing initiatives, and proposes new initiatives.

Work began on integrating the geospatial data sets and model, as well as developing an action plan for implementing the watershed master plan recommendations within the River Authority and with partners in each watershed in FY 2016/17. In FY 2017/18, the data sets and action plan will be completed, and meetings will be held with partners in each watershed to share the relevant recommendations and data. Operations and maintenance costs associated with this project are included in the FY 2017/18 Adopted Budget.

Of the total $75,278 Adopted Budget, $25,278 is estimated labor contribution through the River Authority General Fund.

Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 7,647	$ 67,631	$ -	$ -	$ 75,278
Total	$ 7,647	$ 67,631	$ -	$ -	$ 75,278

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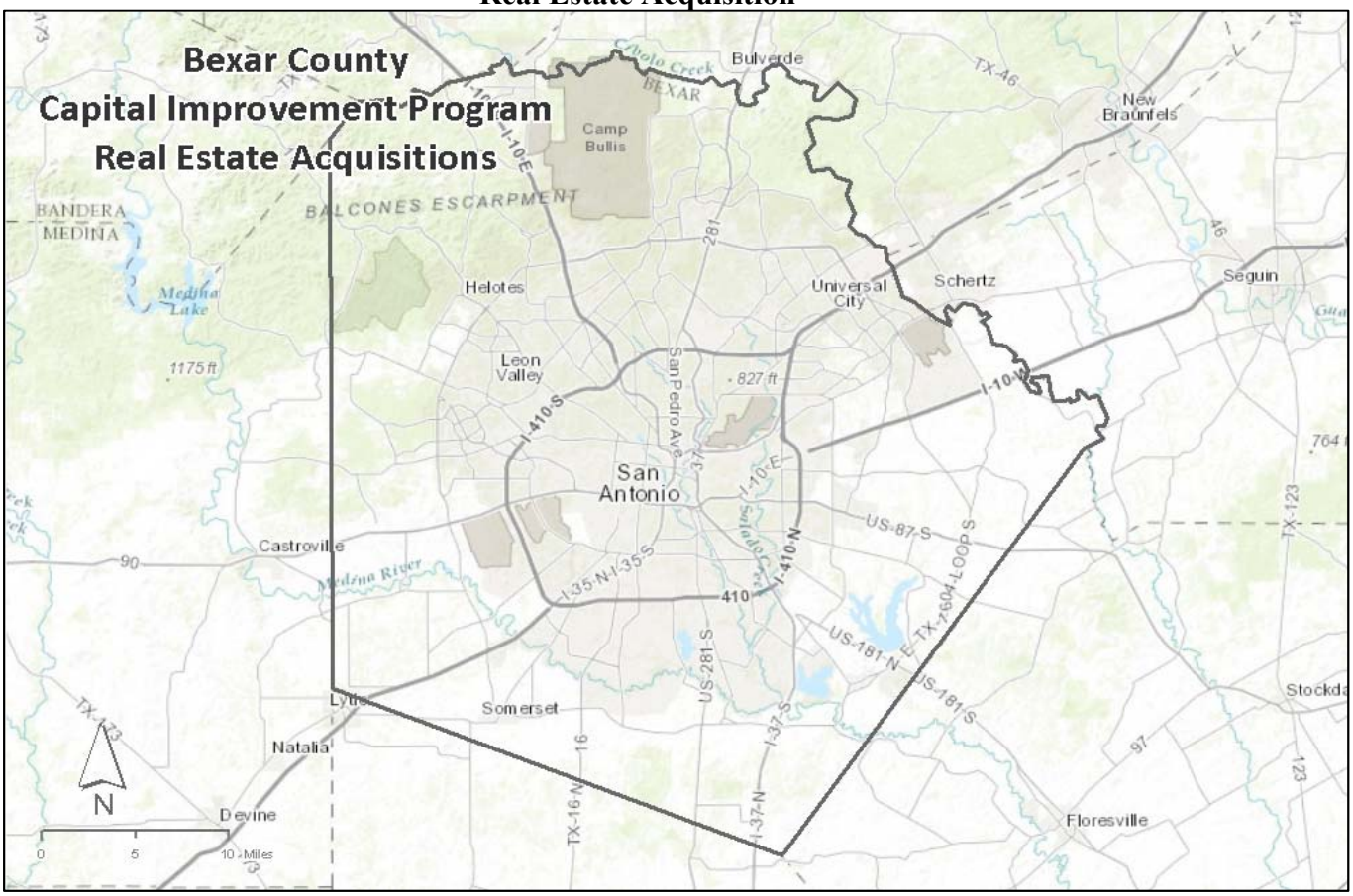
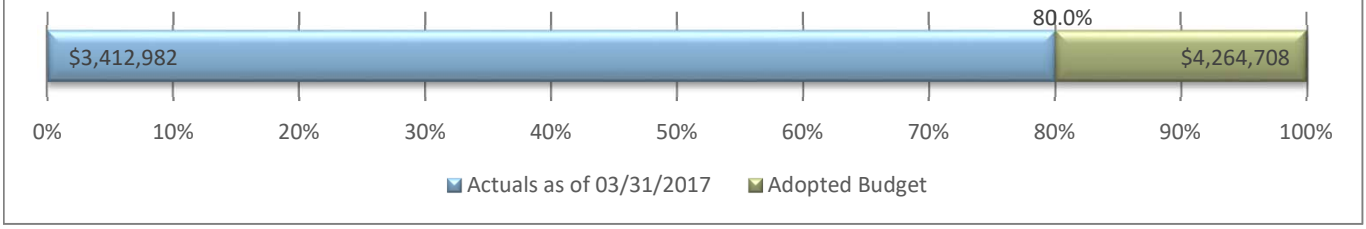
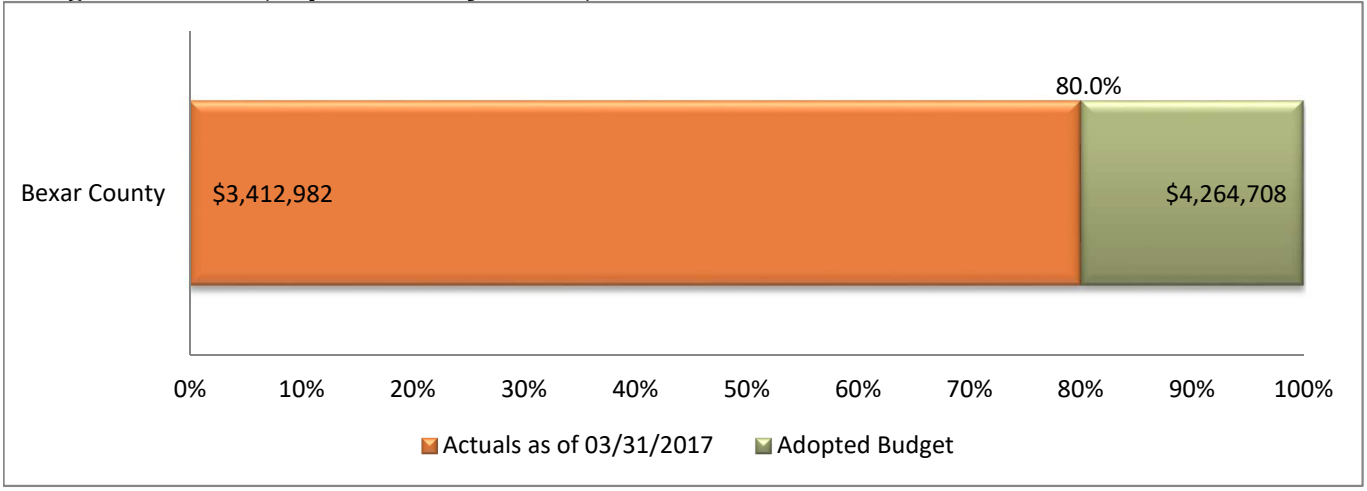
Project Name: Bexar County Capital Improvement Program **Project #** 0394
Real Estate Acquisition



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **Bexar County Capital Improvement Program Real Estate Acquisition** **Project #** **0394**

Managing Department: Real Estate

		Adopted Budget:	$ 4,264,708
Project Start Date:	01/01/2008	Unfunded Plan:	$ -
Project Finish Date:	12/31/2018	Total Project:	$ 4,264,708

The Bexar County Commissioners Court approved a $500 million flood control capital improvements program in 2007. Projects within the program include regional stormwater facilities, low water crossings, natural waterway conveyances (channelization), outfall structures and buyouts located throughout Bexar County. River Authority staff provides real estate acquisition services for the program including negotiations for property rights and relocation with property owners under the threat of eminent domain. The seventh amendment to the interlocal agreement with the County identified a total of 45 projects. This includes the addition of two projects and removal of two projects included in the sixth amendment. The completed projects as of FY 2015/16 are Balcones Heights SA38, Briggs Road MR28, Bulverde Road SC27, Cacias Road SA45, Calaveras 8 SA41, Concepcion Creek SA48, Evans Road SC2, Grosenbacher Road MR30, Hausman Road LC9 and LC10, Henze Road SA47, Huebner Creek LC15, Ingram Road LC8, Jones Maltsberger SC28, Knoll Creek SC4, Laddie Place SA2, Live Oak Slough MR27, Luckey Road MR29, Menger Road SC12, Old Fredericksburg LC27, Prue Road at French Creek LC6, Real Road SA17, Rock Creek I SA6, Roland Avenue SC18, Rosillo Creek SC15, South New Braunfels SA8, Schaefer Road CB19, Shane Road SA4, Shepherd Road MR8, Elm Forest at Turtle Cross MR31, VFW Drainage SA44, Whisper Creek LC19

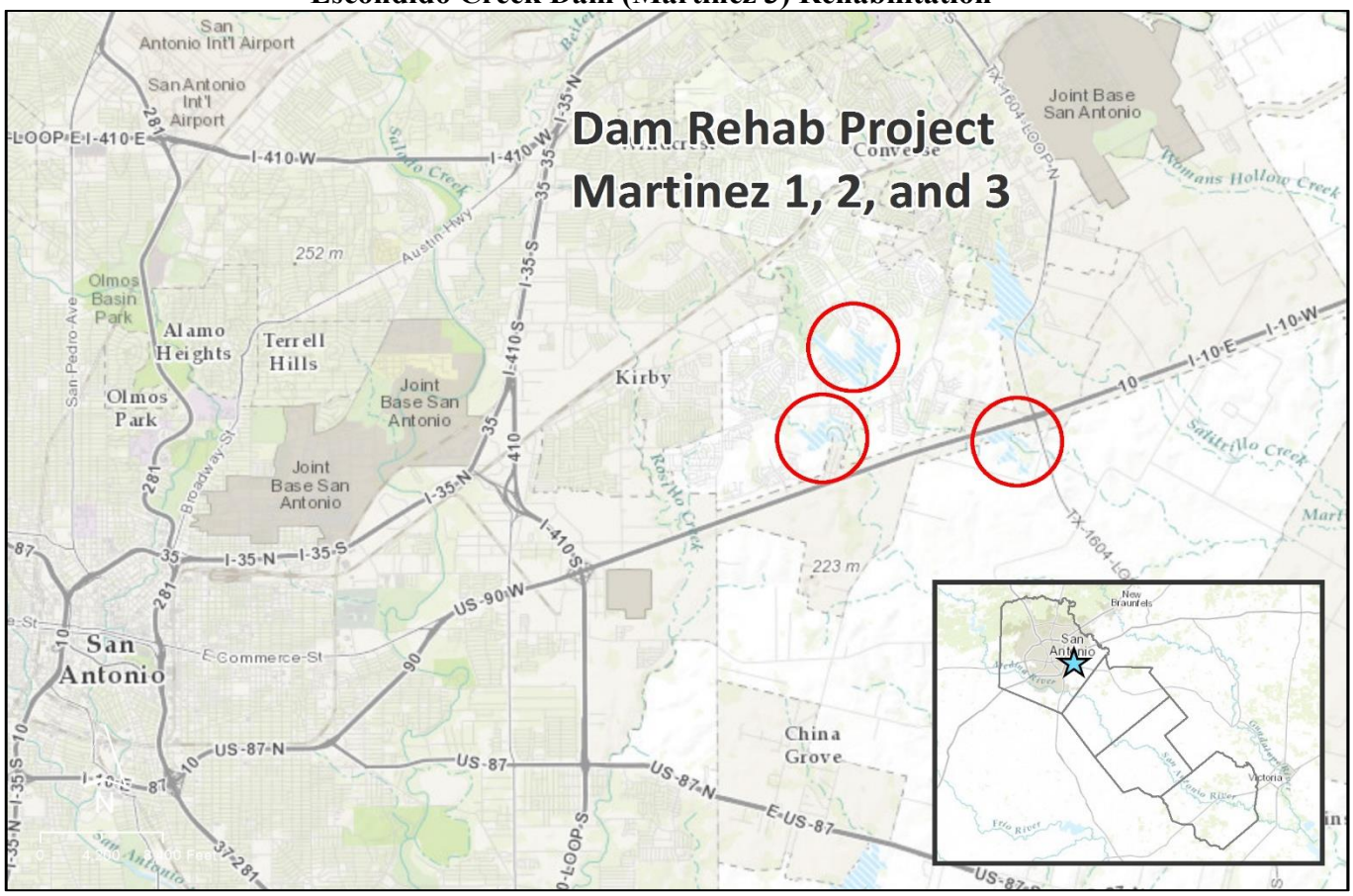
During FY 2017/18, work will continue on the remaining thirteen projects to complete property acquisitions and relocations. All acquisitions and relocations are being conducted on behalf of Bexar County and any operations and maintenance responsibilities would be managed by Bexar County.

This project strengthens employee expertise and dedication and supports the implementation of watershed solutions.

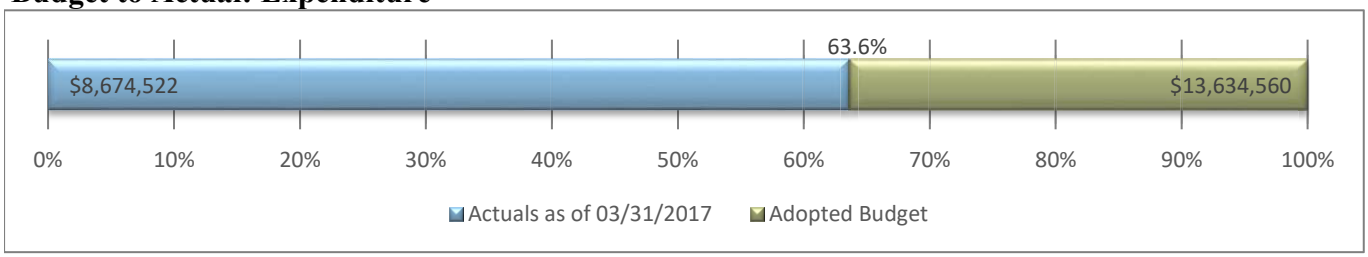
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 3,412,982	$ 851,726	$ -	$ -	$ 4,264,708
Total	$ 3,412,982	$ 851,726	$ -	$ -	$ 4,264,708

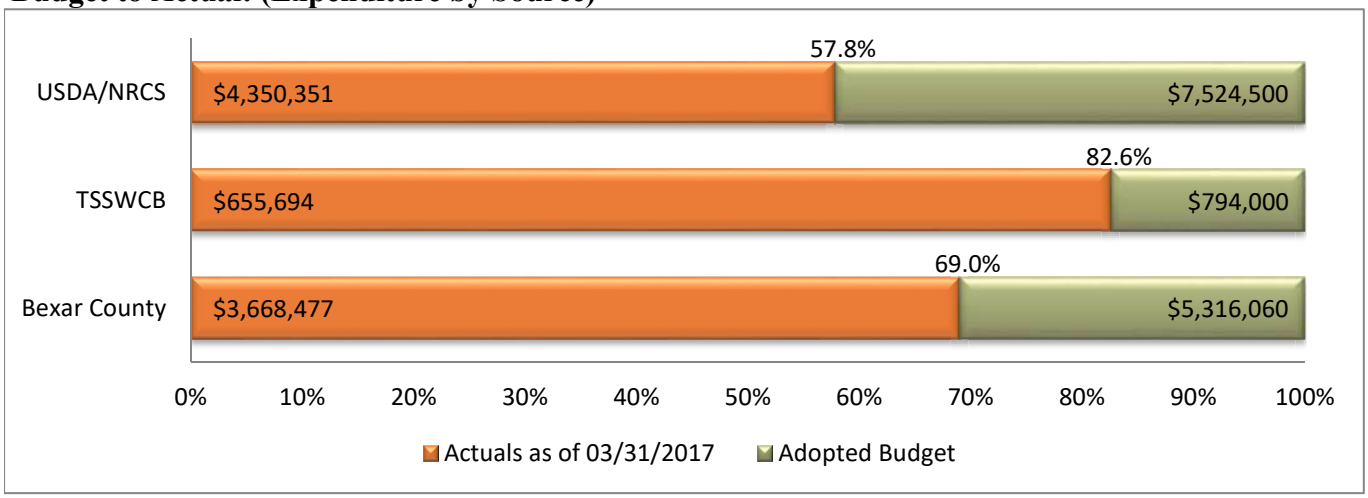
Project Name: Binz Engleman Dam (Martinez 1), Martinez Creek Dam (Martinez 2) and Escondido Creek Dam (Martinez 3) Rehabilitation **Project #** 0374



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **Binz Engleman Dam (Martinez 1), Martinez Creek Dam (Martinez 2) and Escondido Creek Dam (Martinez 3) Rehabilitation** **Project #** **0374**

Managing Department: Watershed and Park Operations

		Adopted Budget:	$ 13,634,560
Project Start Date:	07/27/2012	Unfunded Plan:	$ -
Project Finish Date:	12/29/2017	Total Project:	$ 13,634,560

This project improves Binz Engleman Dam (Martinez 1), Martinez Creek Dam (Martinez 2) and Escondido Creek Dam (Martinez 3) to current Texas Commission on Environmental Quality (TCEQ) standards. Improvements primarily include earthwork to increase the height of the dams and to improve the auxiliary spillways. According to the project plan and the operation and maintenance agreement for the rehabilitation project, the River Authority is responsible for the operation and maintenance of the dams to assure they function as designed and constructed. This project is funded by Texas State Soil and Water Conservation Board (TSSWCB) up to 14 percent; the Natural Resources Conservation Service (NRCS) funds 65 percent; and the remainder is funded by Bexar County. The design is being administered through the River Authority. River Authority staff also provides construction administration and project management services through construction.

