

Amendment # 1 to the San Antonio River Authority Clean Rivers Program FY 2022/2023 QAPP

Prepared by the San Antonio River Authority in Cooperation with the Texas Commission on Environmental Quality (TCEQ)

Effective: Immediately upon approval by all parties

Questions concerning this QAPP should be directed to:

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Quality Assurance Supervisor

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Justification

This document details changes made to the basin-wide Quality Assurance Project Plan to update Appendix B for fiscal year 2022 Clean Rivers Program Monitoring.

Detail of Changes

List each section in which a change is proposed and provide a description of the change(s) in the table below.

Section/Figure/Table	Page	Change	Justification
Section A1	2	<ul style="list-style-type: none"> Rebecca DuPont as CRP Work Leader has been replaced with Kyle Girten as Acting CRP Work Leader Rebecca DuPont as Acting CRP Project QA Specialist has been replaced with Luis Medina as CRP Project QA Specialist Replace Charles Lorea with Rebecca Reeves as CRP Project Manager 	Identify changes in TCEQ staff assignments and SARA Staff Assignments
A3	11	<ul style="list-style-type: none"> Replace Charles J. Lorea with Rebecca Reeves as Project Manager 	Identify changes in SARA Staff Assignments
A4	13	<ul style="list-style-type: none"> Rebecca DuPont as CRP Work Leader has been replaced with Kyle Girten as Acting CRP Work Leader Rebecca DuPont as Acting CRP Project QA Specialist has been replaced with Luis Medina as CRP Project QA Specialist Sarah Kirkland as CRP Data Manager has been replaced with Cathy Anderson as Acting CRP Data Manager Replace Charles Lorea with Rebecca Reeves as CRP 	Identify changes in TCEQ staff assignments and SARA Staff Assignments

Section/Figure/Table	Page	Change	Justification
		Project Manager and as Acting Watershed Monitoring Supervisor	
Figure A4.1	18	<ul style="list-style-type: none"> • Rebecca DuPont as CRP Work Leader has been replaced with Kyle Girten as Acting CRP Work Leader • Rebecca DuPont as Acting CRP Project QA Specialist has been replaced with Luis Medina as CRP Project QA Specialist • Sarah Kirkland as CRP Data Manager has been replaced with Cathy Anderson as Acting CRP Data Manager • Replace Charles Lorea with Rebecca Reeves as CRP Project Manager and as Acting Watershed Monitoring Supervisor 	Identify changes in TCEQ staff assignments and SARA Staff Assignments
Table B1.1	70	<ol style="list-style-type: none"> 1. Add River Rec comment to station 17859 2. Edit Assessment Unit for station 12802 – 1902_03 3. Edit Assessment Unit for station 14200 – 1903_05 4. Edit Assessment Unit for station 21126 – 1905A_01 5. Modify comment for station 18865 to include – ‘BS sample to be collected with RT events’ 6. Site 14211 Increase to three Benthic Events 7. Edit station 18407 – remove Chlorophyll/Pheophytin analysis 8. Edit station 20539 – reduce to three RT events and remove BS events. Sampling suspended at this site due 	Clarify information in the monitoring schedule

Section/Figure/Table	Page	Change	Justification
		to bridge construction. 9. Increase frequency of Field events at River Recreation Bacteria Stations to 52 to account for field parameters collected with weekly bacteria and flow.	
Appendix B	65	1. Add explanation of expected parameters for Recreation Monitoring sites 2. Add Conventional Analysis explanation of separated columns for BOD and Chlorophyll/Pheophytin	Clarify the field observations to be documented for Recreation Monitoring sites when only bacteria samples are collected. Clarify column separation as these parameters are not intended to be performed on all stations.

Distribution

QAPP Amendments and Revisions to Appendices will be distributed to all personnel on the distribution list maintained by the Planning Agency.

These changes will be incorporated into the QAPP document and TCEQ and the San Antonio River Authority will acknowledge and accept these changes by signing this amendment.

Bandera County River Authority and Groundwater District

David Mauk
General Manager

Date

Clint Carter
Field Operations Manager

Date

City of Boerne

Ryan Bass
Environmental Planner / Urban Forester

Date

DHL Laboratory

Electronically Approved 4/20/2022

John DuPont Date
General Manager

Electronically Approved 4/20/2022

Sherri Herschmann Date
Laboratory Quality Assurance Officer

Sub-tier participants (e.g., subcontractors, subparticipants, or other units of government) will sign the QAPP, indicating the organization's awareness of, and commitment to requirements contained in this quality assurance project plan and any amendments or added appendices of this plan. Signatures in section A1 will eliminate the need for adherence letters to be maintained. If adherence letters are preferred, the San Antonio River Authority will secure written documentation from each sub-tier project participant (e.g., subcontractors, subparticipants, or other units of government) stating the organization's awareness of and commitment to requirements contained in this quality assurance project plan and any amendments or added appendices of this plan. The San Antonio River Authority will maintain this documentation as part of the project's quality assurance records and will ensure the documentation is available for review.

A3 Distribution List

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The San Antonio River Authority will provide copies of this project plan and any amendments or appendices of this plan to each person on this list and to each sub-tier project participant, e.g., subcontractors, subparticipants, or other units of government. The San Antonio River Authority will document distribution of the plan and any amendments and appendices, maintain this documentation as part of the project's quality assurance records, and ensure the documentation is available for review.

A4 Project/Task Organization

Description of Responsibilities

TCEQ

Kyle Girtten

Acting CRP Work Leader

Responsible for Texas Commission on Environmental Quality (TCEQ) activities supporting the development and implementation of the Texas Clean Rivers Program (CRP). Responsible for verifying that the TCEQ Quality Management Plan (QMP) is followed by CRP staff. Supervises TCEQ CRP staff. Reviews and responds to any deficiencies, corrective actions, or findings related to the area of responsibility. Oversees the development of Quality Assurance (QA) guidance for the CRP. Reviews and approves all QA audits, corrective actions, reports, work plans, contracts, QAPPs, and TCEQ Quality Management Plan. Enforces corrective action, as required, where QA protocols are not met. Ensures CRP personnel are fully trained.

Dana Squires

CRP Lead Quality Assurance Specialist

Participates in the development, approval, implementation, and maintenance of written QA standards (e.g., Program Guidance, SOPs, QAPPs, QMP). Assists program and project manager in developing and implementing quality system. Serves on planning team for CRP special projects. Prepares and distributes annual audit plans. Conducts monitoring systems audits of Planning Agencies. Concurs with and monitors implementation of corrective actions. Conveys QA problems to appropriate management. Recommends that work be stopped in order to safeguard programmatic objectives, worker safety, public health, or environmental protection. Ensures maintenance of audit records for the CRP.

Jenna Wadman

CRP Project Manager

Responsible for the development, implementation, and maintenance of CRP contracts. Tracks, reviews, and approves deliverables. Participates in the development, approval, implementation, and maintenance of written QA standards (e.g., Program Guidance, SOPs, QAPPs, QMP). Coordinates the review and approval of CRP QAPPs. Ensures maintenance of QAPPs. Assists CRP Lead QA Specialist in conducting San Antonio River Authority audits. Verifies QAPPs are being followed by contractors and that projects are producing data of known quality. Coordinates project planning with the San Antonio River Authority Project Manager. Reviews and approves data and reports produced by contractors. Notifies QA Specialists of circumstances which may adversely affect the quality of data derived from the collection and analysis of samples. Develops, enforces, and monitors corrective action measures to ensure contractors meet deadlines and scheduled commitments.

Cathy Anderson

Team Leader, Data Management and Analysis (DM&A) Team

Participates in the development, approval, implementation, and maintenance of written QA standards (e.g., Program Guidance, SOPs, QAPPs, QMP). Ensures DM&A staff perform data management-related tasks.

Cathy Anderson**Acting CRP Data Manager, DM&A Team**

Responsible for coordination and tracking of CRP data sets from initial submittal through CRP Project Manager review and approval. Ensures that data are reported following instructions in the Data Management Reference Guide, July 2019 or most current version (DMRG). Runs automated data validation checks in the Surface Water Quality Management Information System (SWQMIS) and coordinates data verification and error correction with CRP Project Managers. Generates SWQMIS summary reports to assist CRP Project Managers' data review. Identifies data anomalies and inconsistencies. Provides training and guidance to CRP and Planning Agencies on technical data issues to ensure that data are submitted according to documented procedures. Reviews QAPPs for valid stream monitoring stations. Checks validity of parameter codes, submitting entity code(s), collecting entity code(s), and monitoring type code(s). Develops and maintains data management-related SOPs for CRP data management. Coordinates and processes data correction requests. Participates in the development, implementation, and maintenance of written QA standards (e.g., Program Guidance, SOPs, QAPPs, QMP).

Luis Medina**CRP Project Quality Assurance Specialist**

Serves as liaison between CRP management and TCEQ QA management. Participates in the development, approval, implementation, and maintenance of written QA standards (e.g., Program Guidance, SOPs, QAPPs, QMP). Serves on planning team for CRP special projects and reviews QAPPs in coordination with other CRP staff. Coordinates documentation and implementation of corrective action for the CRP.

SAN ANTONIO RIVER AUTHORITY**Rebecca Reeves****San Antonio River Authority Project Manager/ Acting Watershed Monitoring Supervisor**

Responsible for implementing and monitoring CRP requirements in contracts, QAPPs, and QAPP amendments and appendices. Coordinates basin planning activities and work of basin partners. Ensures monitoring systems audits are conducted to ensure QAPPs are followed by San Antonio River Authority participants and that projects are producing data of known quality. Ensures that subparticipants are qualified to perform contracted work. Ensures CRP project managers and/or QA Specialists are notified of deficiencies and corrective actions, and that issues are resolved.

Patricia M. Carvajal**San Antonio River Authority Quality Assurance Officer**

Responsible for coordinating the implementation of the QA program. Responsible for writing and maintaining the QAPP and monitoring its implementation. Responsible for maintaining records of QAPP distribution, including appendices and amendments. Responsible for maintaining written records of sub-tier commitment to requirements specified in this QAPP. Responsible for identifying, receiving, and maintaining project QA records. Responsible for coordinating with the TCEQ QAS to resolve QA-related issues. Notifies the San Antonio River Authority Project Manager of particular circumstances which may adversely affect the quality of data. Coordinates and monitors deficiencies

and corrective action. Coordinates and maintains records of data verification and validation. Coordinates the research and review of technical QA material and data related to water quality monitoring system design and analytical techniques. Conducts monitoring systems audits on project participants to determine compliance with project and program specifications, issues written reports, and follows through on findings. Ensures that field staff is properly trained and that training records are maintained.

Michelle M. Garza

San Antonio River Authority Data Manager

Responsible for ensuring that field data are properly reviewed and verified. Responsible for the transfer of basin quality-assured water quality data to the TCEQ in a format compatible with SWQMIS. Maintains quality-assured data on San Antonio River Authority internet sites.

SARA-REL

Zachary Jendrusch

Laboratory Supervisor

Responsible for overall performance, administration, and reporting of analyses performed by SARA's Laboratory. Responsible for supervision of laboratory personnel involved in generating analytical data for the project. Ensures that laboratory personnel have adequate training and a thorough knowledge of this QAPP and related SOPs. Responsible for oversight of all laboratory operations ensuring that all QA/QC requirements are met, documentation is complete and adequately maintained, and results are reported accurately. Additionally, the lab director ensures that all laboratory data is reviewed and verified for integrity and continuity, reasonableness and conformance to project requirements, and then validated against the data quality objectives listed in Appendix A of this QAPP.