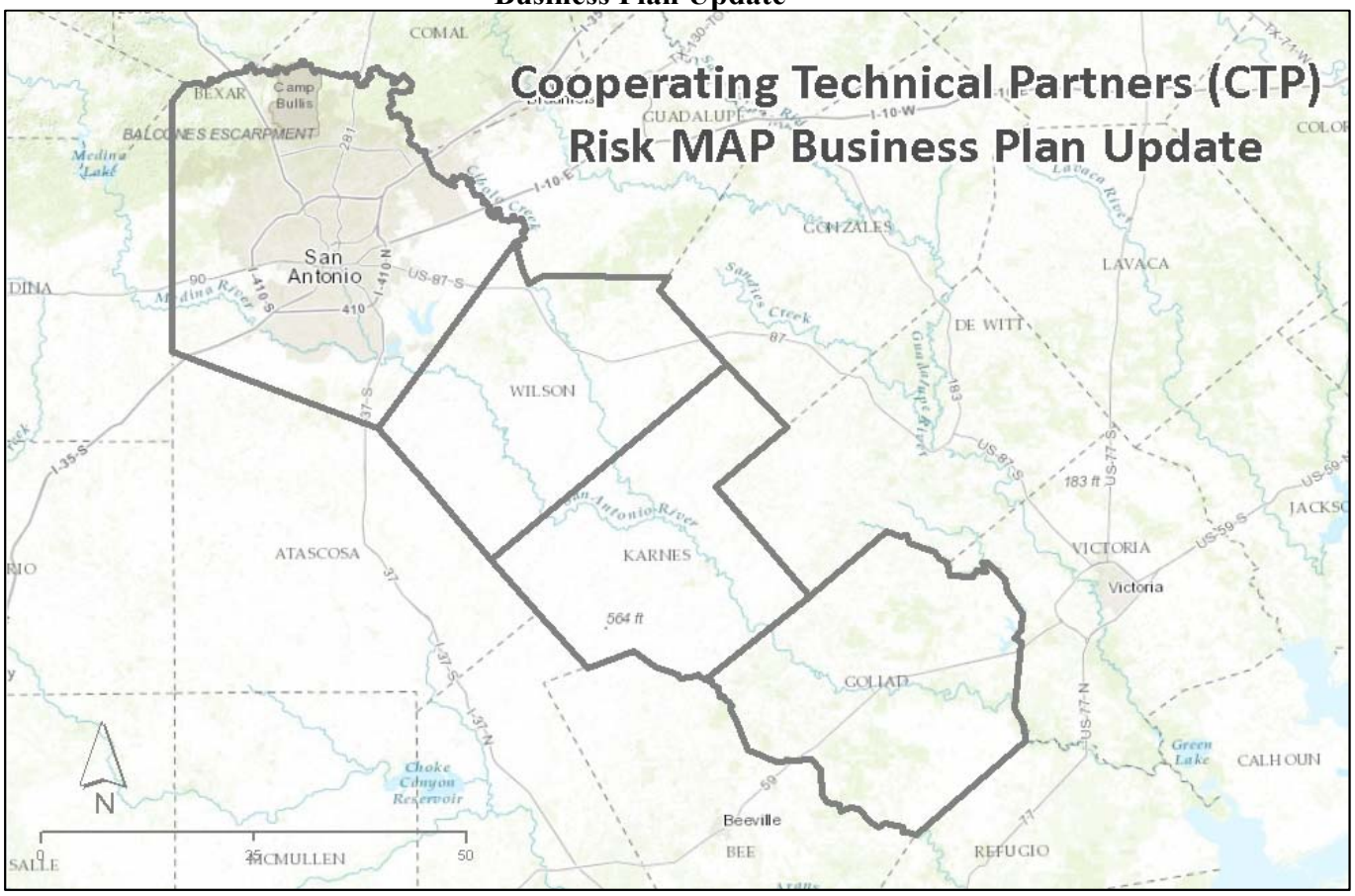
The dams are an important component in controlling floodwaters in the basin and protecting creeks and rivers. Construction of the improvements at all three dams will be completed in FY 2017/18. The project is funded by the Grants Fund ($8,318,500) and Bexar County Capital Project Fund ($5,316,060). Operations and maintenance costs for these dams are included in the FY 2017/18 Adopted Budget.

The dams advance the watershed health and safety goal by controlling floodwaters in the basin.

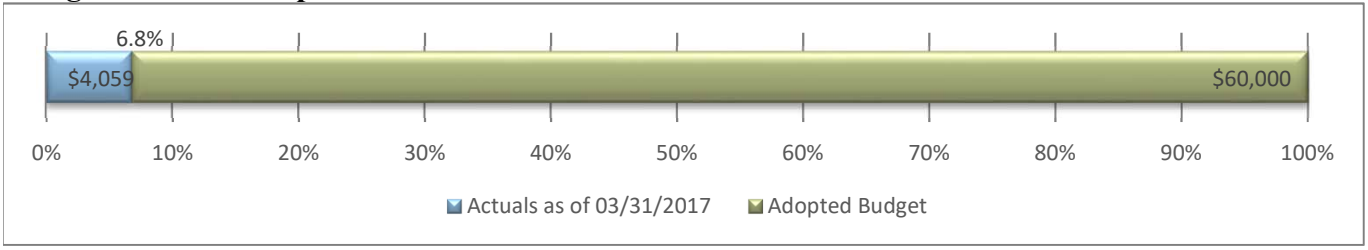
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Right-of-Way Acquisition	$ 888,845	$ -	$ -	$ -	$ 888,845
Design	$ 1,779,228	$ -	$ -	$ -	$ 1,779,228
Construction	$ 6,006,449	$ 4,960,038	$ -	$ -	$ 10,966,487
Total	$ 8,674,522	$ 4,960,038	$ -	$ -	$ 13,634,560

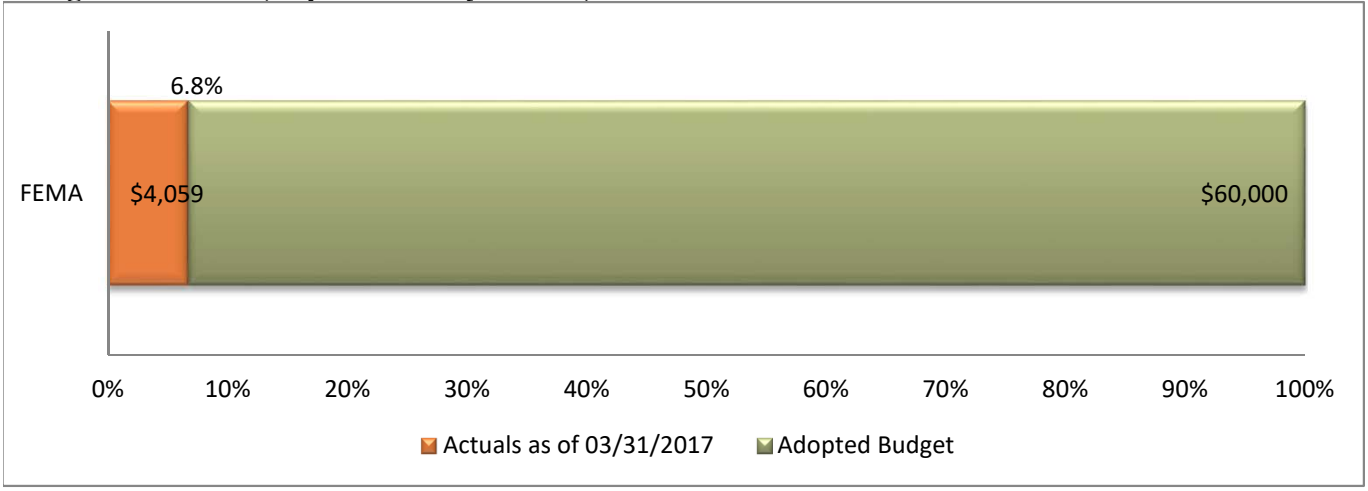
Project Name:	Cooperating Technical Partners (CTP) Business Plan Update	Project #	0562



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **Cooperating Technical Partners (CTP) Business Plan Update** **Project #** **0562**

Managing Department: Watershed Engineering

		Adopted Budget:	$	60,000
Project Start Date:	10/01/2016	Unfunded Plan:	$	-
Project Finish Date:	09/30/2018	Total Project:	$	60,000

The Federal Emergency Management Agency (FEMA) Risk Mapping, Assessment and Planning (Risk MAP) program assists communities nationwide with assessing flood risks and encouraging mitigation planning to avoid or minimize damage in the face of future disasters. Through more precise flood maps, risk assessment tools and outreach support, Risk MAP strengthens local ability to make informed decisions about reducing risk. In partnership with FEMA, the River Authority is conducting Risk MAP efforts within the Cibolo Creek, Lower San Antonio River, Upper San Antonio River – Phases I and II, and the Upper Medina River watersheds. These efforts consist of two phases with the first being Discovery and the second being Risk Identification and Assessment.

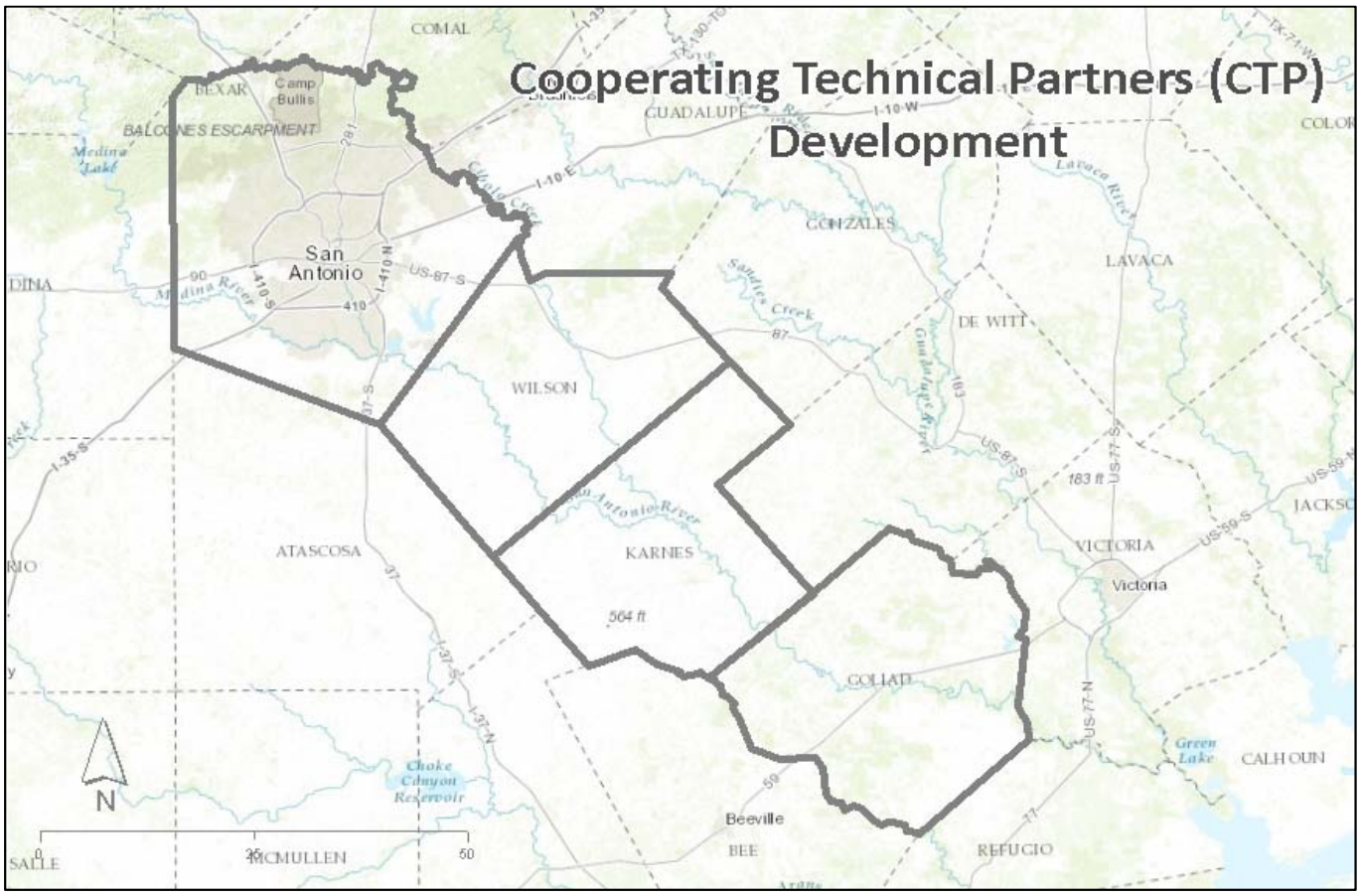
For FY 2017/18, the Upper San Antonio River, Medina River, Cibolo Creek, and Lower San Antonio River projects will focus on completing Phase II, Risk Identification and Assessment activities. These activities include developing FEMA flood risk GIS data products, a Flood Risk map, report, and database for each project area.

Also in FY 2017/18, the River Authority will continue program management items such as an annual update of the CTP - Business Plan and an update of the quality assurance/quality control plan. FEMA funding for this program totals $2,911,500 with $60,000 for the Business Plan portion.

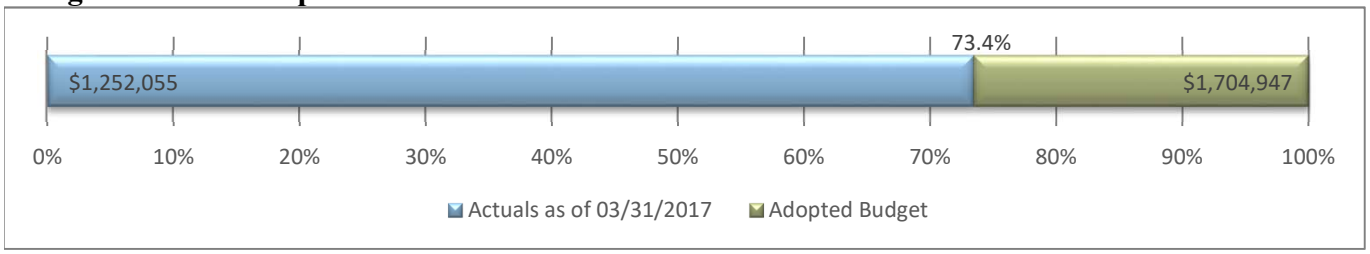
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 4,059	$ 55,941	$ -	$ -	$ 60,000
Total	$ 4,059	$ 55,941	$ -	$ -	$ 60,000

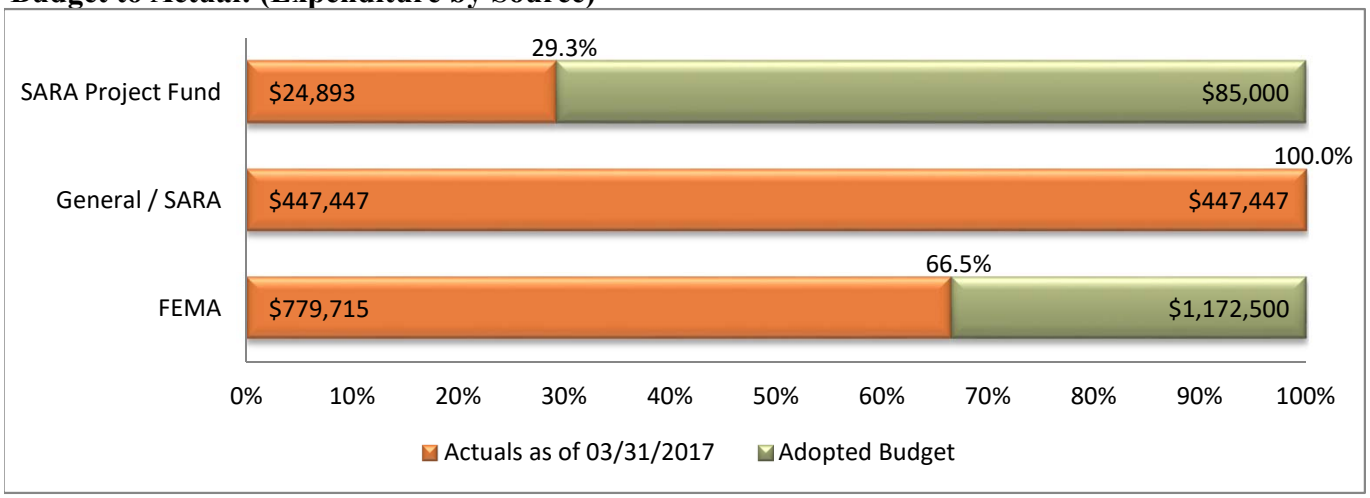
Project Name: Cooperating Technical Partners (CTP) Development **Project #** 0092



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Cooperating Technical Partners (CTP) Development**	**Project #**	**0092**
Managing Department:	Watershed Engineering		

		Adopted Budget:	$ 1,704,947
Project Start Date:	07/01/2009	Unfunded Plan:	$ -
Project Finish Date:	07/31/2020	Total Project:	$ 1,704,947

Through partnerships, this project is advancing and applying River Authority expertise to influence, develop and implement watershed solutions. This also expands, diversifies and leverages funding sources.

This project supports the River Authority's Letter of Map Revision (LOMR) and Conditional Letter of Map Revision (CLOMR) delegation. The River Authority has responsibility for reviewing all LOMR and CLOMR submittals to the Federal Emergency Management Agency (FEMA). This project secures the Digital Flood Insurance Rate Maps (DFIRM) investment by developing a way to keep the new flood map information up to date and interactive.