Jeanette Hernandez

Quality Assurance Officer

Maintains operating procedures that are in compliance with this QAPP, amendments and appendices. Responsible for the overall quality control and quality assurance of analyses performed by SARA's Laboratory. Ensures that internal assessments are performed in accordance with laboratory accreditation requirements.

Bandera County River Authority & Groundwater District

David Mauk

General Manager

Coordinates basin planning activities with the San Antonio River Authority. Ensures SARA CRP project manager and/or QA Specialists are notified of deficiencies and corrective actions, and that issues are resolved. Ensures that field staff is properly trained and that training records are maintained.

Clint Carter

Field Operations Manager

Responsible for conducting routine monitoring in support of this QAPP. Responsible for implementing and monitoring CRP requirements in, QAPPs and QAPP amendments and appendices. Responsible for coordinating with the SARA QA staff to resolve QA-related issues. Notifies the SARA QA Staff of particular circumstances which may adversely affect the quality of data. Coordinates and monitors deficiencies and corrective action. Coordinates the research and review of technical QA material and data related to water quality monitoring system design and analytical techniques.

DHL Laboratory

John DuPont

General Manager

Responsible for overall performance, administration, and reporting of analyses performed by DHL's Laboratory. Responsible for supervision of laboratory personnel involved in generating analytical data for the project. Ensures that laboratory personnel have adequate training and a thorough knowledge of this QAPP and related SOPs. Responsible for oversight of all laboratory operations ensuring that all QA/QC requirements are met, documentation is complete and adequately maintained, and results are reported accurately. Additionally, the lab director ensures that all laboratory data is reviewed and verified for integrity and continuity, reasonableness and conformance to project requirements, and then validated against the data quality objectives listed in Appendix A of this QAPP.

Sherri Herschmann

Quality Assurance Officer

Maintains operating procedures that are in compliance with this QAPP, amendments and appendices. Responsible for the overall quality control and quality assurance of analyses performed by DHL's Laboratory. Ensures that internal assessments are performed in accordance with laboratory accreditation requirements.

GBRA Laboratory

Kylie Gudgell

Laboratory Director

Responsible for overall performance, administration, and reporting of analyses performed by GBRA's Laboratory. Responsible for supervision of laboratory personnel involved in generating analytical data for the project. Ensures that laboratory personnel have adequate training and a thorough knowledge of this QAPP and related SOPs. Responsible for oversight of all laboratory operations ensuring that all QA/QC requirements are met, documentation is complete and adequately maintained, and results are reported accurately. Additionally, the lab director ensures that all laboratory data is reviewed and verified for integrity and continuity, reasonableness and conformance to project requirements, and then validated against the data quality objectives listed in Appendix A of this QAPP.

Michelle Robertson

Quality Assurance Officer

Maintains operating procedures that are in compliance with this QAPP, amendments and appendices. Responsible for the overall quality control and quality assurance of analyses performed by GBRA's Laboratory. Ensures that internal assessments are performed in accordance with laboratory accreditation requirements.

City of Boerne

Ryan Bass

Environmental Planner/Urban Forester

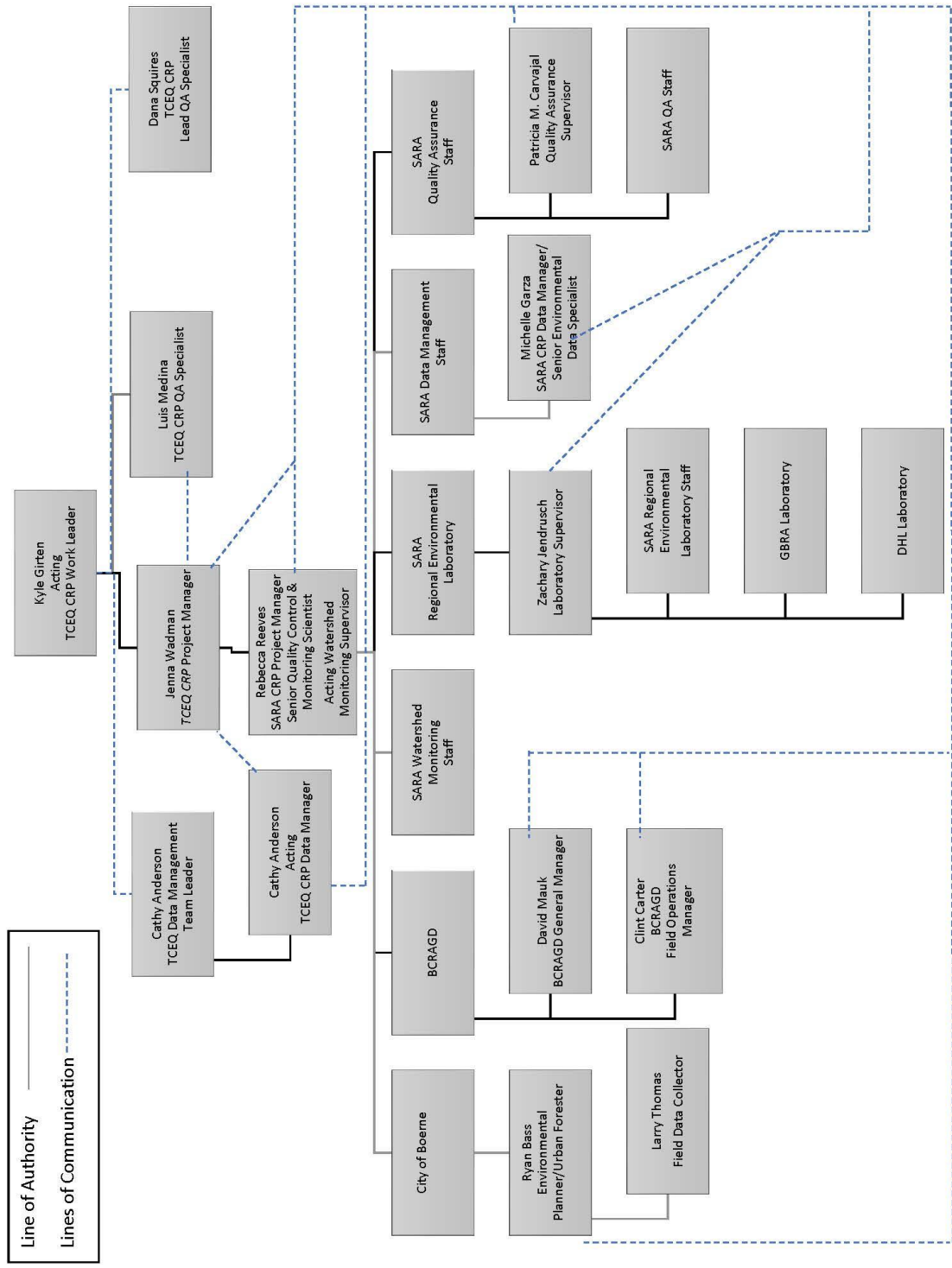
Coordinates basin planning activities with the San Antonio River Authority. Ensures SARA CRP project manager and/or QA Specialists are notified of deficiencies and corrective actions, and that issues are resolved. Responsible for implementing and monitoring CRP requirements in, QAPPs and QAPP amendments and appendices. Responsible for conducting monitoring in support of this QAPP. Notifies the SARA QA Staff of particular circumstances which may adversely affect the quality of data. Coordinates and monitors deficiencies and corrective action. Coordinates the research and review of technical QA material and data related to water quality monitoring system design and analytical techniques.

Larry Thomas

Field Data Collector

Responsible for conducting routine monitoring in support of this QAPP. Responsible for implementing and monitoring CRP requirements in QAPPs and QAPP amendments and appendices. Responsible for ensuring that sample documentation is complete, sample containers are labeled and sites identified. Ensures sample collection is consistent with SOPs and QAPP. Ensures all field documentation and instrument calibration data is complete.

Figure A4.1 Organizational Chart – Lines of Communication



Appendix B: Task 3 Work Plan & Sampling Process Design and Monitoring Schedule (Plan)

Sample Design Rationale FY 2022

The sample design is based on the legislative intent of CRP. Under the legislation, the Basin Planning Agencies have been tasked with providing data to characterize water quality conditions in support of the Texas Water Quality Integrated Report, and to identify significant long-term water quality trends. Based on Steering Committee input, achievable water quality objectives and priorities and the identification of water quality issues are used to develop work plans which are in accord with available resources. As part of the Steering Committee process, the San Antonio River Authority coordinates closely with the TCEQ and other participants to ensure a comprehensive water monitoring strategy within the watershed.

Description of Monitoring

1. River Recreation Bacteria Stations (Rec-BacT) – Bacteria samples are collected weekly along with flow and field observations: Flow Severity, Field Water Color, Field Water Odor, Present Weather and Days since last precipitation. All field parameters and field observations are collected with conventional samples which are performed 6 times per year.
2. BOD and Chlorophyll-a/Pheophytin are conventional analysis but are listed as separate columns as these parameters are not intended to be performed on all stations.

Table B1.1 Sample Design and Schedule, FY 2022

Site Description	Station ID	Waterbody ID	Assessment Unit	Region	SE	CE	MT	24 hr DO	AqHab	Benthics	Nekton	Metal Water	Chlorophyll-a Pheophytin	BOD	Conv	Bacteria	Flow	Field	Comment
Segment 1901 Lower San Antonio River Map																			
SAN ANTONIO RIVER AT US 77 ON REFUGIO-VICTORIA COUNTY LINE Map (08188570)	12789	1901	1901_06	14	SA	SA	RT								6	6	6	6	
SAN ANTONIO RIVER BRIDGE ON US 77-A AND 183 SOUTHEAST OF GOLIAD Map (08188500)	<u>12791</u>	1901	1901_02	14	SA	SA	RT						6		6	52	52	52	River Recreation Bacteria Station
SAN ANTONIO RIVER AT SOUTHERN PACIFIC RR BRIDGE IN GOLIAD Map	12792	1901	1901_02	14	SA	SA	BS	3	3		3						3	3	Biologicals collected approximately 150 M upstream of 12792
SAN ANTONIO RIVER AT SH 72 NEAR RUNGE Map (08188060)	12794	1901	1901_04	13	SA	SA	RT						6	6	6	52	52	52	River Recreation Bacteria Station
12795 SAN ANTONIO RIVER AT SH 80 SW OF HELENA Map	12795	1901	1901_05	13	SA	SA	RT						6		6	6		6	No Flow Possible Safety Issue
SAN ANTONIO RIVER AT CONQUISTA CROSSING 2.4 KM DOWNSTREAM OF FM 791 SW OF FALLS CITY Map	16580	1901	1901_05	13	SA	SA	BS	3	3		3								BS samples will be collected along with RT events
SAN ANTONIO RIVER AT CONQUISTA CROSSING 2.4 KM DOWNSTREAM OF FM 791 SW OF FALLS CITY Map	<u>16580</u>	1901	1901_05	13	SA	SA	RT						6	6	6	6	6	6	Flow will be collected from USGS gage station 08183500, San Antonio River nr Falls City, TX
SAN ANTONIO RIVER AT NORTH RIVERDALE RD 15 KM WEST OF GOLIAD TEXAS Map	17859	1901	1901_03	14	SA	SA	RT					3	6		6	52		52	Flow severity and estimated flow will be recorded. No instantaneous flow will be taken. Flow estimate recorded from USGS 08188500. River Recreation Bacteria Station