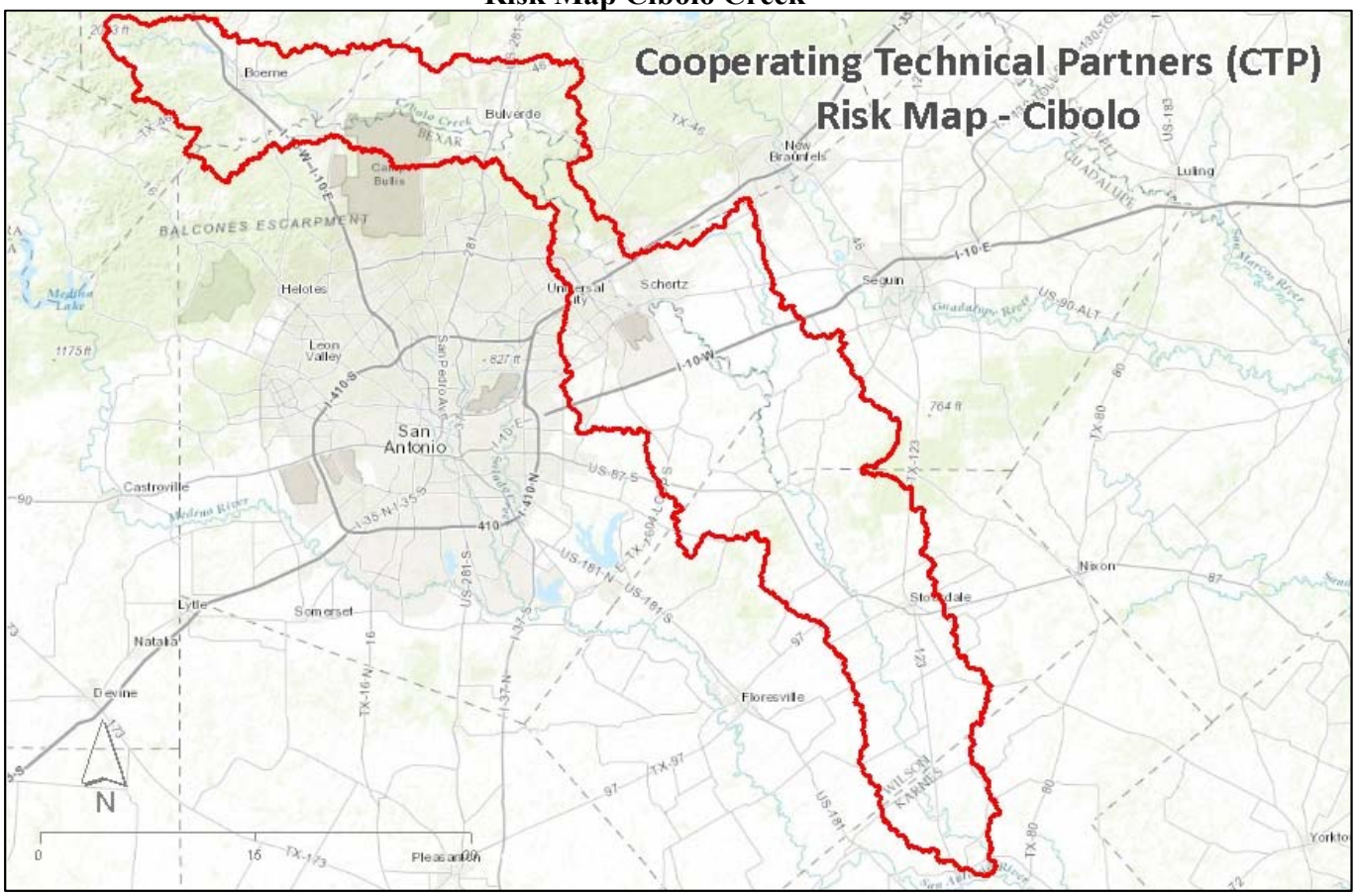
In FY 2010/11, the River Authority became FEMA's LOMR Delegation Partner. Since then the River Authority has continued its role of FEMA LOMR Delegation partner and reviews on behalf of FEMA all forms for Letter of Map Change (LOMC) submittals within the Bexar, Wilson, Karnes and Goliad counties. The project budget supports staff training and an annual FEMA workshop which is required to serve as FEMA's Cooperating Technical Partner. The operating costs related to this program are included in the FY 2017/18 Adopted Budget. The project's current activity is funded by the San Antonio River Authority Project Fund ($85,000) and the Grants Fund ($703,500).

Of the total $1,704,947 Adopted Budget, $69,265 is estimated labor contribution through the River Authority General Fund.

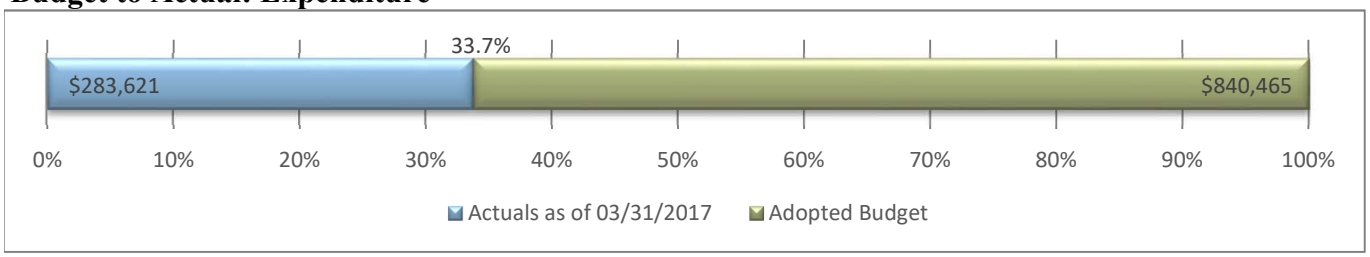
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 1,252,055	$ 452,892	$ -	$ -	$ 1,704,947
Total	$ 1,252,055	$ 452,892	$ -	$ -	$ 1,704,947

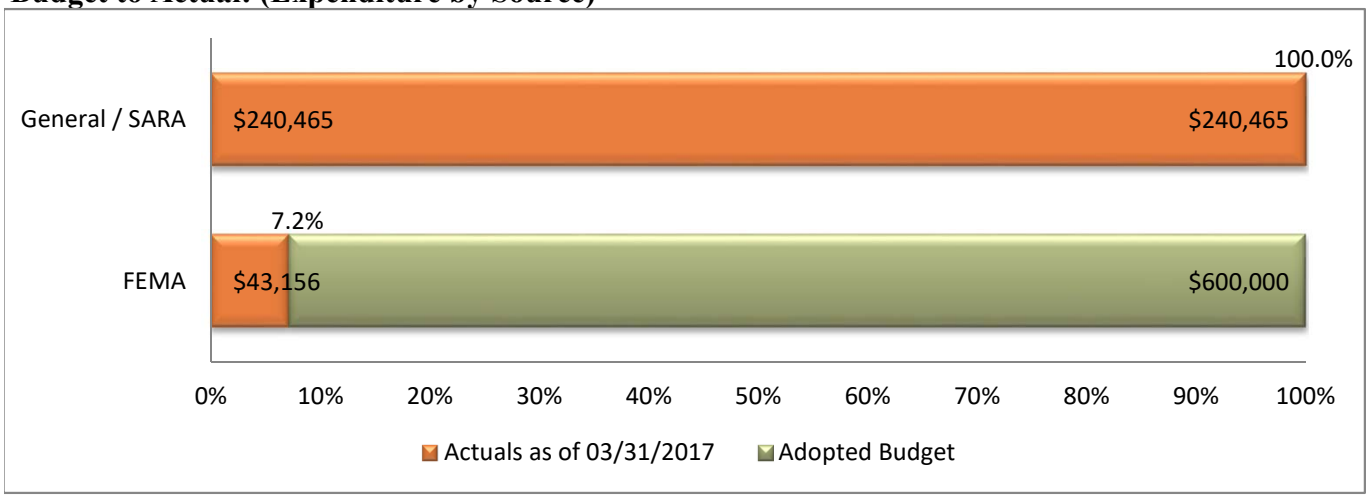
Project Name: Cooperating Technical Partners (CTP) Risk Map Cibolo Creek **Project #** 0472



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **Cooperating Technical Partners (CTP) Risk Map Cibolo Creek** **Project #** **0472**

Managing Department: Watershed Engineering

		Adopted Budget:	$	840,465
Project Start Date:	01/01/2015	Unfunded Plan:	$	-
Project Finish Date:	09/30/2019	Total Project:	$	840,465

The Federal Emergency Management Agency (FEMA) Risk Mapping, Assessment and Planning (Risk MAP) program assists communities nationwide with assessing flood risks and encouraging mitigation planning to avoid or minimize damage in the face of future disasters. Through more precise flood maps, risk assessment tools and outreach support, Risk MAP strengthens local ability to make informed decisions about reducing risk. In partnership with FEMA, the River Authority is conducting Risk MAP efforts within the Cibolo Creek, Lower San Antonio River, Upper San Antonio River – Phases I and II, and the Upper Medina River watersheds. These efforts consist of two phases with the first being Discovery and the second being Risk Identification and Assessment.

For FY 2017/18, the Upper San Antonio River, Medina River, Cibolo Creek, and Lower San Antonio River projects will focus on completing Phase II, Risk Identification and Assessment activities. These activities include developing FEMA flood risk GIS data products, a Flood Risk map, report, and database for each project area.

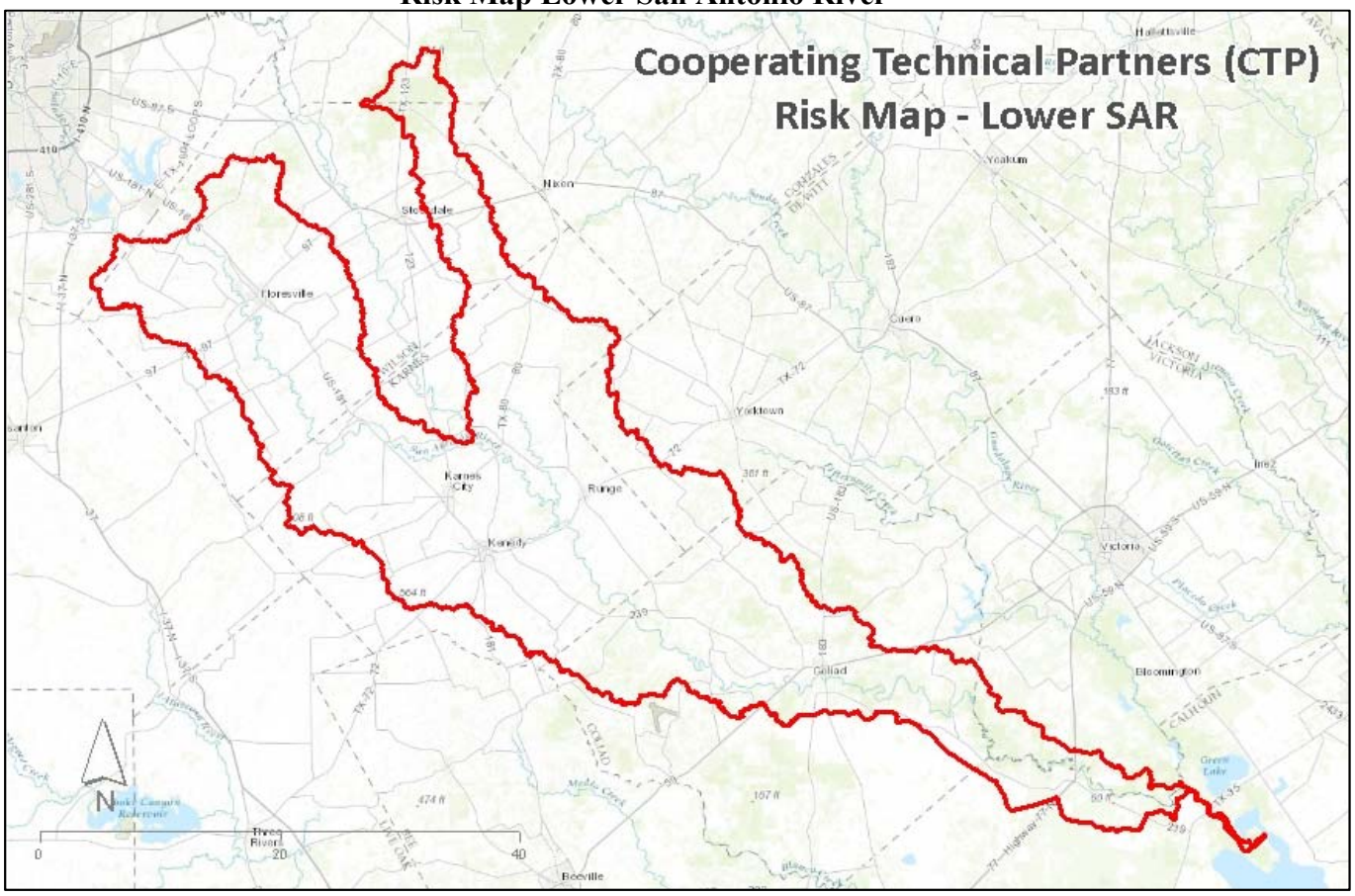
Also in FY 2017/18, the River Authority will continue program management items such as an annual update of the CTP - Business Plan and an update of the quality assurance/quality control plan. FEMA funding for this program totals $2,911,500 with $600,000 for the Cibolo Creek Risk MAP project.

The Cooperating Technical Partners (CTP) Risk Map Cibolo project advances the River Authority's goal of watershed health and safety as well as implementing watershed solutions.

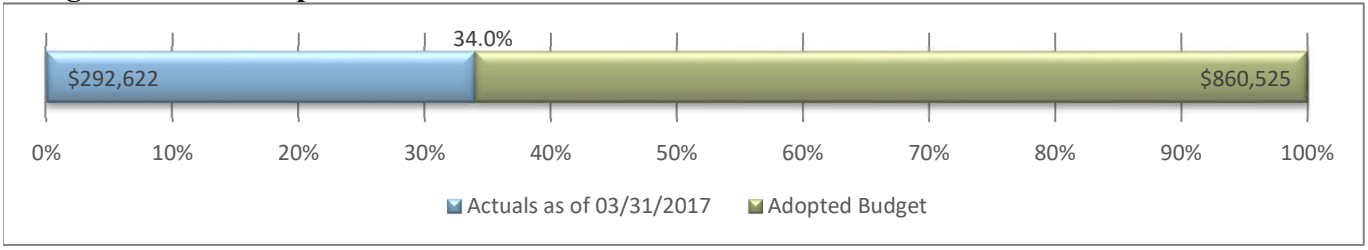
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 283,621	$ 556,844	$ -	$ -	$ 840,465
Total	$ 283,621	$ 556,844	$ -	$ -	$ 840,465

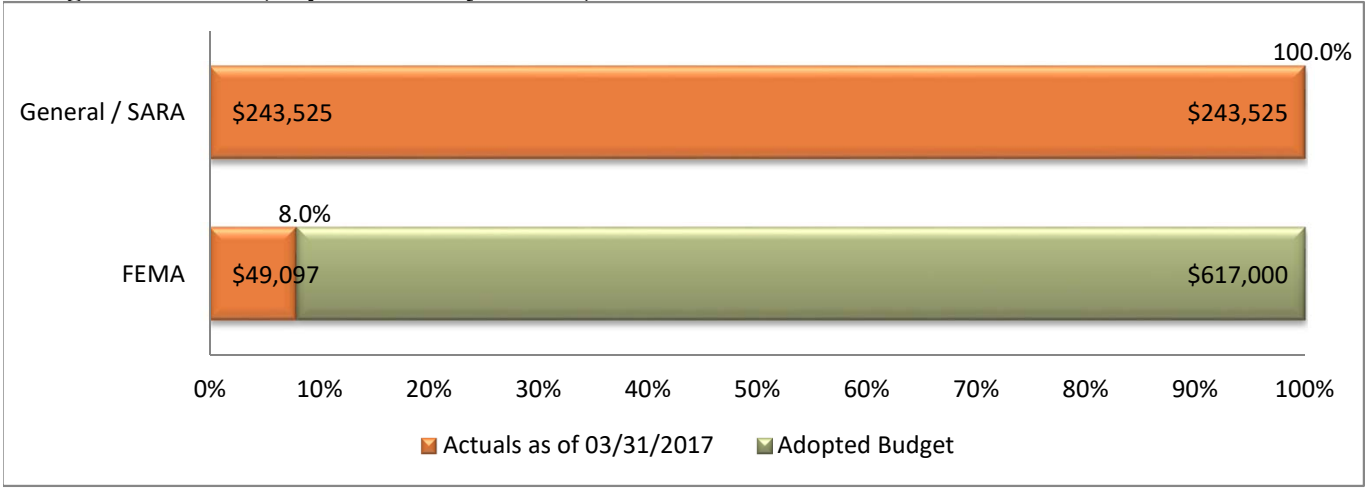
Project Name: Cooperating Technical Partners (CTP) Risk Map Lower San Antonio River **Project #** 0520



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **Cooperating Technical Partners (CTP) Risk Map Lower San Antonio River** **Project #** **0520**

Managing Department: Watershed Engineering

		Adopted Budget:	$	860,525
Project Start Date:	01/01/2016	Unfunded Plan:	$	-
Project Finish Date:	06/30/2018	Total Project:	$	860,525

The Federal Emergency Management Agency (FEMA) Risk Mapping, Assessment and Planning (Risk MAP) program assists communities nationwide with assessing flood risks and encouraging mitigation planning to avoid or minimize damage in the face of future disasters. Through more precise flood maps, risk assessment tools and outreach support, Risk MAP strengthens local ability to make informed decisions about reducing risk. In partnership with FEMA, the River Authority is conducting Risk MAP efforts within the Cibolo Creek, Lower San Antonio River, Upper San Antonio River – Phases I and II, and the Upper Medina River watersheds. These efforts consist of two phases with the first being Discovery and the second being Risk Identification and Assessment.

For FY 2017/18, the Upper San Antonio River, Medina River, Cibolo Creek, and Lower San Antonio River projects will focus on completing Phase II, Risk Identification and Assessment activities. These activities include developing FEMA flood risk GIS data products, a Flood Risk map, report, and database for each project area.