Site Description	Station ID	Waterbody ID	Assessment Unit	Region	SE	CE	MT	24 hr DO	AqHab	Benthics	Nekton	Metal Water	Chlorophyll-a Pheophytin	BOD	Conv	Bacteria	Flow	Field	Comment
SAN ANTONIO RIVER IMMEDIATELY UPSTREAM OF US 181 0.5 KM SOUTHEAST OF FALLS CITY TEXAS Map	17862	1901	1901_05	13	SA	SA	RT					3	6		6	6		6	No Flow Possible, Safety issue
ESCONDIDO CREEK AT KARNES CR 331 Map	18402	1901A	1901A_01	13	SA	SA	RT						6		6	6	6	6	
CABEZA CREEK AT FM 2043 1.6 KM UPSTREAM OF THE SAN ANTONIO RIVER CONFLUENCE 10.0 KM WEST OF GOLIAD TX Map	<u>16992</u>	1901B	1901B_01	14	SA	SA	RT									3	3	3	
ECLETO CREEK AT FM 81 424 METERS EAST AND 103 METERS NORTH TO THE INTERSECTION OF KARNES CR 334 AND FM 81 Map (08186500)	20539	1901F	1901F_01	13	SA	SA	BS	2											BS event and flow collected along with RT event. Sampling Suspended at this site due to bridge construction
ECLETO CREEK AT FM 81 424 METERS EAST AND 103 METERS NORTH TO THE INTERSECTION OF KARNES CR 334 AND FM 81 Map (08186500)	20539	1901F	1901F_01	13	SA	SA	RT						3		3	3	3	3	Sampling suspended at this site due to bridge construction. No further sampling will be conducted.
Segment 1902 Lower Cibolo Creek Map																			
SANTA CLARA CREEK ON CR 315 SANTA CLARA RD NORTHWEST OF NEW BERLIN 2.19 KM 1.34 MI UPSTREAM OF THE CONFLUENCE WITH CIBOLO CREEK Map	12784	1902	NA	13	SA	SA	RT						6		6	6	6	6	
CIBOLO CREEK AT FM 81 EAST OF PANNA MARIA Map	12797	1902	1902_01	13	SA	SA	RT						6		6	6	6	6	
CIBOLO CREEK AT FM 541 WEST OF KOSCIUSKO	12802	1902	1902_05 1902_03	13	SA	SA	BS	2	2		2						2	2	

Site Description	Station ID	Waterbody ID	Assessment Unit	Region	SE	CE	MT	24 hr DO	AqHab	Benthics	Nekton	Metal Water	Chlorophyll-a Pheophytin	BOD	Conv	Bacteria	Flow	Field	Comment
CIBOLO CREEK AT FM 539 Map (08188060)	12805	1902	1902_04	13	SA	SA	RT						6		6	6	6	6	
CIBOLO CREEK AT SCULL CROSSING Map	14197	1902	1902_05	13	SA	SA	BS	2	2		2								BS event and flow collected along with RT event.
CIBOLO CREEK AT SCULL CROSSING Map	14197	1902	1902_05	13	SA	SA	RT						6		6	6	6	6	
CIBOLO CREEK AT CR389 NEAR CESTOWHOWA TEXAS Map	14211	1902	1902_02	13	SA	SA	BS			3									
CIBOLO CREEK AT CR389 NEAR CESTOWHOWA TEXAS Map	14211	1902	1902_02	13	SA	SA	RT						6	6	6	52	52	52	River Recreation Bacteria Station
MARTINEZ CREEK ON NORTH GABLE ROAD SOUTH OF ZUEHL Map	12741	1902A	1902A_01	13	SA	SA	BS	2											BS event and flow collected along with RT event.
MARTINEZ CREEK ON NORTH GABLE ROAD SOUTH OF ZUEHL Map (08185100)	12741	1902A	1902A_01	13	SA	SA	RT								6	6	6	6	
SALATRILLO CREEK AT AUTUMN RUN Map	14202	1902B	1902B_01	13	SA	SA	RT						6		6	6	6	6	
SAN ANTONIO RIVER AUTHORITY'S SALATRILLO WWTP 249 METERS DWSTRN FROM SCHAEFER RD Map	14923	1902B	1902B_01	13	SA	SA	RT								6	6	6	6	
CLIFTON BRANCH AT OLD FLORESVILLE ROAD/WILSON COUNTY ROAD 401 2.7 KILOMETERS WEST OF STOCKDALE Map	20776	1902C	1902C_01	13	SA	SA	RT								6	6	6	6	

Site Description	Station ID	Waterbody ID	Assessment Unit	Region	SE	CE	MT	24 hr DO	AqHab	Benthics	Nekton	Metal Water	Chlorophyll-a Pheophytin	BOD	Conv	Bacteria	Flow	Field	Comment
Segment 1903 Medina River Below Medina Diversion Lake Map																			
MEDINA RIVER AT FM 1937 NEAR LOSOYA Map	12811	1903	1903_01	13	SA	SA	RT						6		6	6	6	6	
Medina River at Applewhite Road approximately 1.16 kilometers north of Neal Road at the southern boundary of the Toyota property CAMS ID 0769 USGS Site ID 08180850 Map	<u>12814</u>	1903	1903_03	13	SA	SA	RT						6		6	6	6	6	
MEDINA RIVER AT CR 2615 APPROX .5 MI DOWNSTREAM OF DIVERSION DAM NEAR RIO MEDINA Map (08180500)	12824	1903	1903_05	13	SA	SA	RT						6		6	6	6	6	
MEDINA RIVER AT CR 484 Map	<u>14200</u>	1903	1903_04 1903_05	13	SA	SA	BS	2	2		2								BS samples will be collected along with RT events
MEDINA RIVER AT CR 484 Map	14200	1903	1903_04 1903_05	13	SA	SA	RT						6		6	6	6	6	
CITY OF SAN ANTONIO DOS RIOS WWTP DISCHARGE INTO MEDINA RIVER PERMIT WQ0010137-033 Map	16584	1903	1903_01	13	SA	SA	RT								6	6	6	6	
Medina River approximately 450 m downstream of Pleasanton Road	22225	1903	1903_02	13	SA	SA	RT					3	6		6	6	6	6	
Segment 1904 Medina Lake Map																			
MEDINA LAKE AT MEDINA LAKE DAM WEST OF SAN ANTONIO Map	12825	1904	1904_01	13	SA	BA	RT						4		4	4		4	
MEDINA LAKE NEAR RED COVE Map	12826	1904	1904_01	13	SA	BA	RT								4	4		4	
MEDINA LAKE AT MORMON BLUFF Map	12827	1904	1904_03	13	SA	BA	RT								4	4		4	