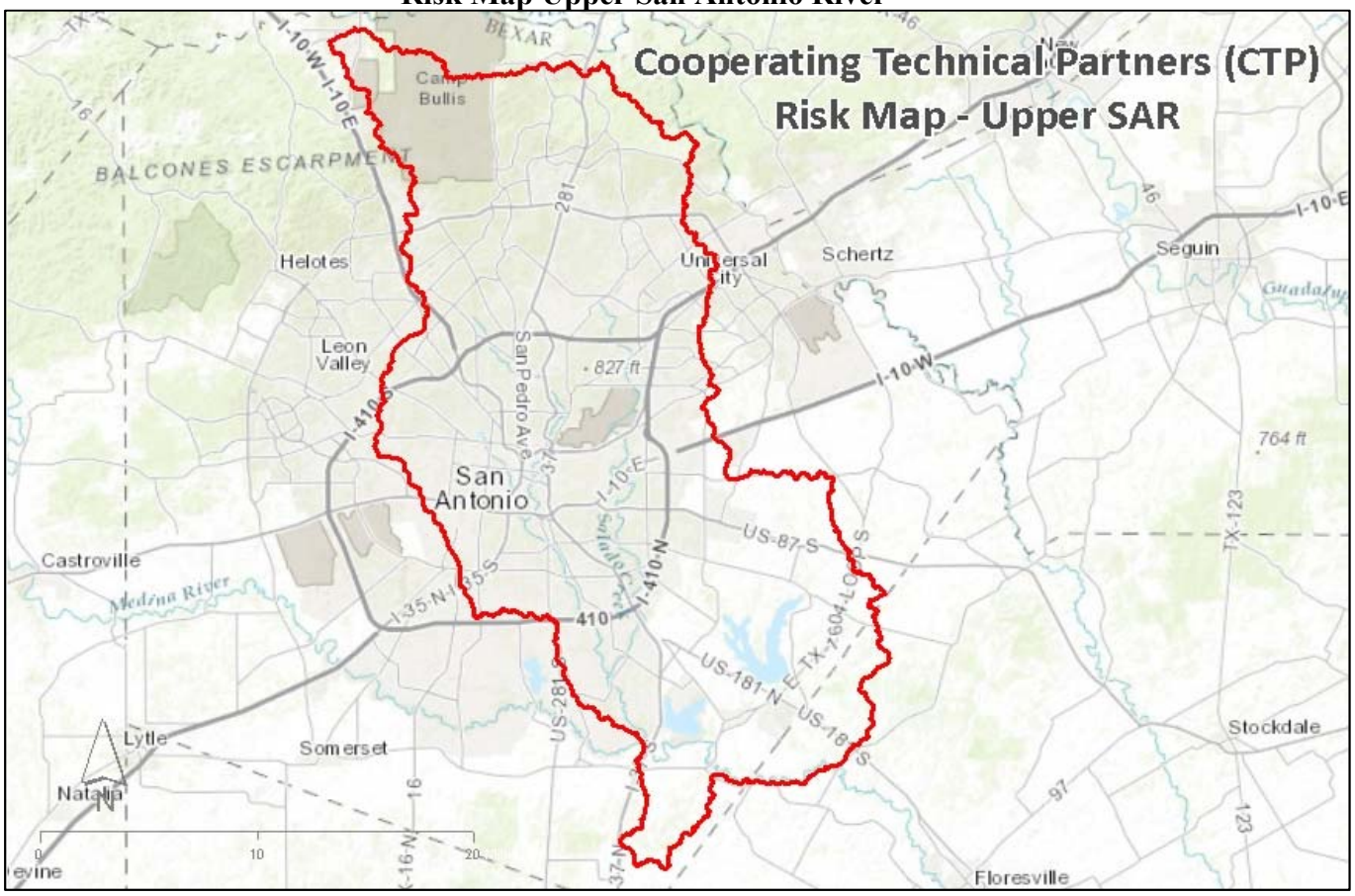
Also in FY 2017/18, the River Authority will continue program management items such as an annual update of the CTP - Business Plan and an update of the quality assurance/quality control plan. FEMA funding for this program totals $2,911,500 with $617,000 for the Lower San Antonio Risk MAP project.

The Cooperating Technical Partners (CTP) Risk Map Lower San Antonio River project advances the River Authority's goal of watershed health and safety as well as implementing watershed solutions.

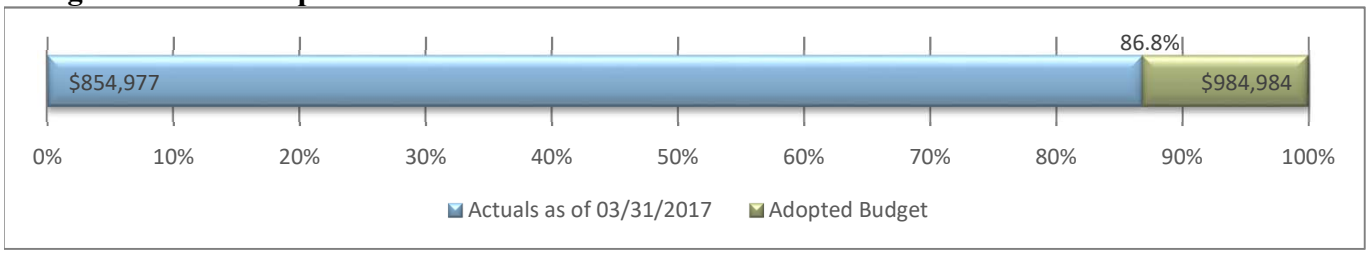
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 292,622	$ 567,903	$ -	$ -	$ 860,525
Total	$ 292,622	$ 567,903	$ -	$ -	$ 860,525

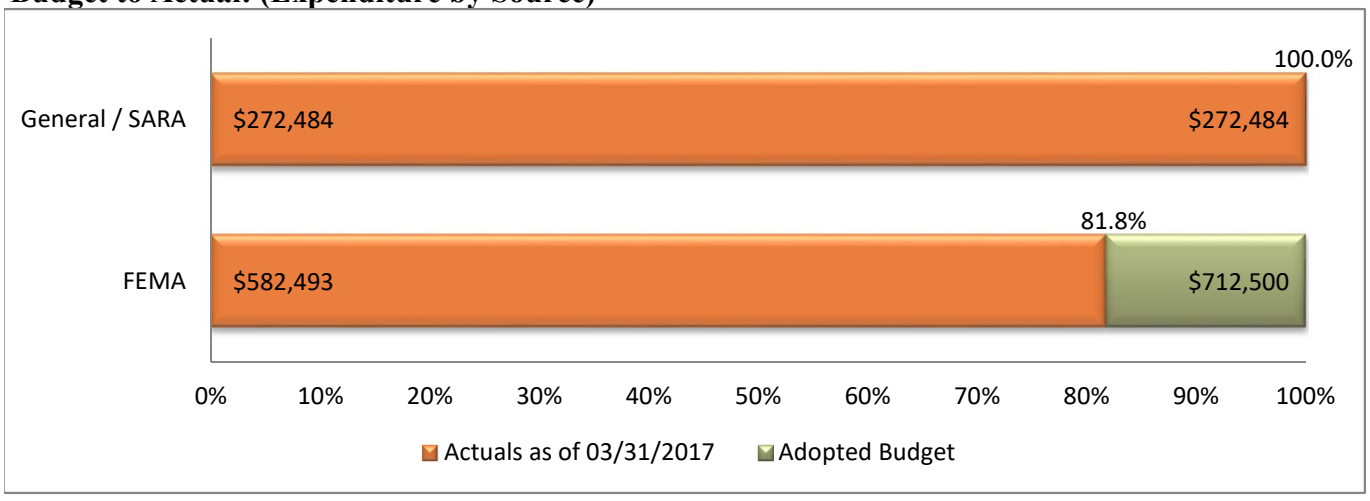
Project Name: Cooperating Technical Partners (CTP) Risk Map Upper San Antonio River **Project #** 0438



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **Cooperating Technical Partners (CTP) Risk Map Upper San Antonio River** **Project #** **0438**

Managing Department: Watershed Engineering

		Adopted Budget:	$	984,984
Project Start Date:	11/01/2012	Unfunded Plan:	$	-
Project Finish Date:	12/31/2017	Total Project:	$	984,984

The Federal Emergency Management Agency (FEMA) Risk Mapping, Assessment and Planning (Risk MAP) program assists communities nationwide with assessing flood risks and encouraging mitigation planning to avoid or minimize damage in the face of future disasters. Through more precise flood maps, risk assessment tools and outreach support, Risk MAP strengthens local ability to make informed decisions about reducing risk. In partnership with FEMA, the River Authority is conducting Risk MAP efforts within the Cibolo Creek, Lower San Antonio River, Upper San Antonio River – Phases I and II, and the Upper Medina River watersheds. These efforts consist of two phases with the first being Discovery and the second being Risk Identification and Assessment.

For FY 2017/18, the Upper San Antonio River, Medina River, Cibolo Creek, and Lower San Antonio River projects will focus on completing Phase II, Risk Identification and Assessment activities. These activities include developing FEMA flood risk GIS data products, a Flood Risk map, report, and database for each project area.

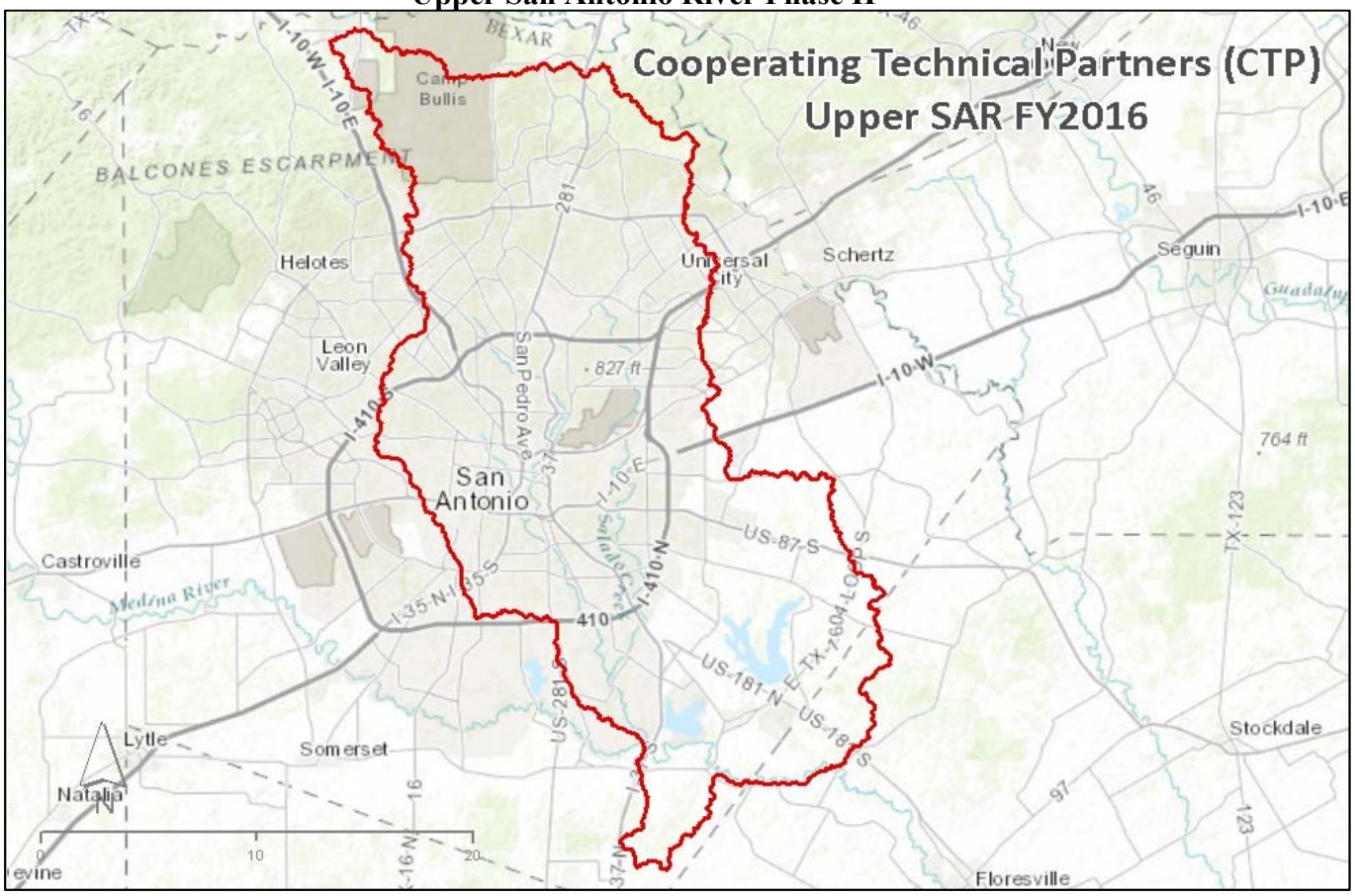
Also in FY 2017/18, the River Authority will continue program management items such as an annual update of the CTP - Business Plan and an update of the quality assurance/quality control plan. FEMA funding for this program totals $2,911,500 with $712,500 for the Upper San Antonio River Risk MAP project.

The Cooperating Technical Partners (CTP) Risk Map Upper San Antonio River project advances the River Authority's goal of watershed health and safety as well as implementing watershed solutions.

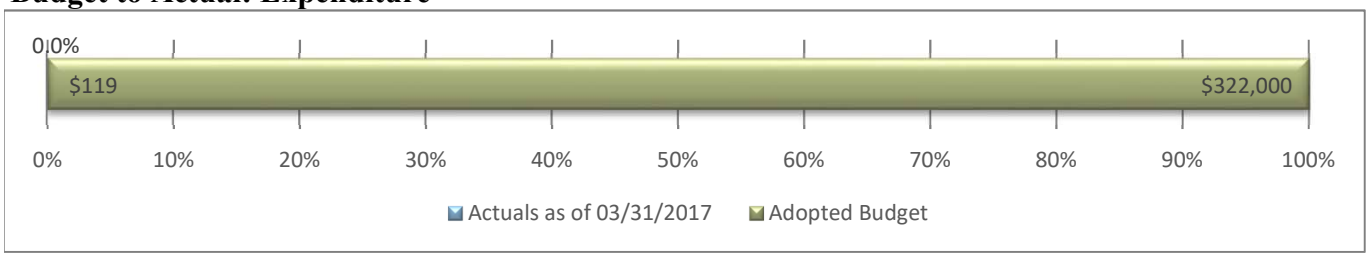
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 854,977	$ 130,007	$ -	$ -	$ 984,984
Total	$ 854,977	$ 130,007	$ -	$ -	$ 984,984

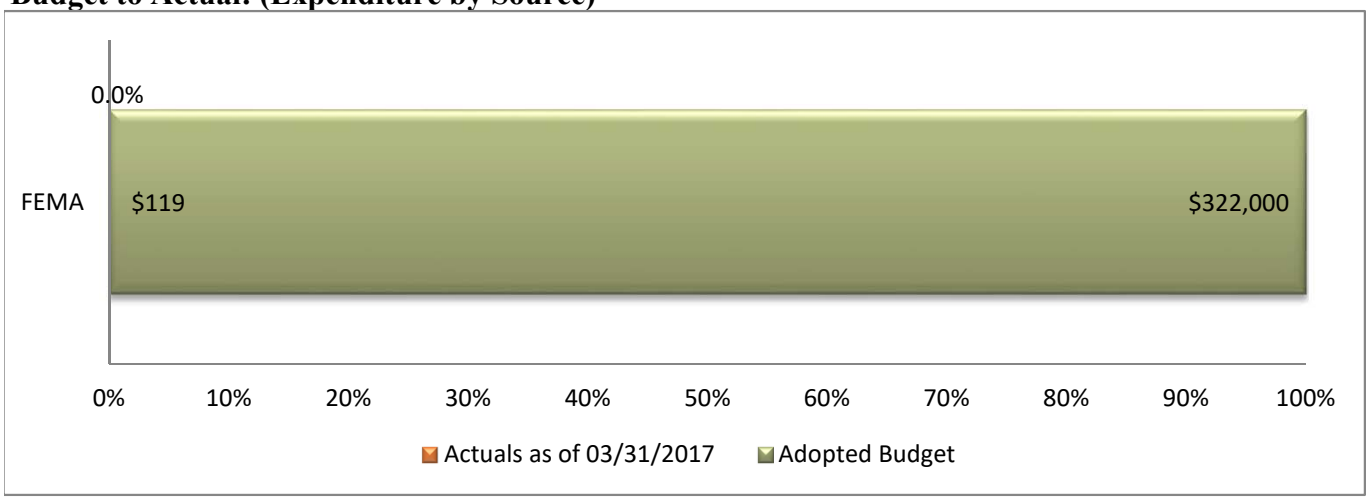
Project Name: Cooperating Technical Partners (CTP) Upper San Antonio River Phase II **Project #** 0563



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name: **Cooperating Technical Partners (CTP) Upper San Antonio River Phase II** **Project #** **0563**

Managing Department: Watershed Engineering

		Adopted Budget:	$	322,000
Project Start Date:	10/01/2016	Unfunded Plan:	$	-
Project Finish Date:	09/30/2019	Total Project:	$	322,000

The Federal Emergency Management Agency (FEMA) Risk Mapping, Assessment and Planning (Risk MAP) program assists communities nationwide with assessing flood risks and encouraging mitigation planning to avoid or minimize damage in the face of future disasters. Through more precise flood maps, risk assessment tools and outreach support, Risk MAP strengthens local ability to make informed decisions about reducing risk. In partnership with FEMA, the River Authority is conducting Risk MAP efforts within the Cibolo Creek, Lower San Antonio River, Upper San Antonio River – Phases I and II, and the Upper Medina River watersheds. These efforts consist of two phases with the first being Discovery and the second being Risk Identification and Assessment.

For FY 2017/18, the Upper San Antonio River, Medina River, Cibolo Creek, and Lower San Antonio River projects will focus on completing Phase II, Risk Identification and Assessment activities. These activities include developing FEMA flood risk GIS data products, a Flood Risk map, report, and database for each project area.

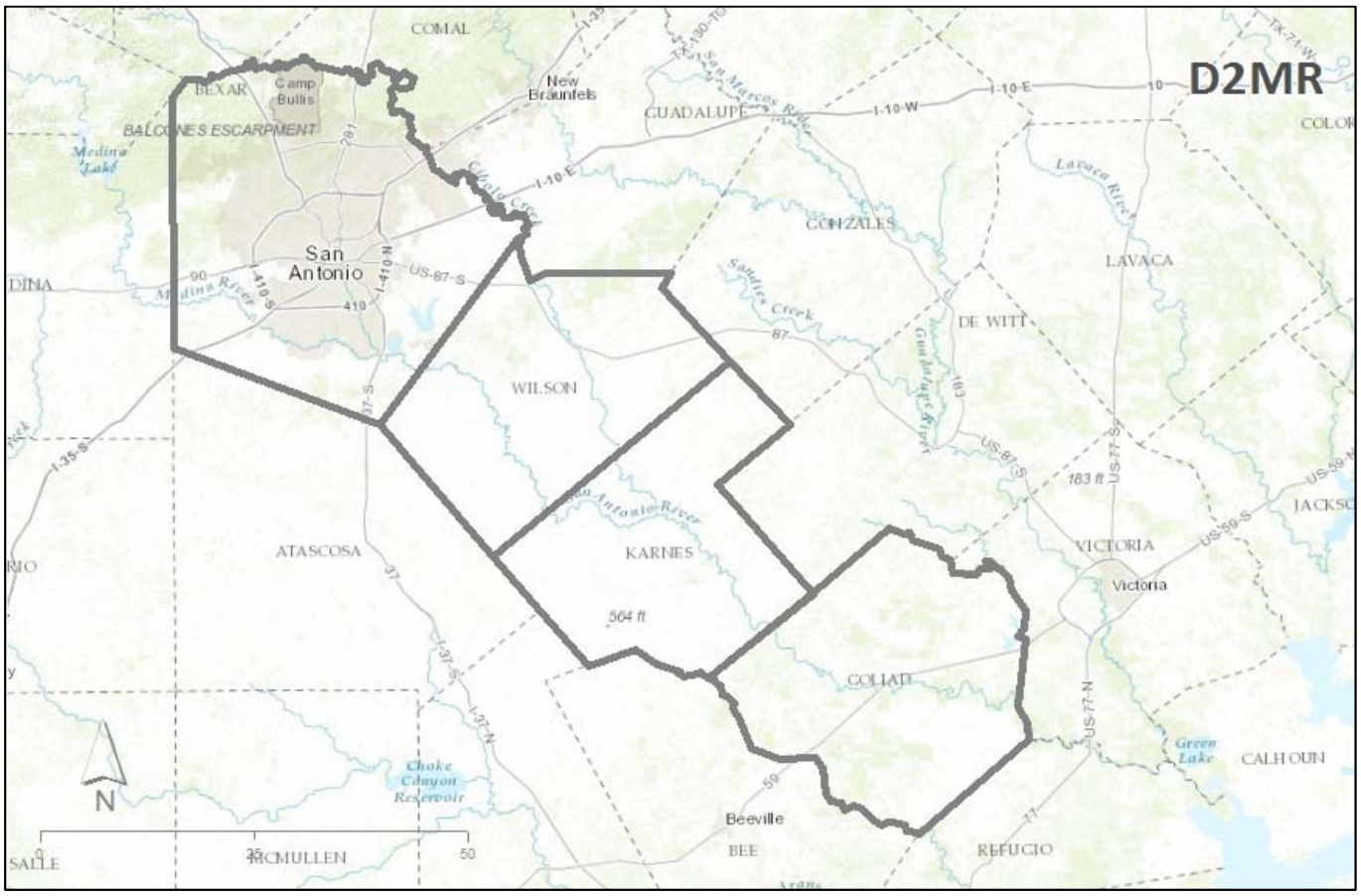
Also in FY 2017/18, the River Authority will continue program management items such as an annual update of the CTP - Business Plan and an update of the quality assurance/quality control plan. FEMA funding for this program totals $2,911,500 with $322,000 for the Upper San Antonio River FY 2016 Project.

The Cooperating Technical Partners (CTP) Risk Map Upper San Antonio River project advances the River Authority's goal of watershed health and safety as well as implementing watershed solutions.

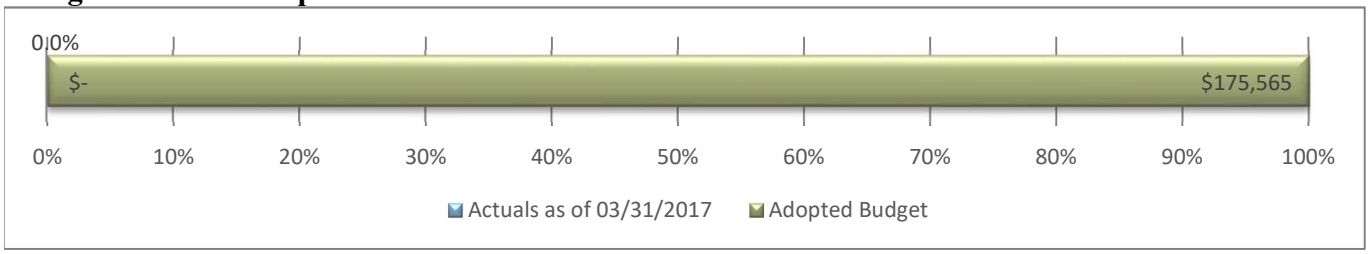
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 119	$ 321,881	$ -	$ -	$ 322,000
Total	$ 119	$ 321,881	$ -	$ -	$ 322,000

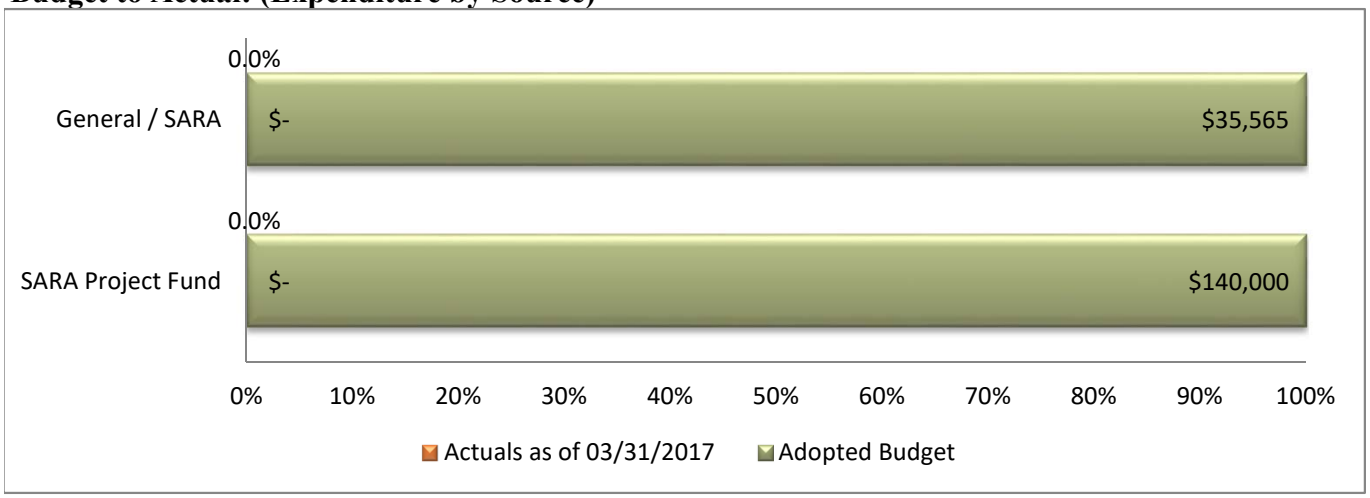
Project Name: **Digital Data and Model Repository (D2MR)** **Project #** **0578**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Digital Data and Model Repository (D2MR)**	**Project #**	**0578**
Managing Department:	Watershed Engineering		

		Adopted Budget:	$ 175,565
Project Start Date:	07/01/2017	Unfunded Plan:	$ 384,906
Project Finish Date:	06/30/2020	Total Project:	$ 560,471

This software application continues development to host and facilitate the review of hydrological models. The engineering community can then easily download the required models and supporting data to begin the Federal Emergency Management (FEMA) Conditional Letter of Map Revision (C/LOMR) process, upload a FEMA C/LOMR study for FEMA review, notify users of overlapping studies based on information provided at the time of a request, and allow for the storage and distribution of the baseline model and all the required models for a C/LOMR in the study area.

The Digital Data and Model Repository (D2MR) Redevelopment project focuses on building a new web application for discovery and accessibility to hydraulic and hydrology modeling data and supports the River Authority's LOMR Delegation Program and OpenData initiatives. This project revisits the storage solutions, modeling data organization, and available data technologies that allow for optimized storage and reduced long-term management. The project decouples core components so they become focused and tuned for performance and optimal functionality, allowing for more widespread integration through the web and desktop environments. The key technology objectives of this project include: increasing accessibility to modeling data, enhancing search ability of the modeling repository, optimizing web performance for mobile and tablet devices, and reengineering the user experience for external users and River Authority staff. The key business objectives of the project include: enhanced administrative features for tracking, reporting specifically in support of LOMR delegation and the River Authority's modeling activities, integration with ArcGIS Online infrastructure for streamlined geospatial data management, and development of new enhanced features that would allow end-users to explore and utilizing data through REST data services.

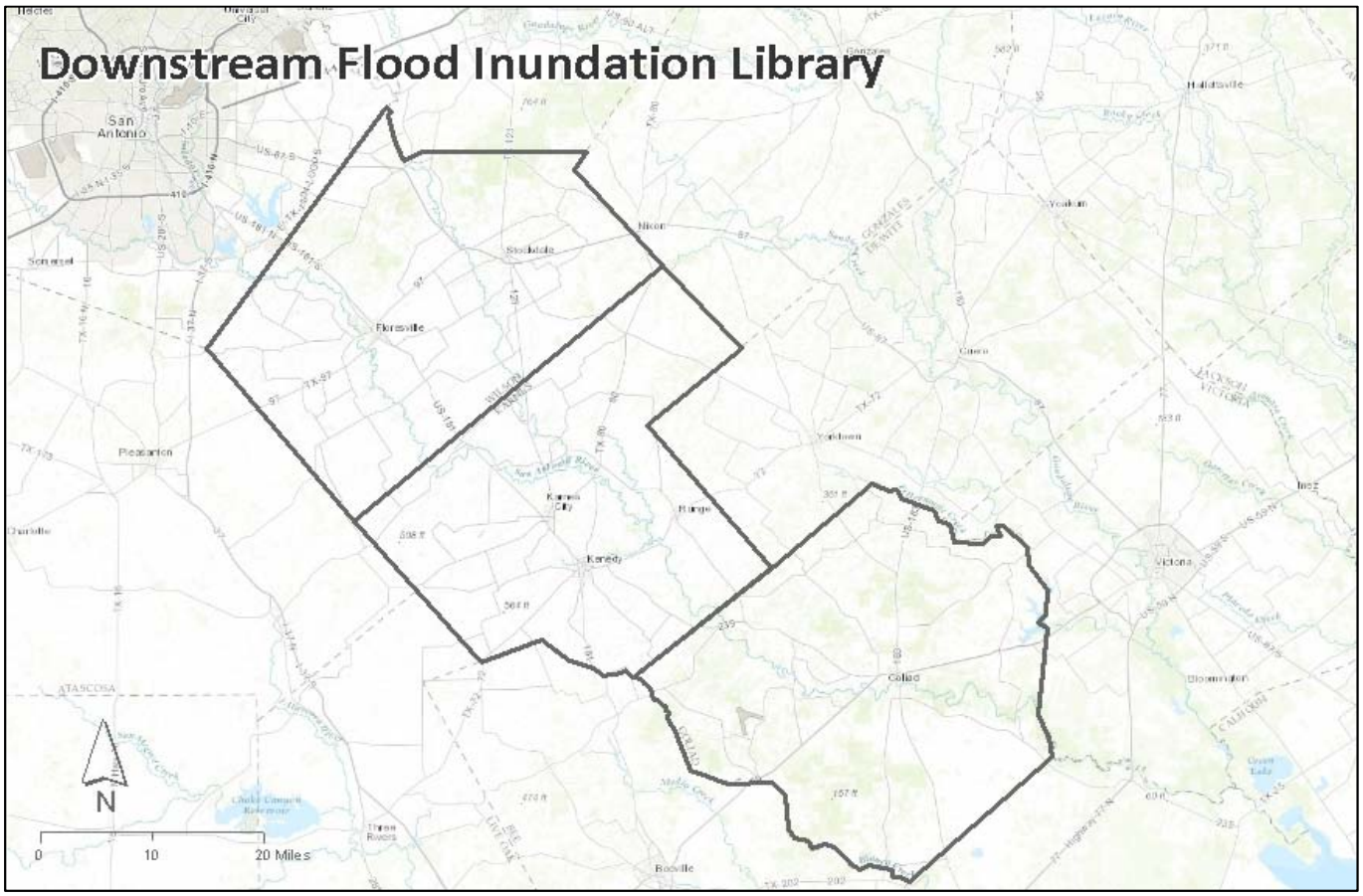
In FY 2017/18, the project will focus on redesigning the data repository data structure, developing the repository search and data retrieval solution, and documenting the business requirements and functional needs to inform the following phases of this project. The search and data retrieval solution will allow for this tool to be used and integrated with other systems, if needed, and afford significant flexibility in future development cycles. The business requirements and functional needed will explicitly document the features needed to support various internal and external business processes; this item will be used to guide the next phases of redevelopment of the D2MR platform. Operation and maintenance will be similar to other GIS data and applications, and will be accomplished through regular GIS maintenance activities by existing staff.

Of the total $175,565 Adopted Budget, $35,565 is estimated labor contribution through the River Authority General Fund.

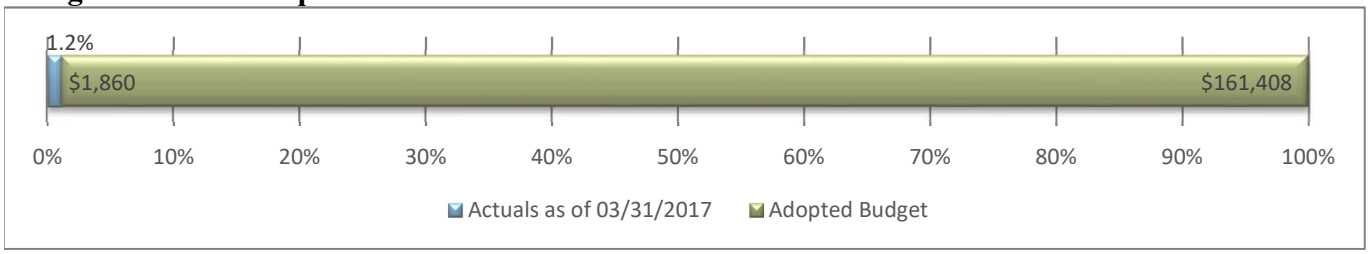
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ -	$ 175,565	$ 256,809	$ 128,097	$ 560,471
Total	$ -	$ 175,565	$ 256,809	$ 128,097	$ 560,471

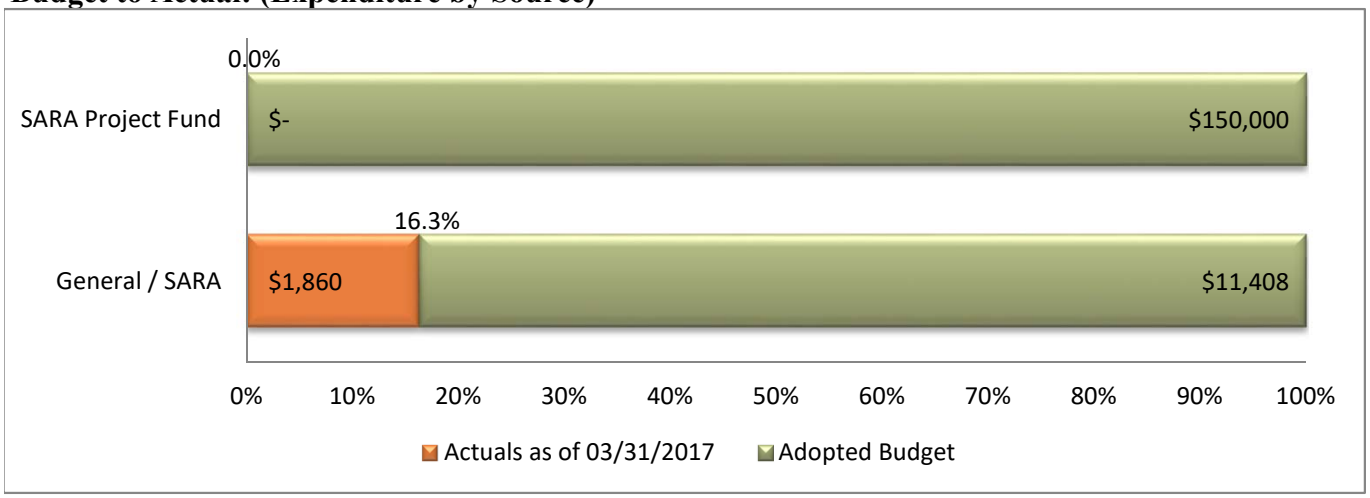
Project Name: **Downstream Flood Inundation Library** **Project #** **0545**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Downstream Flood Inundation Library**	**Project #**	**0545**
Managing Department:	Watershed Engineering		

		Adopted Budget:	$ 161,408
Project Start Date:	04/25/2016	Unfunded Plan:	$ -
Project Finish Date:	12/31/2017	Total Project:	$ 161,408

The Downstream Flood Inundation Library supports the Downstream Flood Mapping and Response system by depicting the potential flooded area associated with a rising river stage. This library assists Wilson, Karnes and Goliad counties in flood responsiveness.

This project updates previously developed modeling and data used to support the Downstream Flood Mapping and Response system. The project develops more current flood inundation libraries for each of the downstream United States Geological Survey (USGS) gages that depict the potential flooded area associated with a rising river stage.

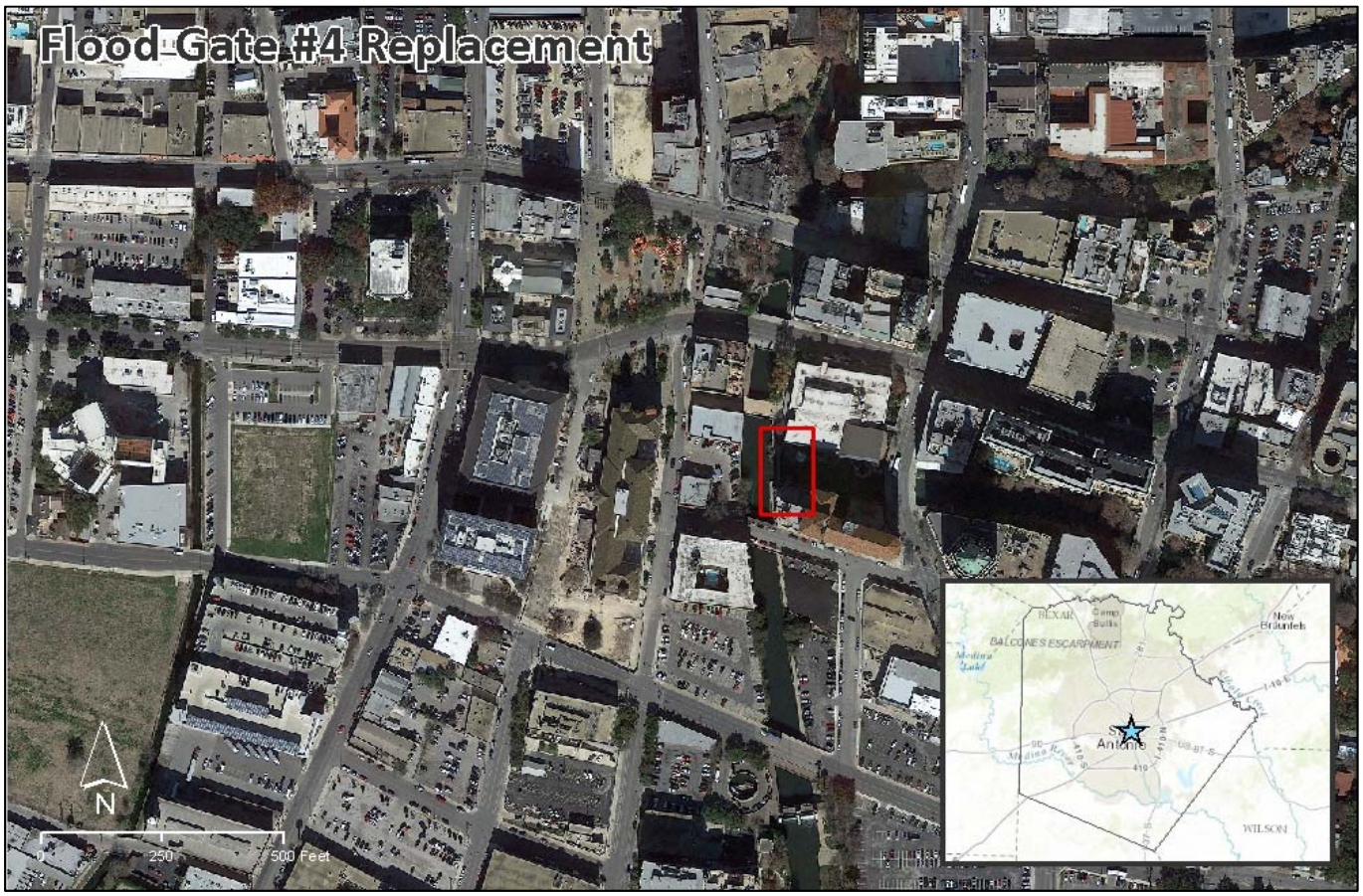
The project began in FY 2016/17 with a review and update of previous floodplain modeling and mapping. The latest elevation data was collected and used to update the floodplain models. In FY 2017/18, this project will work to complete the development of a geospatial library of flood inundation polygons for several USGS gages along San Antonio River and Cibolo Creek within the downstream part of the San Antonio River Basin. Additional deliverables may include floodplain map books as well as data related to floodplain impact summaries and river stage flood response tables. Operation and maintenance will be similar to other GIS data and applications, and will be accomplished through regular GIS maintenance activities by existing staff.