Site Description	Station ID	Waterbody ID	Assessment Unit	Region	SE	CE	MT	24 hr DO	AqHab	Benthics	Nekton	Metal Water	Chlorophyll-a Pheophytin	BOD	Conv	Bacteria	Flow	Field	Comment
MEDINA LAKE BETWEEN CYPRESS AND SPETTEL COVES Map	12828	1904	1904_03	13	SA	BA	RT								4	4		4	
MEDINA LAKE MID LAKE NEAR HEADWATER Map	12829	1904	1904_02	13	SA	BA	RT						4		4	4		4	
Segment 1905 Medina River Above Medina Lake Map																			
MEDINA RIVER AT OLD ENGLISH CROSSING ABOVE BANDERA FALLS Map	12830	1905	1905_01	13	SA	BA	RT								4	4	4	4	
MEDINA RIVER AT FM 470 WEST OF BANDERA Map	12832	1905	1905_01	13	SA	BA	RT								4	4	4	4	
MEDINA RIVER AT SH 173 1.9 MI UPSTREAM FROM BANDERA CREEK 5.6 MI DOWNSTREAM FROM INDIAN CREEK Map (08178880)	<u>13638</u>	1905	1905_01	13	SA	BA	RT								4	4	4	4	
WEST PRONG MEDINA RIVER 11M UPSTREAM FROM COALKILN RD 3 KM WEST OF MEDINA AND IMMEDIATELY SOUTH OF SH337 Map	15736	1905	NA	13	SA	BA	RT								4	4	4	4	
MEDINA RIVER AT PATTERSON AVENUE IN MOFFETT PARK MEDINA TEXAS Map	21125	1905	1905_02	13	SA	BA	RT								4	4	4	4	
MEDINA RIVER AT NORTH SIDE OF MAYAN RANCH, WEST OF CITY OF BANDERA AND 2.16 KILOMETERS UPSTREAM OF SCHMIDTKE ROAD CROSSING Map	21631	1905	1905_01	13	SA	BA	RT						4		4	4	4	4	

Site Description	Station ID	Waterbody ID	Assessment Unit	Region	SE	CE	MT	24 hr DO	AqHab	Benthics	Nekton	Metal Water	Chlorophyll-a Pheophytin	BOD	Conv	Bacteria	Flow	Field	Comment
MEDINA RIVER AT NORTH SIDE OF MAYAN RANCH, WEST OF CITY OF BANDERA AND 2.16 KILOMETERS UPSTREAM OF SCHMIDTKE ROAD CROSSING Map	21631	1905	1905_01	13	SA	SA	BS	2	2		2								BS samples will be collected along with RT events
NORTH PRONG MEDINA RIVER AKA WALLACE CREEK IMMEDIATELY UPSTREAM OF SH 16 Map	18447	1905A	1905A_01	13	SA	BA	RT						4		4	4	4	4	
NORTH PRONG MEDINA RIVER AT FM 2107 APPROX 80 METERS NORTHEAST OF THE INTERSECTION OF BREWINGTON CREEK ROAD AND FM 2107 NORTHWEST OF MEDINA TEXAS Map	21126	1905A	1905_01 1905A_01	13	SA	BA	RT								4	4	4	4	
Segment 1906 Lower Leon Creek Map																			
LEON CREEK AT APPLEWHITE RD	12835	1906	1906_02	13	SA	SA	RT					3			6	6	6	6	
LEON CREEK UPSTREAM FROM LEON CREEK WWTP AND APPROX 980 METERS UPSTREAM OF THE CONFLUENCE WITH COMANCHE CREEK Map	14198	1906	1906_01	13	SA	SA	BS	2	2		2								BS event and flow collected along with RT event.
LEON CREEK UPSTREAM FROM LEON CREEK WWTP AND APPROX 980 METERS UPSTREAM OF THE CONFLUENCE WITH COMANCHE CREEK Map	<u>14198</u>	1906	1906_01	13	SA	SA	RT						6		6	6	6	6	
Segment 1907 Upper Leon Creek Map																			
LEON CREEK IN RAYMOND RUSSELL PARK AT LOW WATER BRIDGE Map	12851	1907	1907_01	13	SA	SA	RT						6		6	6	6	6	