Of the total $161,408 Adopted Budget, $11,408 is estimated labor contribution through the River Authority General Fund.

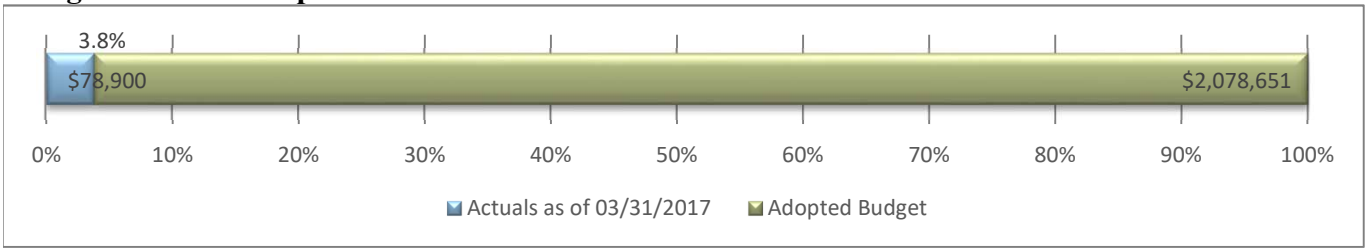
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 1,860	$ 159,548	$ -	$ -	$ 161,408
Total	$ 1,860	$ 159,548	$ -	$ -	$ 161,408

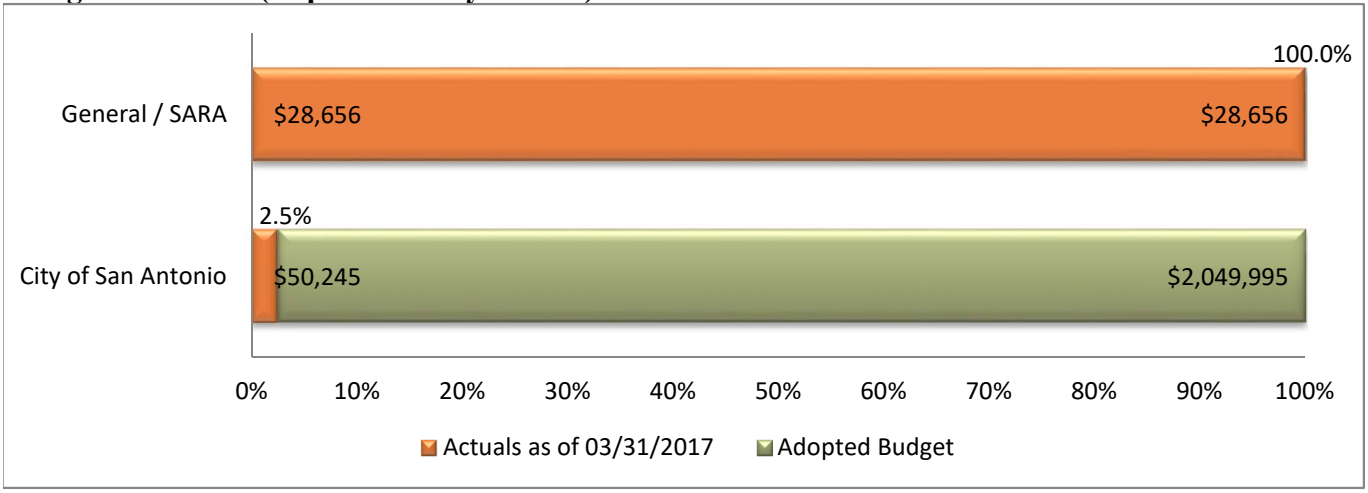
Project Name: **Flood Gate 4 Replacement** **Project #** **0516**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Flood Gate 4 Replacement**	**Project #**	**0516**
Managing Department:	Watershed Engineering		

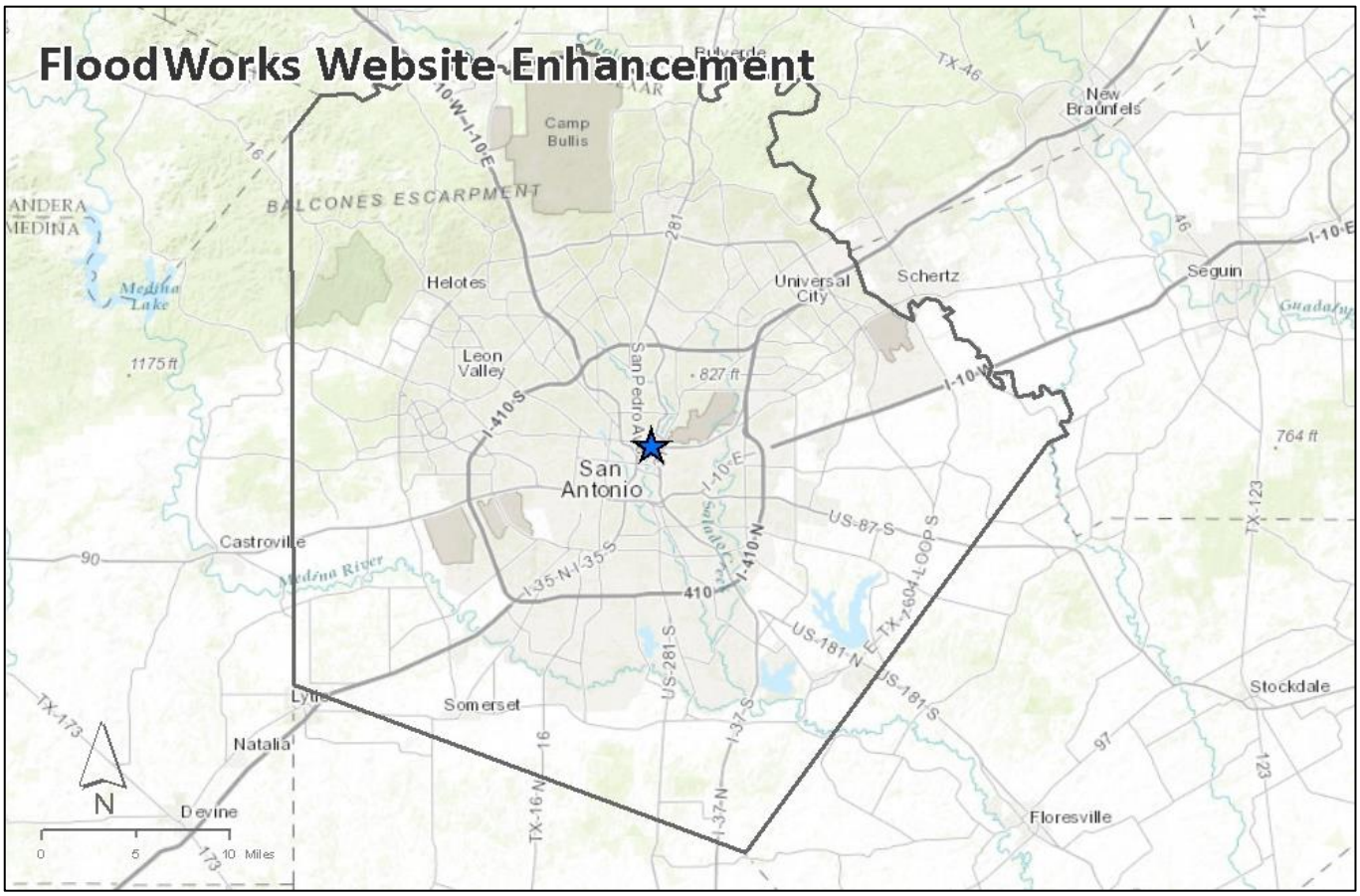
		Adopted Budget:	$ 2,078,651
Project Start Date:	06/17/2015	Unfunded Plan:	$ -
Project Finish Date:	12/28/2017	Total Project:	$ 2,078,651

The City of San Antonio, during routine maintenance on Flood Gate 4 located at the International Center, noticed the hydraulic cylinder had pulled away from the concrete vault wall and was discharging hydraulic fluid. The City recommended full replacement and contracted with the River Authority to manage the installation of a new flood gate. The River Authority is responsible for overseeing the removal and disposal of the old gate and installation of a new gate. The new gate and all ancillary equipment are being designed and fabricated by a gate equipment vendor. The River Authority also developed the bridging documents needed to prepare for the solicitation of a design-build contractor. Installation and operation of the new gate will occur in FY 2017/18. The River Authority is not responsible for any operations and maintenance activities related to this project.

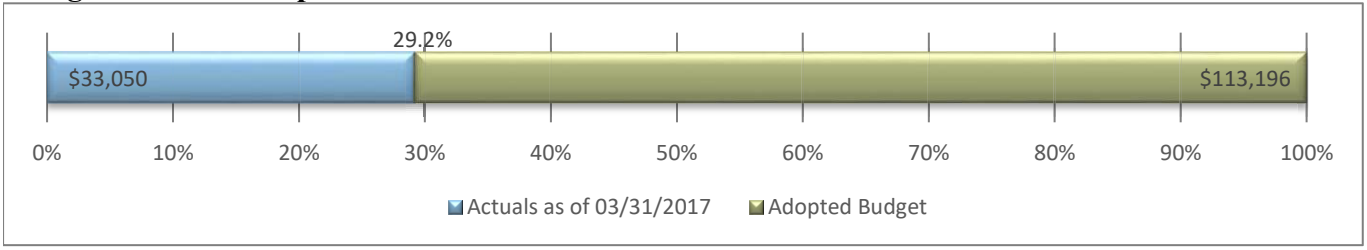
Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Design	$ 61,495	$ 26,052	$ -	$ -	$ 87,547
Construction	17,405	1,973,698	-	-	1,991,104
Total	$ 78,900	$ 1,999,750	$ -	$ -	$ 2,078,651

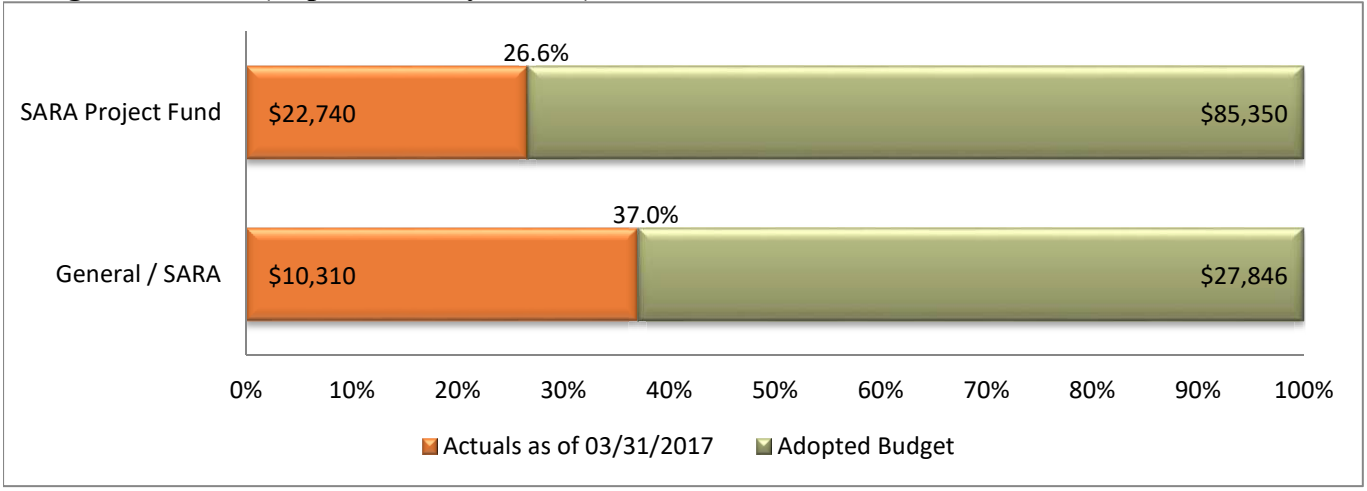
Project Name: **FloodWorks Website Enhancement** **Project #** **0498**



Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**FloodWorks Website Enhancement**		**Project #**	**0498**
Managing Department:	Watershed Engineering			
		Adopted Budget:	$	113,196
Project Start Date:	07/01/2015	Unfunded Plan:	$	-
Project Finish Date:	07/14/2017	Total Project:	$	113,196

This project enhances the current FloodWorks website to display one or many rainfall forecast results in addition to current condition results. This strengthens the River Authority's support role with local emergency operations and provides emergency managers and response personnel access to the best available forecasted and current flood event data to support their planning and preparation activities well in advance and during a storm event. The FloodWorks system ultimate goal is to keep citizens safe in times of high water events.

The FloodWorks website is a companion application that reads and displays simulation results from the primary FloodWorks system. The current website only displays near-real time data and doesn't allow display of future forecast simulation results. The objective of this project is to enhance the current web application to display one or many forecast results in addition to the current condition results.

This project began in FY 2015/16 to enhance the existing FloodWorks web application. In FY 2017/18, this project will complete the enhancements to the FloodWorks web mapping application such as usability on mobile devices, adding locations of critical infrastructure, allowing users to "save" bookmarks of locations important to them, integration of other GIS layers, and developing a mechanism for live notifications from the system based on simulation results. Operations and maintenance costs associated with the project are included in the FY 2017/18 Adopted Budget.

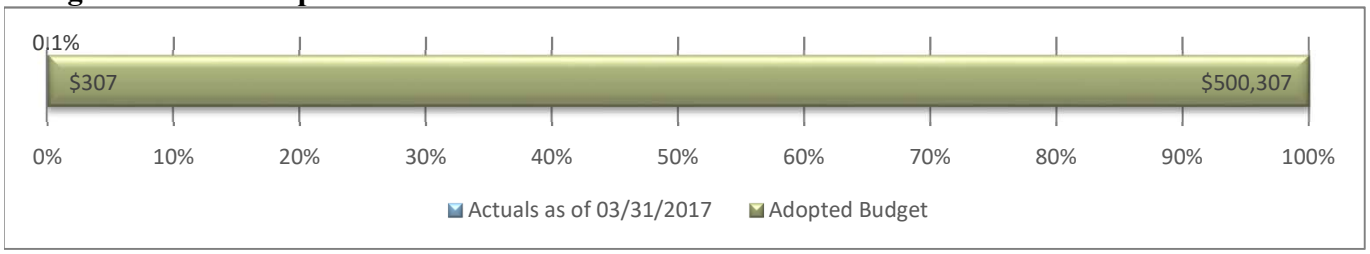
Of the total $113,196 Adopted Budget, $27,846 is estimated labor contribution through the River Authority General Fund.

Spending Plan of Total Project Budget

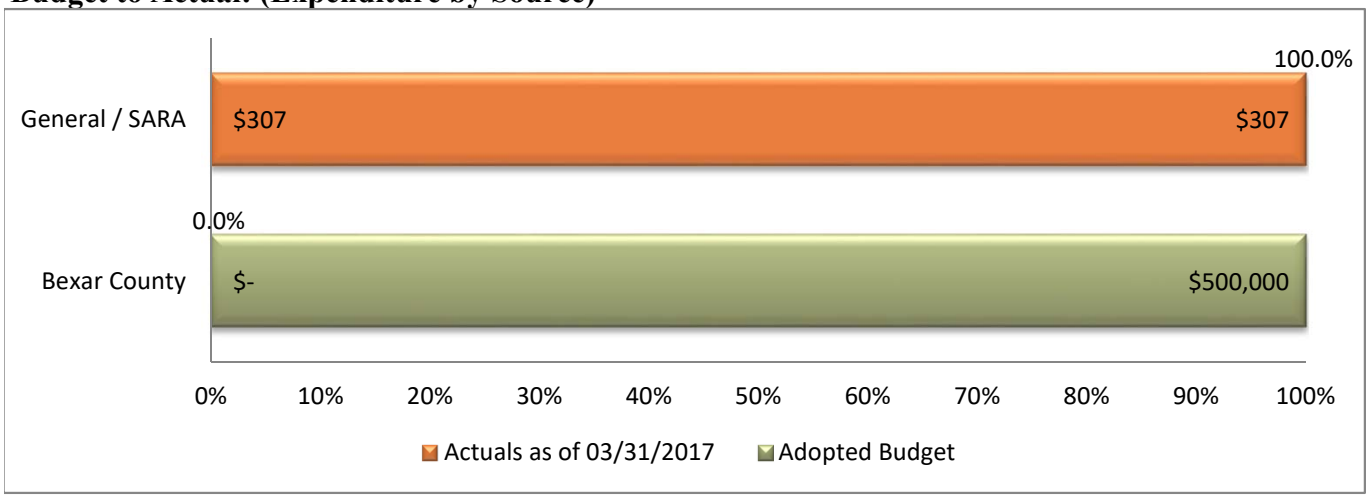
Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Administration	$ 33,050	$ 80,146	$ -	$ -	$ 113,196
Total	$ 33,050	$ 80,146	$ -	$ -	$ 113,196

Project Name: Stone Oak Park Dam (Salado 8) Spillway Repair **Project #** 0531

Budget to Actual: Expenditure



Budget to Actual: (Expenditure by Source)



Project Name:	**Stone Oak Park Dam (Salado 8) Spillway Repair**		**Project #**		**0531**
Managing Department:	Watershed Engineering				
		Adopted Budget:	$	500,307	
Project Start Date:	07/01/2016	Unfunded Plan:	$	-	
Project Finish Date:	12/29/2017	Total Project:	$	500,307	

Neighboring developers deposited construction debris and cut a road on the auxiliary spillway of Stone Oak Park Dam (Salado 8), impacting the functionality of the dam and, therefore, the health and safety of the neighboring community.