Site Description	Station ID	Waterbody ID	Assessment Unit	Region	SE	CE	MT	24 hr DO	AqHab	Benthics	Nekton	Metal Water	Chlorophyll-a Pheophytin	BOD	Conv	Bacteria	Flow	Field	Comment
Segment 1908 Upper Cibolo Creek Map																			
CIBOLO CREEK @ RIVER ROAD	20823	1908	1908_01	13	SA	BC	RT								4	4		4	No Flow Possible
Segment 1909 Medina Diversion Lake Map																			
MEDINA RIVER DOWNSTREAM MEDINA RESERVOIR IN MICO TX AT LOW WATER CROSSING Map	14205	1909	1909_01	13	SA	BA	RT								4	4	4	4	
MEDINA DIVERSION LAKE NEAR WEST BANK 40 M UPSTREAM OF DAM AND APPROXIMATELY 1 MI UPSTREAM OF MEDINA RIVER CROSSING AT MEDINA CR 2615	18407	1909	1909_01	13	SA	BA	RT								4	4		4	No Flow Possible
Segment 1910 Salado Creek Map																			
SALADO CREEK AT SOUTHTON ROAD IN SAN ANTONIO Map	12861	1910	1910_01	13	SA	SA	BS	2	2		2								BS samples will be collected along with RT events
SALADO CREEK AT SOUTHTON ROAD IN SAN ANTONIO Map	<u>12861</u>	1910	1910_01	13	SA	SA	RT						6		6	6	6	6	
SALADO CREEK AT GEMBLER RD Map	12870	1910	1910_02	13	SA	SA	BS	1	1	1	1								BS samples will be collected along with RT events
SALADO CREEK AT GEMBLER RD Map	12870	1910	1910_02	13	SA	SA	RT						6		6	6	6	6	
SALADO CREEK AT RITTIMAN ROAD IN SAN ANTONIO Map	12874	1910	1910_03	13	SA	SA	BS	2											BS samples will be collected along with RT events
SALADO CREEK AT RITTIMAN ROAD IN SAN ANTONIO Map	12874	1910	1910_03	13	SA	SA	RT						6		6	6	6	6	

Site Description	Station ID	Waterbody ID	Assessment Unit	Region	SE	CE	MT	24 hr DO	AqHab	Benthics	Nekton	Metal Water	Chlorophyll-a Pheophytin	BOD	Conv	Bacteria	Flow	Field	Comment
SALADO CREEK AT EISENHAUER ROAD IN SAN ANTONIO Map	12875	1910	1910_04	13	SA	SA	BS	2											BS samples will be collected along with RT events
SALADO CREEK AT EISENHAUER ROAD IN SAN ANTONIO Map	12875	1910	1910_04	13	SA	SA	RT						6		6	6	6	6	
SALADO CREEK AT COMANCHE PARK Map	14929	1910	1910_02	13	SA	SA	BS	2	2	2	2								BS samples will be collected along with RT events
SALADO CREEK AT COMANCHE PARK Map	<u>14929</u>	1910	1910_02	13	SA	SA	RT					3	6		6	6	6	6	
WALZEM CREEK AT HOLBROOK ROAD Map	12698	1910A	1910A_01	13	SA	SA	RT						6		6	6	6	6	
ROSILLO CREEK AT W.W. WHITE ROAD IN SAN ANTONIO	12690	1910B	1910B_01	13	SA	SA	RT								6	6	6	6	
MENGER CREEK AT COLISEUM RD	12693	1910	1910D_01	13	SA	SA	RT								6	6	6	6	
Segment 1911 Upper San Antonio River Map																			
SAN ANTONIO RIVER AT FM 541 NEAR POTH	12880	1911	1911_02	13	SA	SA	RT					3	6		6	6	6	6	For high flow events where instantaneous flow is not possible, flow information will be collected from USGS gage 08183500 SAR at Fall City.
SAN ANTONIO RIVER AT SH 97 NEAR FLORESVILLE (08183200)	<u>12881</u>	1911	1911_03	13	SA	SA	RT						6	6	6	52	52	52	River Recreation Bacteria Station
SAN ANTONIO RIVER AT DIETZFIELD ROAD CR 117 NORTHWEST OF FLORESVILLE	<u>12883</u>	1911	1911_04	13	SA	SA	RT								6	6	6	6	Flow reported from USGS 8183200 SAR at Floresville

Site Description	Station ID	Waterbody ID	Assessment Unit	Region	SE	CE	MT	24 hr DO	AqHab	Benthics	Nekton	Metal Water	Chlorophyll-a Pheophytin	BOD	Conv	Bacteria	Flow	Field	Comment
SAN ANTONIO RIVER MID CHANNEL 30 M DOWNSTREAM OF ST LOOP 1604 WEST OF ELMENDORF RT/CONTINUOUS MONITORING SITE CAMS 715 Map (08181800)	12886	1911	1911_05	13	SA	SA	RT						6	6	6	6	6	6	
SAN ANTONIO RIVER AT IH 410 LOW WATER CROSSING CAMINO COAHUILATECHAN 0.25 KM BELOW THE BRIDGE IN SAN ANTONIO (08178565)	12897	1911	1911_07	13	SA	SA	RT						6		6	52	52	52	River Recreation Bacteria Station
SAN ANTONIO RIVER AT LOW WATER CROSSING FOR PADRE RD NEAR END OF ASHLEY RD Map	12899	1911	1911_08	13	SA	SA	BS	2	2	2	2								BS samples will be collected along with RT events
SAN ANTONIO RIVER AT LOW WATER CROSSING FOR PADRE RD NEAR END OF ASHLEY RD Map	12899	1911	1911_08	13	SA	SA	RT						6		6	6	6	6	
SAN ANTONIO RIVER AT ALAMO ST IN SAN ANTONIO Map (08178000)	12904	1911	1911_09	13	SA	SA	RT						6		6	6	6	6	
SAN ANTONIO RIVER AT WOODLAWN AVE IN SAN ANTONIO Map	12908	1911	1911_09	13	SA	SA	BS	1	1		1								BS samples will be collected along with RT events
SAN ANTONIO RIVER AT WOODLAWN AVE IN SAN ANTONIO Map	12908	1911	1911_09	13	SA	SA	RT						6		6	6	6	6	
SAN ANTONIO RIVER AT MULBERRY ST IN SAN ANTONIO Map	12909	1911	1911_09	13	SA	SA	BS	1	1		1								BS samples will be collected along with RT events
SAN ANTONIO RIVER AT MULBERRY ST IN SAN ANTONIO Map	12909	1911	1911_09	13	SA	SA	RT								6	6	6	6	
SAN ANTONIO RIVER AT WELL NO. 2 AT JOSKES PAVILLION Map	12911	1911	1911_09	13	SA	SA	RT						6		6	6	6	6	