This project will remediate the impact of the development activity on the Stone Oak Park Dam. The project will be funded by Bexar County and managed by River Authority staff.

In FY 2017/18, the project will remove the construction debris and repair the damage caused by the road that was cut into the auxiliary spillway and was used to access the development. The project is funded by the Bexar County Capital Project Fund ($500,000). The San Antonio River Authority Project Fund does not include any funding for the project; however, this is an authorized project in this fund. Operations and maintenance costs would be absorbed within the appropriation levels for FY 2017/18. No additional staffing would be required.

Of the total $500,307 Adopted Budget, $307 is estimated labor contribution through the River Authority General Fund.

Spending Plan of Total Project Budget

Expenditures	Actuals as of March 31, 2017	April 1, 2017 to June 2018	2018/19	Succeeding from 2019	Total
Construction	$ -	$ 500,000	$ -	$ -	$ 500,000
Administration	307	-	-	-	307
Total	$ 307	$ 500,000	$ -	$ -	$ 500,307

SAN ANTONIO
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Leaders in Watershed Solutions

Abbreviations & Acronyms

AFB	–	Air Force Base
BBASC	–	Basin and Bay Stakeholder Committee
BCCIP	–	Bexar County Capital Improvement Program
BMPs	–	Best Management Practices
BRWM	–	Bexar Regional Watershed Management
BST	–	Bacterial Source Tracking
CRP	–	Clean Rivers Program
CTP	–	Cooperating Technical Partners
DFIRM	–	Digital Flood Insurance Rate Map
EAA	–	Edwards Aquifer Authority
EDYS	–	Ecosystem Dynamic Simulation
EGIS	–	Enterprise Geographical Information System
FEMA	–	Federal Emergency Management Agency
FWRS	–	Flood Warning and Response System
GIS	–	Geographic Information System
GPD	–	Gallons per Day
GWSW	–	Ground Water Surface Water
HEC	–	Hydrologic Engineering Center
IBI	–	Index of Biotic Integrity
ICM	–	Integrated Catchment Modeling
IGCR	–	Intergovernmental/Community Relations
ILA	–	Interlocal Agreement
LEED	–	Leadership in Energy and Environmental Design
LID	–	Low Impact Development
LIDAR	–	Light Detection and Ranging
LOMR	–	Letter of Map Revision
LSAR	–	Lower San Antonio River
MGD	–	Million Gallons per Day
MROC	–	Mission Reach Operations Center
NCD	–	Natural Channel Design
NPS	–	National Park Service
NRCS	–	Natural Resources Conservation Service
O&M	–	Operations and Maintenance
PCB	–	Polychlorinated biphenyls
QA/QC	–	Quality Assurance/Quality Control
RFP	–	Request for Proposal
RFQ	–	Request for Qualifications
RO	–	Reverse Osmosis
RWRDG	–	Regional Water Resource Development Group
SACIP	–	San Antonio Capital Improvement Projects
SAHA	–	San Antonio Housing Authority
SAR	–	San Antonio River
SARA	–	San Antonio River Authority (the River Authority)
SARB	–	San Antonio River Basin
SARIP	–	San Antonio River Improvements Project
SCADA	–	Supervisory Control and Data Acquisition
SCTRWPG	–	South Central Texas Regional Water Planning Group
SR	–	Stream Restoration
TBL	–	Triple Bottom Line
TCEQ	–	Texas Commission on Environmental Quality
TIF	–	Tax Increment Financing
TIRZ	–	Tax Increment Reinvestment Zone
TWDB	–	Texas Water Development Board
TxDOT	–	Texas Department of Transportation
UDC	–	Unified Development Code
USACE	–	US Army Corps of Engineers
USDA	–	US Department of Agriculture
USGS	–	US Geological Survey
WSC	–	Water Supply Corporation
WSM	–	Watershed Management
WSMP	–	Watershed Master Plan
WSO	–	Watershed Operations
WW	–	Wastewater
WWTP	–	Wastewater Treatment Plant

SAN ANTONIO
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PROJECT MANAGEMENT CENTER OF EXPERTISE

FINAL RECOMMENDATION

January 7, 2016

PM COE TEAM

Patricia Carvajal

Erin Cavazos

Rudy Farias

Michelle Garza – Lead

Chris Giambernardi

Terry Ploetz

Austin Snell

Rick Trefzer

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Executive Summary

In an effort to build on and fine tune project management processes for the River Authority a cross functional team, identified as the Project Management Center of Expertise (COE), was established. After extensive review and consideration of existing conditions several initial recommendations have been developed that are intended to bring greater consistency, clearer understanding, and improved work-flow processes for project management to the River Authority.

The Project Management COE has placed its focus on striking a balance between recognized project management principles, such as those recognized by The Project Management Institute (PMI), and principles that are easily understandable and executable for staff members with various levels of experience managing projects.

Project Ideas and Overview

The River Authority is a project intensive organization with a constant flow of ideas and thoughts that contribute to better serving our river basin. Given the limited resources the River Authority makes available to projects each fiscal year it is important that project ideas are aligned with the annual strategic plan and its objectives. The Project Management COE believes that project ideas should be evaluated and compared to the strategic plan, prior to moving through the established review and approval process. The proposed process requires a fair amount of additional effort from those submitting ideas for consideration. With this change, it will be increasingly important for decision makers (i.e. department managers, Executive Team sponsors) to provide constructive feedback with regards to whether an idea is consistent with the strategic objectives and if the idea is likely to receive support for priority consideration in order to prevent unnecessarily spending time and effort further developing an idea.

There are typically project ideas that are ‘unfunded’ after the budget review cycle and there is currently no clear process for determining the next steps for these ideas to evolve. In coordination with Program Leaders, department managers and Executive Team sponsors, it is recommended that the River Authority rethink the suggestion that new projects are only developed during the formal budget process. While approving/adopting project will continue to happen with the budget process, establishing practices that manage a pipeline of project ideas that result in proposals being developed throughout the year, facilitating the carry forward of previously developed ideas, and closing ideas that are no longer supported or seen as a priority will benefit departments across the organization.

Having clear documentation and guidance for the entire project lifecycle is a key objective of the Project Management COE. This will be achieved by providing a clearly documented Process Flow Chart, Project Classification Tool, Project Management Checklists (multiple levels) as well as other tools and templates to assist those that develop and propose project ideas.

Documentation

Documentation and its importance has been a consistent topic of discussion during COE meetings. Improving the content, standardizing the format and making information available to

project managers is a priority. SARA's project management documentation resources include: the processes and procedures, lessons learned from previous projects, the financial system (ONESolution), project management tools and templates used during the initiating, planning, executing, monitoring and the closing processes. Project management documentation resources guide and influence project managers by instilling consistency, making past project experiences available for review, and assist in further developing ideas. Completion of these documents should increase the likelihood of a successful project and create a more comprehensive historical record.

In support of the work completed by the COE, continuing effort should be made to improve project documentation and the access to that information. In addition, effort is currently being made to reestablish a project management presence on SARAnet and research will continue on how we can better utilize 'lessons learned' produced by project managers through existing tools. As discussions continue other ideas and opportunities will likely present themselves.

Reporting

Subsequent to putting processes and documentation resources in place the Project Management COE is proposing to look closer at reporting and performance monitoring for SARA projects. Making information available in a presentation that is most relevant for the audience will be examined. The Project Dashboard will slowly adapt to provide more accurate and comprehensive snapshot of project information but will still serve as the tool that conveys the project's overall health, performance and direction at a high level. Working with Information Technology, it will be refreshed in a way to limit the need to contact the Project Manager for interpretation. Collaboration between project managers and finance will continue to increase the transparency and accuracy of project information stored within the financial system (ONESolution). Standard monthly project status updates will be used to convey the projects progress and when appropriate significant issues and concerns that happened in the previous month. For additional project details and more granularity refer to the project files, financial system (ONESolution), or contact the Program Leader or Project Manager.

Next Steps

Now that consensus has been built on the foundation for project management at SARA, our team will direct its attention to the templates and 'tools'. As the Project Management COE continues to complete items described above a focus will be placed on working with the appropriate stakeholders to finalize project management templates that correspond to the Process Flow Chart and Project Management Checklist, where applicable. In addition, the Project Management COE plans to meet with CA Technologies (Clarity) in January to review enhancements to our currently licensed project and share our needs based on the direction of project management at SARA with our vendor. Finally, the COE will develop the supplemental resources and plan for training SARA staff on the revisions to our project management practices. The goal is to have this work completed by March with the intention of having all recommendations in place prior to the beginning of the new fiscal year.

PROJECT MANAGER (PM)

Day-To-Day

- Monitors project scope, schedule and budget
- Determines and reviews project goals and priorities
- Coordinates with Program Leader (PL) (if his/her project is under a program) to provide necessary information and support for successful program delivery
- Manages relationships with project participants, including internal and external participants/stakeholders and vendors, keeping stakeholders informed of progress and issues in order to manage expectations on all project requirements and deliverables
- Communicates with Program Leader and Project Managers (PM) under the same program
- Ensures a healthy progress of the project from start to finish and ensures all deliverables have been met as the project comes to a close
- Maintains "lessons-learned"
- Uses a formal Change Request (CR) process to communicate changes that effect the project's scope, budget and schedule
- Reviews project team members and their time allocations
- Reviews and if necessary, updates the project schedule and milestones (if there is a change in tasks, communicates this with project participants/stakeholders
- Reviews project budget and actuals.
- Takes necessary action to adjust (using CR process) the budget if there is a need
- Analyzes the actual progress and performance against the baseline schedule and makes adjustments
- Ensures the use of project management tools and that the information is up-to-date
- Reviews, communicates and updates project related Annual Objectives with Program Leader and Department Manager (DM)
- Communicates with Executive Team Sponsor, Support Departments and Budget Analyst (BA) as necessary

Tactical

- When dealing with a project idea:
    - Discuss project idea with Department Manager and Division Director as appropriate
    - Gains endorsement for the project idea by identifying if the idea is consistent with the Strategic Plan or responding to a specific need
    - Develops a project charter in coordination with project sponsor; Project charter includes a scope summary, deliverables, stakeholders/customers, estimated start and finish dates, order of magnitude budget, possible funding partners, and high level risks

- When planning the project:
    - Completes the project classification tool to determine the project idea's level (I, II, or III) and required documentation
    - Completes budget planning tool; estimates project team resources, contracts, and commodities
    - Completes required project proposal documentation
    - Receives endorsement for the project proposal and creates required project work breakdown structure documentation
    - Completes project reviews and incorporates review suggestions
    - Gains endorsement to formally execute the project and completes the project management plan
    - Identifies and documents potential risks and impacts
- When executing and monitoring a project:
    - Sets up file folders, coordinates with Finance to finalize project budget and KRONOS codes, and coordinates with Purchasing Agent for the procurement of goods and services
    - Conducts kick-off meeting, assigns resource assignments and ensures tasks are executed
    - Evaluates and responds to risks, documents lessons learned, monitors contracts
    - Ensures project deliverables/results conform to project quality guidelines
    - Captures and documents lessons learned throughout the project's execution
    - Tracks, reviews, and regulates the progress and performance of the project
    - Documents project changes through a change request as necessary
    - Monitors contractual requirements to ensure requirements are being met
    - Ensures invoices are reviewed and paid appropriately
    - Monitors project scope, budget and schedule
    - Conducts project progress meetings
    - Manages and updates project files and records
    - Documents overall project performance
    - Reviews and updates project status and project milestone percent completed on a monthly basis to ensure the project's dashboard is accurately reflecting the project's status
    - Monitors identified risks and documents new risks as necessary
    - Performs quality control and quality assurance for project deliverables
    - Identifies ways to eliminate causes of unsatisfactory deliverables/results
    - Communicates scope, budget, and schedule changes to program leader and support departments
    - Re-baselines project when changes to project scope, budget, and/or schedule occur
- When closing a project:
    - Finalizes all activities across the project management process groups to formally close the project
    - Requests final financials 30 – 45 days after contract work is completed

- Closes contract
- Requests the closure of Kronos and accounting codes from Finance
- Coordinates close-out with the support departments
- Conducts close-out/review meeting
- Finalizes and reviews all lessons learned with project team
- Archives appropriate project files and distribute to the designated archiving personnel
- Recognizes/celebrates project team upon completion of the project

Strategic

- Assists Program Leaders in annual proposed list of projects
- During the annual budgeting process, for ongoing projects, coordinates with the Program Leader/Project Managers in the budgeting process and decisions

PROGRAM LEADER (PL)

Day-To-Day

- Provided guidance and assistance to assigned Program, Project Managers and projects as needed

Tactical

- When dealing with a project idea:
  - Assist Project Manager, as necessary, in discussing project idea with Division Director
  - Gains endorsement for the project idea by identifying if the idea is consistent with the Strategic Plan or responding to a specific need
- When planning the project:
  - Participates in annual scoring and prioritizing of projects
- When executing and monitoring a project:
  - Meets with Executive Team (ET) sponsor at least quarterly to provide project(s') status updates
  - Ensures the accuracy of the project dashboard information
  - Monitors project(s') performance
- When closing a project:
  - Recognizes/celebrates project team upon completion of the project
- Other:
  - Coordinates assignment of projects and efforts into and out of programs
  - Becomes familiar with all SARA projects and their influence on other projects and programs

- Works effectively with internal and/or external participants/stakeholders, third party vendors, department managers and the executive team in accomplishing program objectives
- Advocates for program goals throughout organization by ensuring teamwork, communication and multidisciplinary approach to projects
- Keeps all PMs under the program informed of issues that may affect each project
- Ensures that prior coordination is performed among PM, DM and BA prior to the any adjustments to the program's overall budget
- Ensures compliance with the documented Project Management processes and procedures
- Provides training and guidance to Project Managers

Strategic

- Assists department manager(s) in the development of scopes, budgets, schedules, and resources for new projects and efforts
- Helps to determine whether proposed project ideas align with SARA's strategic plan
- Provides projects and efforts oversight and review to ensure goals and strategic plan are met to effect program success
- Conducts reviews of individual project budget and project dashboard
- Serves as a mentor/advisor/facilitator to PMs for issues related to internal and external relations, customer relations, governmental regulation, project quality, project risk, and safety
- Meets with ET to seek out and assist in the development of projects that support SARA's strategic plan
- Works closely with the Program Mentor/ET Sponsor to facilitate decisions necessary for successful program development and delivery
- Participates and assists in the development of the strategic plan
- Reviews contracting documents
- Notifies Department Manager of project deficiencies
- Escalates to ET Sponsor if there is no action
- Works across departments to ensure communication between Program Leaders and Department Managers

DEPARTMENT MANAGER (DM)

Day-To-Day

- Encourages and ensures all Project Managers in their department follow the SARA Project Management process and procedures
- Provides training and mentoring for their staff regarding effective project management
- Ultimately, responsible for the department project budgets

Tactical

- When dealing with a project idea:
    - Discusses project idea with Project Manager and Division Director
- When planning the project:
    - Endorses, in coordination with ET Sponsor, project proposal
- When executing and monitoring a project:
    - Participates in kick-off meeting
    - Assists in vendor relations and procurement related to the projects
    - Ensures the availability of the resources to the approved active programs/projects
    - Coordinates with Program Leaders and Project Managers in case of resource unavailability
    - Provides support to the Program Leader/Project Managers throughout the life of programs and projects
    - Reviews change requests regarding project scope, budget, and/or schedule
- When closing a project:
    - Recognizes/celebrates project team upon completion of the project

Strategic

- Assists Program Leaders in annual proposed list of projects (during and outside of the budget process)
- During the annual budgeting process, for ongoing projects, coordinates with the Program Leader/Project Managers in the budgeting process and decisions
- Responsible for resource planning and allocation for their department
- Participates and assists in the development of the strategic plan
- Examines/vets project's potential in regards to the strategic plan or in response to a specific need or regulation

EXECUTIVE TEAM SPONSOR (ET)

Day-To-Day

- Provided guidance and assistance to Program Liaisons, Project Managers and projects as needed

Tactical

- When dealing with a project idea:
    - Provides assistance to Department Manager through discussions on project ideas
    - Provides endorsement for the project idea by identifying if the idea is consistent with the Strategic Plan or responding to a specific need
- When planning the project:
    - Endorses project proposal which allows the Project Manager to begin development of a Work Breakdown Structure

    - Following the budget workshop, review meetings, and confirmation of resources, ET Sponsor endorses the project for Board consideration
- When executing and monitoring a project:
    - Participates in kick-off meeting
    - Reviews change requests regarding project scope, budget, and/or schedule
    - Reviews program dashboard to see general health of project budgets and schedules
- When closing a project:
    - Recognizes/celebrates project team upon completion of the project
    - Receives, reviews, and accepts project deliverables

Strategic

- Coaches PLs on how to interface effectively with Department Managers and Project Managers
- Shares institutional and professional wisdom, critiques performance, makes suggestions
- Supports, listens and serves as an advisor in SARA's cultural expectations and acknowledges challenges and opportunities
- Helps PL to keep sight of SARA’s strategic plan
- Mediates disagreements between PLs and Department Managers
- Meets at least quarterly with PL

PROJECT MANAGEMENT PROCESS FLOWCHART

Appendix B.

INITIATING

Concept development and initial planning phases can occur any time of year.

Project Idea

Discuss with DM and Division Director

Consistent with Strategic Plan? Responding to need or regulation?

Yes

No

End

Assign PM (if not already in place)

Project Charter:

Scope summary, estimated start and finish dates, and other high-level elements as noted in the PM Processes checklist.[1]

PLANNING

Project Classification (form)

Project Proposal:

Details based on checklist for Project Classification. Initial budget with finance (tool available if needed). If ILA or grant, make sure terms addressed.

Endorsed by DM or ET Sponsor?

Yes

No

End

Work Breakdown Structure:

Additional task, budget, and schedule detail required depending on Project Classification (see checklist). Begin resource planning with support depts.

Coordinate Reviews[2]- Strategic Assessment, Environmental, Support Departments, Project Delivery

Authorized off cycle projects[1]

Endorsed by Review Teams?

No

Yes

Project is considered at budget workshop and project review meeting.

Management and support departments confirm resource allocation and program assignment.

Approved by ET?

Yes

No

End

Board Review

Approved by Board?

Yes

No

End

Convert to Active Project

Project Management Plan:

Complete additional components required depending on Project Classification (see checklist).

Project prioritization and Board approval typically occur in conjunction with the budget process in the spring.

[1]If project is requesting approval outside the budget process, authorization from the Executive Team is required at the Project Concept stage. Off-cycle projects should meet the following criteria: tie to Strategic Plan, have a funding source, advance an on-going initiative/project, show staff resources are available, and have ET approval.

[2]During the budget cycle, these reviews will be facilitated within the budget process. Outside the budget cycle, PM will need to schedule these reviews (this is only for projects authorized as noted above).

See checklist for more details and requirements based on Project Level classification.

EXECUTING

Coordination with Finance, Purchasing, IGCR, GIS, and any other support departments is critical during project setup. They should already be aware of the project from the planning phase.

- Review file folder set-up and remove unnecessary folders.
- Work with Finance to complete budget and set up Kronos Codes.
- Work with IGCR, GIS, and other support departments to confirm project needs and staff assignments.
- Procurement (if applicable)
- Hold Kick-off Meeting* with Project Team including IGCR and Support Departments.

MONITORING

These tasks will be performed on an iterative basis during the execution of the project. Timing and frequency will be defined in each project's work plan.

- Monitor project dashboard and track milestone progress.
- Prepare monthly updates.
- Document lessons learned.
- Hold progress meetings* (as appropriate—see checklist)
- Manage files and records.
- Review and approve invoices.
- Submit request if changing scope, schedule, or budget.
- Arrange for quality assurance review of deliverables.

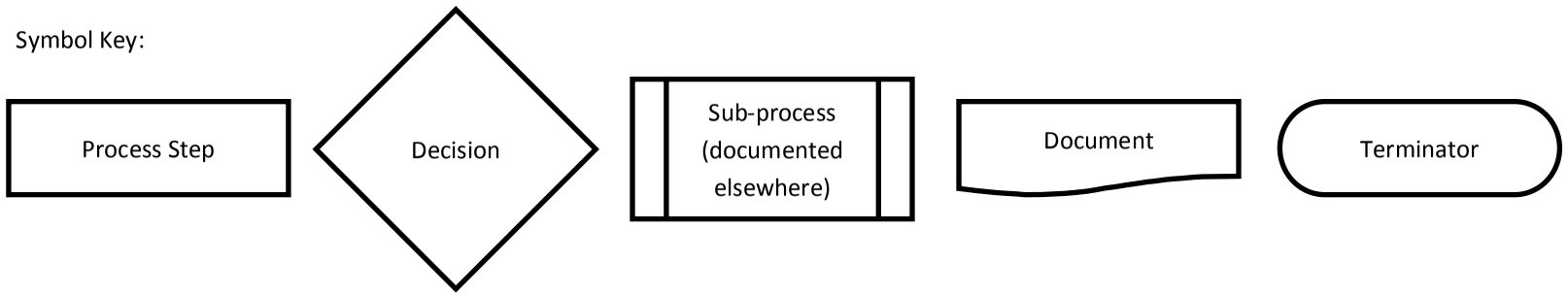
CLOSING

- Initiate Project Closeout
- Request Final Financials 30 to 45 days after contract work is complete.
- Close out contracts
- Close out Kronos codes and accounting codes with Finance
- Coordinate close-out with Support Services Liaisons and Real Estate
- Hold closeout/review meeting.*
- File Lessons Learned
- Archive files
- Recognize the project team.
- End

*Meeting recommendations are based on project classification. Meetings may be combined with regularly scheduled program meetings if appropriate. See checklist for guidance.

DM Department Manager
ET Executive Team
PL Program Leader
PM Project Manager

Symbol Key:



Appendix C.

SAN ANTONIO RIVER AUTHORITY
PROJECT MANAGEMENT PROCESSES CHECKLIST

PROJECT INITIATION (Initiating Process)

Initiating a project can occur at any time of the year by anyone within the organization. The process entails defining a new project or a new phase of an existing project and obtaining authorization to move into the project planning phase. The process begins by:

Project Idea

- ☐ Discuss project idea with Department Manager and Division Director as appropriate.

Gain Endorsement

- ☐ Identify if the project idea is consistent with the Strategic Plan or responding to a specific need.
  - ☐ If there is support for the project idea, develop a Project Charter. Otherwise, project idea ends.

Project Charter Documentation Requirements*

- ☐ A project manager and project sponsor are identified to develop the project charter.
- ☐ Project charter shall include a scope summary, deliverables, stakeholders/customers, estimated start and finish dates, order of magnitude budget, possible funding partners, and high level risks.

PROJECT PLANNING (Planning Process)

Following support for a project idea, the project moves into the planning process. This planning process establishes the scope of the project, refines the objectives, and defines the course of action required to attain the objectives the project is seeking to achieve. Authorization to start the project is received within this process group. The process begins by taking the approved project idea and:

Project Classification

- ☐ Project manager completes project classification tool
  - ☐ Tool's output determines the project's level (Level I, II, or III) and required project documentation

Project Proposal Documentation Requirements* (Levels I, II, or III)

- ☐ Confirm project manager and project sponsor. (I, II, III)
- ☐ Project manager documents project proposal:
  - ☐ Identify and document which program the project will be under. (I, II, III)
    - ☐ Confirm with the appropriate Program Leader.
  - ☐ Obtain (from the Finance Department) and complete budget planning tool. (I, II, II)
    - ☐ Tool helps estimate cost for project team, contracts (professional services) and/or commodities (supplies and equipment). If procuring services, coordinate with purchasing personnel (I, II, III)
  - ☐ Develop high level project schedule. (I, II, III)
  - ☐ Identify and document project milestones. (I, II, III)
  - ☐ Identify and document expected outcomes and benefits. (I, II, III)
  - ☐ Refine and validate project scope and objectives. (I, II, III)
  - ☐ Identify and document critical success factors. (I, II, III)
  - ☐ Identify and document stakeholder needs and requirements. (II, III)
  - ☐ Identify and document customer needs and requirements. (II, III)
  - ☐ Identify and document project goals and deliverables. (I, II, III)
  - ☐ Identify and document potential risks and impact to the project. (II,III)
  - ☐ Gather and evaluate all relevant background information. (III)

Gain Endorsement (Levels I, II and III)

- ☐ Project manager obtains endorsement for the project proposal from Department Manager or ET Sponsor, and updates the Program Leader and Budget Analyst. (I, II, III)

Project Work Breakdown Structure Documentation Requirements* (Levels II and III)

- ☐ Project manager identifies and documents personnel needed to complete Work Breakdown Structure (WBS). The WBS is completed in coordination with the project team and support departments and includes:
  - ☐ Develop and document a detailed schedule. (II, III)
  - ☐ Refine budget based upon detailed schedule. (II, III)

- ☐ Confirm personnel resources and obtain approval from necessary department managers and support departments (i.e. IGCR, GIS, IT, HR, Finance.) (II, III)
- ☐ Develop and document detailed scope of work and obtain approval from department manager and program leader. (II, III)
- ☐ Identify and document organization and/or project constraints. (II, III)
- ☐ Document all project assumptions. (III)
- ☐ Develop and document Risk Response Plan. (III)
- ☐ Develop and document Quality Management Plan (III

Note: Components of the WBS may be completed following Board approval.

Reviews/Endorsements (Levels I, II and III)

☐ Complete project reviews and incorporate suggestions as appropriate.
- ☐ Environmental Review (I, II, III)
- ☐ Strategic Assessment Tool (I, II, III)
- ☐ Project Delivery Review, if necessary. (Applies to studies, and design and construction projects.) (I, II, III)
- ☐ Support Department Review (I, II, III)

☐ Based upon the reviews, communicate any changes to scope, cost or schedule to department manager, support departments, program leader, and Finance. Changes to scope, cost or schedule will require an update to the WBS. (I, II, III)

Review Team and Management Reviews (Levels I, II and III)

☐ In Budget Cycle – Projects are considered at the budget workshop and project review meetings (Levels I, II, III)

☐ Confirm staffing availability and program assignment with department manager(s) and support departments. (I, II, III)

☐ Out of Budget Cycle – The project must tie to the strategic plan, have a funding source, advance an on-going initiative, show staff resources are available, and have Executive Team approval. The project manager will also need to schedule and complete the project reviews. (I, II, III)

Gain Endorsement (Levels I, II and III)

☐ In and Out of Budget Cycle - Obtain final approvals from Executive Team to move to the Board for project and budget approval. (I, II, III)

☐ Board/Budget approval obtained.
- ☐ If yes, convert Proposed Project to an Active Project. (I, II, III)
- ☐ If no, all information gathered up to this point should be saved on the G: drive for possible future use. (I, II, III)

Project Management Plan (Levels II and III)

☐ If not complete, project manager with the project team completes components of the project WBS and finalizes Project Management Plan. (Levels II and III)

PROJECT EXECUTING (Execution Process)

The execution processes are those processes performed to complete the work defined in the Project Management Plan to satisfy the project specifications. ONESolution is the system for all financials.

Project Set Up (Levels I, II and III)

Project manager coordinates with Finance, Purchasing, IGCR, GIS and any other support departments to:

☐ Set up project file folders. Project manager removes unnecessary folders. (I, II, III)

☐ Contact Finance to finalize budget and set up Kronos codes. (I, II, III)

☐ Request Finance give project team access to Kronos codes. (I, II, III)

☐ Prior to procuring goods and services, project manager works with Purchasing Agent and reviews and follows SARA's policies (FN 001 and FN 009). (I, II, III)

Project Activity (Levels I, II and III)

☐ Project manager conducts kick-off meeting
- ☐ Include project team, ET sponsor, program leader, department manager, and support departments. (I, II)
- ☐ Include project team, ET sponsor, program leader, department manager, support departments, and external participants. (III)

☐ Assign resources to project tasks as identified by schedule. (I, II, III)

☐ Ensure team members are executing task as assigned. (I, II, III)

☐ Identify and document new risks. (I, II, III)

☐ Execute risk response plans, as necessary. (III)

- ☐ Ensure project deliverables/results conform to project quality guidelines. (III)
- ☐ Capture and document lessons learned throughout the project's execution. (I, II and III)

PROJECT MONITORING (Monitoring Process)

The monitoring processes includes those processes require to track, review, and regulate the progress and performance of the project. During this process, areas requiring change are identified. Changes are initiated and documented through a change request. These tasks will be performed on an iterative basis during the execution of the project.

Project Activity (Levels I, II and III)

- ☐ Monitor contractual requirements to ensure requirements are being met. (I, II, III)
  - ☐ Ensure invoices are reviewed and paid appropriately. (I, II, III)
- ☐ Monitor project scope, budget and schedule. (I, II, III)
- ☐ Conduct project progress meetings. (II, III)
- ☐ Manage and update project files and records. (I, II, III)
- ☐ Document overall project performance.
  - ☐ Review and update project status, project dashboard, and project milestone percent completion monthly. (I, II, III)
- ☐ Monitor identified risks and document new risks monthly. (III)
- ☐ Perform quality control and quality assurance for project deliverables. (I, II, III)
  - ☐ Identify ways to eliminate causes of unsatisfactory deliverables/results. (III)
- ☐ Communicate scope, budget, and schedule changes to program leader and support departments. (I, II)
- ☐ Communicate changes that effect project scope, budget, and schedule to project team, program leader, ET sponsor, support departments, and external participants as determined appropriate by project manager. (III)
- ☐ Initiate a change request to document changes to project scope, budget, and/or schedule. (I, II, III)
- ☐ Re-baseline project when changes to project scope, budget, and/or schedule occur. (II, III)

PROJECT CLOSING (Closing Process)

The closing processes finalize all activities across the project management processes groups to formally close the project.

Project Closure (Levels I, II and III)

- ☐ Sponsor receives, reviews, and accepts project deliverables. (I, II, III)
- ☐ Project manager requests final financials 30 – 45 days after contract work is completed. (I, II, III)
- ☐ Project manager closes contract. (I, II, III)
- ☐ Project manager requests the closure of Kronos and accounting codes from Finance. (I, II, III)
- ☐ Project manager coordinates close-out with the support departments. (I, II, III)
- ☐ Project manager conducts close-out/review meeting. (II, III)
- ☐ Project manager finalizes and reviews all lessons learned with project team. (I, II, III)
- ☐ Project manager finalizes and reviews lessons learned with project participants. (III)
- ☐ Project manager archives appropriate project files and distribute to the designated archiving personnel. (I, II, III)
- ☐ Project team is recognized for the completion of the project. (I, II, III)

*** Elements of the Project Charter, Project Proposal and Project Work Breakdown Structure make up the Project Management Plan.**

GLOSSARY

Clarity – The River Authority's project management system for routing and capturing scope, time, monthly updates, change requests and lessons learned.

Customer – The person or organization that will use the project's product or service or result.*

Executive Team (ET) – The River Authority's General Manager, Assistant General Manager, and Division Directors.

Kronos – The River Authority's time keeping system for staff.

ONESolution – The River Authority's financial accounting system and system of record. All financial reporting must be derived from ONESolution.

Project Charter – A document issued by the project sponsor Executive Team sponsor that formally authorizes the planning of a project, and provides the project manager with the authority to apply organizational resources to project activities. (Adapted from *A Guide to the Project Management Body of Knowledge* (PMBOK) – Third Edition)

Project Classification – The River Authority's tool for determining a project's level of complexity and required documentation. Levels are I, II and III with III being the most complex.

Project Dashboard – Located on SARANet under SARA Goals and Reporting, the dashboard illustrates project spending, milestone status, start and end dates, monthly project updates, and captures the project scope.

Project Management Plan – It is a formal, approved document that defines how the project is executed, monitored and controlled. It may be summary or detailed and may be composed of one or more subsidiary management plans and other planning documents.*

Project Manager – The person assigned by the performing organization to achieve the project objectives.*

Project Scope – The work that must be performed to deliver a product, services, or result with the specified features and functions.*

Project Sponsor – The Executive Team sponsor that advocates for the financial resources, in cash or in kind, for the project. (Adapted from *A Guide to the Project Management Body of Knowledge* (PMBOK) – Third Edition)

Quality Management Plan – The quality management plan is a component of the project management plan. The quality management plan may be formal or informal, highly detailed, or broadly framed, based on the requirements of the project. It defines the level of quality of deliverables.

Risk Assessment – Also referred to as Risk Identification in the PMBOK, it is the process of determining which risks might affect the project and documenting their characteristics and potential impacts.*

Risk Response Plan – The process of developing options and actions to enhance opportunities and to reduce threats to project objectives.*

Scope of Work – See Project Scope.

Stakeholder – Person or organization (e.g., customer, sponsor, performing organization, or the public) that is actively involved in the project, or whose interests may be positively or negatively affected by execution or completion of the project. A stakeholder may also exert influence over the project and its deliverables.*

Work Breakdown Structure (WBS) – A deliverable-oriented hierarchical decomposition of the work to be executed by the project team to accomplish the project objectives and create the required deliverables. It organizes and defines the total scope of the project. Each descending level represents an increasingly detailed definition of the project work. The deliverable orientation of the hierarchy includes both internal and external deliverables.*

Work Plan – See Project Management Plan.

* As defined in *A Guide to the Project Management Body of Knowledge* (PMBOK) – Third Edition

PROJECT CLASSIFICATION TOOL

What kind of project is it?		Organizational or Asset Improvemer
What is the estimated project cost?		<= $300,000
What is the duration of the project?	Longer projects are more likely to drift off schedule and budget.	< 24 months
Is the project part of an Inter-Local Agreement (ILA) or outside funding?	Sponsor may have additional expectations, and legal agreements may be involved.	no
Was the project requested by an executive or a board member?	Sponsor may have additional expectations.	no
Does the project require cross-departmental support?	Extra coordination effort needed. Risk of schedule delay and/or rework.	no
How many SARA staff are on the project team?	Extra coordination effort needed. Risk of schedule delay and/or rework.	<= 5
Does the project involve a consultant and/or a contractor?	Legal agreement.	no
Does the project have any State or Federal reporting	Penalties may be imposed if in non-compliance.	no
Does the project require permits?	Penalties may be imposed if in non-compliance.	no
Does the project team have experience with the proposed means and methods?	Effort and needs may be underestimated.	yes
Does the project involve field work?	Additional safety concerns. Also weather may impact schedule and budget.	no
What impact would going over schedule have?		None
Project Classification		**I**

All Green	Level I
One to Three Yellow	Level II
Four or more Yellow and/or Any Orange	Level III

Organizational or Asset Improvement	1	1	2	3	4	5	6	7	8	9	10	11	12
Study	4												
Activity	7												
Engineering Design and/or Construction	10												

		Organizational or Asset Improvement			Study			Activity			Engineering Design and/or Construction		
		Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
What is the estimated project cost?		<= $300,000	$300,000 to $1,000,000	>$1,000,000	<= $300,000	$300,000 to $1,000,000	>$1,000,000	<= $300,000	$300,000 to $1,000,000	>$1,000,000	<= $800,000	$800,000 to $5,000,000	>$5,000,000
What is the duration of the project?	Longer projects are more likely to drift off schedule and budget.	< 24 months	24 to 60 months	> 60 months	< 24 months	24 to 60 months	> 60 months	< 24 months	24 to 60 months	> 60 months	< 24 months	24 to 60 months	> 60 months
Is the project part of an Inter-Local Agreement (ILA) or outside funding?	Sponsor may have additional expectations, and legal agreements may be involved.	no	yes		no	yes		no	yes		no	yes	
Was the project requested by an executive or a board member?	Sponsor may have additional expectations.	no	yes		no	yes		no	yes		no	yes	
Does the project require cross-departmental support?	Extra coordination effort needed. Risk of schedule delay and/or rework.	no	yes		no	yes		no	yes		no	yes	
How many SARA staff are on the project team?	Extra coordination effort needed. Risk of schedule delay and/or rework.	<= 5	> 5		<= 5	> 5		<= 5	> 5		<= 5	> 5	
Does the project involve a consultant and/or a contractor?	Legal agreement.	no	yes		no	yes		no	yes		no	yes	
Does the project have any State or Federal reporting requirements?	Penalties may be imposed if in non-compliance.	no	yes		no	yes		no	yes		no	yes	
Does the project require permits?	Penalties may be imposed if in non-compliance.	no	yes		no	yes		no	yes		no	yes	
Does the project team have experience with the proposed means and methods?	Effort and needs may be underestimated.	yes	minimal		yes	minimal		yes	minimal		yes	minimal	
Does the project involve field work?	Additional safety concerns. Also weather may impact schedule and budget.	no	yes		no	yes		no	yes		no	yes	
What impact would going over schedule have?		None	May require supplement from department budget	Could incur fine or cost beyond available funds	None	May require supplement from department budget	Could incur fine or cost beyond available funds	None	May require supplement from department budget	Could incur fine or cost beyond available funds	None	May require supplement from department budget	Could incur fine or cost beyond available funds

Additional Criteria

Design/Construction

Does the project involve survey?

Does the project require local, state, or federal permits?

experience with methods/software/equipment/this kind of project?

familiarity with relevant codes & regulations?

stakeholder timeline/budget realistic?

negative consequences for going over schedule/budget?

successful experience with contractor/consultant in the past?

field work, travel?