Site Description	Station ID	Waterbody ID	Assessment Unit	Region	SE	CE	MT	24 hr DO	AqHab	Benthics	Nekton	Metal Water	Chlorophyll-a Pheophytin	BOD	Conv	Bacteria	Flow	Field	Comment
SAN ANTONIO RIVER AT W. MITCHELL STREET IN DOWNTOWN SAN ANTONIO Map (08178050)	<u>14256</u>	1911	1911_09	13	SA	SA	RT					3	6		6	52	52	52	River Recreation Bacteria Station
SAN ANTONIO ZOO OUTFALL NO 1 DISCHARGE CHANNEL 27 M DOWNSTREAM OF DISCHARGE CULVERT AT SOUTHEAST CORNER OF ZOO OUTSIDE ZOO PROPERTY Map	15722	1911	1911_09	13	SA	SA	RT									6	6	6	
SAN ANTONIO RIVER APPROX 835 METERS UPSTREAM OF THE MEDINA RIVER CONFLUENCE Map	16731	1911	1911_06	13	SA	SA	BS	4	4		4								BS samples will be collected along with RT events
SAN ANTONIO RIVER APPROX 835 METERS UPSTREAM OF THE MEDINA RIVER CONFLUENCE Map	<u>16731</u>	1911	1911_06	13	SA	SA	RT						6		6	6	6	6	
SAN ANTONIO RIVER AT MISSION ROAD IMMEDIATELY UPSTREAM OF RIVERSIDE MUNICIPAL GOLF COURSE 1.65 KM DOWNSTREAM OF SAN ANTONIO RIVER/SAN PEDRO CREEK CONFLUENCE IN SAN ANTONIO TX Map	17066	1911	1911_08	13	SA	SA	RT					3	6		6	52	52	52	River Recreation Bacteria Station
SAN ANTONIO RIVER 57 METERS UPSTREAM OF LEXINGTON STREET BRIDGE AND APPROXIMATELY 1.3 KILOMETERS DOWNSTREAM OF IH 35 Map	18865	1911	1911_09	13	SA	SA	BS	1											No Flow Possible - Barge Traffic BS samples will be collected along with RT events

Site Description	Station ID	Waterbody ID	Assessment Unit	Region	SE	CE	MT	24 hr DO	AqHab	Benthics	Nekton	Metal Water	Chlorophyll-a Pheophytin	BOD	Conv	Bacteria	Flow	Field	Comment
SAN ANTONIO RIVER 57 METERS UPSTREAM OF LEXINGTON STREET BRIDGE AND APPROXIMATELY 1.3 KILOMETERS DOWNSTREAM OF IH 35 Map	18865	1911	1911_09	13	SA	SA	RT						6		6	6		6	No Flow Possible - Barge Traffic
SAN ANTONIO RIVER LOOP 111 METERS DOWNSTREAM OF MARKET STREET AT LITTLE RHEIN STEAKHOUSE IN SAN ANTONIO Map	20122	1911	1911_09	13	SA	SA	RT						6		6	6		6	No Flow Possible - Barge Traffic
SAN ANTONIO RIVER AT VFW BOULEVARD Map	21547	1911	1911_08	13	SA	SA	BS	2	2	2	2								BS samples will be collected along with RT events
SAN ANTONIO RIVER AT VFW BOULEVARD Map	21547	1911	1911_08	13	SA	SA	RT					3	6		6	6	6	6	
APACHE CREEK AT BRAZOS STREET APPROXIMATELY 0.7 KM UPSTREAM OF THE CONFLUENCE WITH ALAZAN CREEK Map	18735	1911B	1911B_01	13	SA	SA	RT						6		6	6	6	6	
ALAZAN CREEK AT TAMPICO ST IN SAN ANTONIO Map	12715	1911C	1911C_01	13	SA	SA	RT						6		6	6	6	6	
SAN PEDRO CREEK AT FURNISH ST IN SAN ANTONIO PERMIT 0000968 UNION STOCK YARDS Map (08178500)	12707	1911D	1911D_01	13	SA	SA	RT								6	6	6	6	
MARTINEZ CREEK AT RUIZ STREET IN SAN ANTONIO Map	12751	1911I	1911I_01	13	SA	SA	RT								6	6	6	6	
<u>Segment 1912 Medio Creek Map</u>																			
MEDIO CREEK AT HIDDEN VALLEY CAMPGROUND Map	<u>12916</u>	1912	1912_01	13	SA	SA	BS	2	2		2								BS event and flow collected along with RT event.

Site Description	Station ID	Waterbody ID	Assessment Unit	Region	SE	CE	MT	24 hr DO	AqHab	Benthics	Nekton	Metal Water	Chlorophyll-a Pheophytin	BOD	Conv	Bacteria	Flow	Field	Comment	
MEDIO CREEK AT HIDDEN VALLEY CAMPGROUND Map	<u>12916</u>	1912	1912_01	13	SA	SA	RT						6		6	6	6	6		
MEDIO CREEK AT US 90 WEST Map	12735	1912A	1912A_01	13	SA	SA	RT						6		6	6	6	6		
Segment 1913 Mid Cibolo Creek Map																				
CIBOLO CREEK 40 METERS DOWNSTREAM FROM IH 10/US 90 ON EAST BANK Map	<u>12919</u>	1913	1913_01	13	SA	SA	RT						6		6	6	6	6		
CIBOLO CREEK AT SCHAEFFER RD 3 MI EAST OF RANDOLPH AIR FORCE BASE Map	12924	1913	1913_02	13	SA	SA	RT					3	6		6	6	6	6		
CIBOLO CREEK UPSTREAM CIBOLO CREEK MUNICIPAL AUTHORITY'S WWTP PERMIT 0011269-001 OFF RIVER ROAD Map	14212	1913	1913_03	13	SA	SA	RT						6		6	6	6	6		