Texas State Soil and Water Conservation Board
CWA §319(h) Agricultural/Silvicultural Nonpoint Source Grant Program
FY 2006 Project Workplan (06-15)

NONPOINT SOURCE SUMMARY PAGE for the CWA §319(h) Agricultural/Silvicultural Nonpoint Source Grant Program						
Title of Project:	Surface Water Quality Monitoring to Support Development and Implementation of Bacteria TMDLs in the Copano Bay Watershed [Short Title: SWQM for Copano Bay TMDL]					
Project Goals/Objectives:	Provide quality assured surface water quality monitoring data to support development of bacteria TMDLs for Copano Bay and Mission and Aransas Rivers in Aransas, Bee, Goliad, Karnes, Refugio, and San Patricio Counties.					
Project Tasks:	1) Project Administration and Coordination 2) Routine Ambient Surface Water Quality Monitoring 3) Targeted Watershed Surface Water Quality Monitoring 4) Effluent Surface Water Quality Monitoring 5) Quality Assurance 6) Data Management and Final Report					
Measures of Success:	Data of known and acceptable quality are generated for surface water quality monitoring (routine ambient, targeted watershed, and effluent) of the Copano Bay (Segment 2472) watershed, including Segments 2001 and 2002 (Mission River Tidal and Non-tidal) and Segments 2003 and 2004 (Aransas River Tidal and Non-tidal) for field, conventional, flow (non-tidal river segments), and bacteria parameters.					
Project Type:	Statewide ( ); Watershed Implementation/Education ( ); Watershed Planning/Assessment (X); Watershed Protection ( )					
Status of Water Bodies: 2004 Water Quality Inventory and 303(d) List	Segment ID: 2472	Parameter: bacteria (oyster waters)	Category: 5a			
	Segment ID: 2001	Parameter: bacteria (contact recreation)	Category: 5c			
	Segment ID: 2002		Category: 2			
	Segment ID: 2003	Parameter: bacteria (contact recreation)	Category: 5c			
	Segment ID: 2004		Category: 2			
Project Location:	Copano Bay (Segment 2472) Watershed (including Mission and Aransas Rivers) in Aransas, Bee, Goliad, Karnes, Refugio, and San Patricio Counties					
Key Project Activities:	Hire Staff (X); Monitoring (X); Regulatory Assistance ( ); Technical Assistance ( ); Education ( ); Implementation ( ); Demonstration ( ); Other ( )					
NPS Management Program Elements:	• Element One (STG 1A; STG 1B; STG 1C; STG 1D; STG 1E) • Element Two • Element Five					
Project Costs:	Federal:	$214,388	Non-Federal Match:	$162,945	Total:	$377,333
Project Management:	Nueces River Authority					
Project Period:	December 1, 2006 – November 30, 2009					

Part I – Applicant Information

Applicant							
Project Lead	Rocky Freund						
Title	Deputy Executive Director						
Organization	Nueces River Authority						
E-mail Address	rfreund@nueces-ra.org						
Street Address	6300 Ocean Drive, Unit 5865						
City	Corpus Christi	County	Nueces	State	TX	Zip Code	78412
Telephone	361-825-3193			Fax	361-825-3195		

Project Partners	
Names	Roles & Responsibilities
Nueces River Authority (NRA)	Perform and supervise all work described in tasks. Provide non-federal match.
Texas Commission on Environmental Quality (TCEQ)	Provide non-federal match through Clean Rivers Program and Surface Water Quality Monitoring Program funds. Provide coordination of TMDL activities with TSSWCB.
Texas State Soil and Water Conservation Board (TSSWCB)	Provide state oversight and management of all project activities, ensure coordination of activities with TCEQ, and provide federal funding.
University of Texas at Austin – Center for Research in Water Resources (CRWR)	Provide non-federal match through student support during sampling events.
Texas A&M University – Corpus Christi (TAMUCC)	Provide non-federal match through student support during sampling events.

Part II – Project Information

Project Type							
Surface Water	X	Groundwater					
Does the project implement recommendations made in a completed Watershed Protection Plan or approved TMDL Report or Implementation Plan?				Yes		No	X
If yes, identify the document.							
If yes, identify the agency/group that developed and/or approved the document.				Year Developed			

Watershed Information				
Watershed Name(s)	Hydrologic Unit Code (8 Digit)	Segment ID	305(b) Category (2004)	Size (Acres)
Copano Bay	12100405	2472	5a	48,090 (Bay only) 223,594 (entire HUC)
Mission River	12100406	2001, 2002	5c	664,218
Aransas River	12100407	2003, 2004	5c	546,245

Project Narrative

Problem/Need Statement

Copano Bay is located in the San Antonio–Nueces Coastal Basin. The bay covers parts of Aransas and Refugio counties, while the watershed also encompasses Bee, Goliad Karnes and San Patricio counties. Mission Bay and Port Bay are sub-bays of Copano Bay and are included in Segment 2472. Segment 2472 is the receiving body of the Mission and Aransas Rivers. Mission River Above Tidal (Segment 2002) begins at the confluence of Blanco and Medio Creeks in Refugio County and is 9 miles in length. Mission River Tidal (Segment 2001) begins at a point 4.6 miles downstream of US 77 in Refugio County, is 19 miles in length, and flows into Mission Bay. Aransas River Above Tidal (Segment 2004) begins at the confluence of Poesta and Aransas Creeks in Bee County and is 35 miles in length. Aransas River Tidal (Segment 2003) begins at a point one mile upstream of US 77 in Refugio/San Patricio County, is 6 miles in length, and flows into Copano Bay. The Aransas River forms a portion of the boundary between Refugio and San Patricio Counties, from the Bee County line to the bay.

According to the *2004 Texas Water Quality Inventory and 303(d) List*, Copano Bay (Segment 2472) is impaired for bacteria in oyster waters (category 5c) in the area along the southern shore including Port Bay and the area near Bayside. There are concerns for total phosphorus in the area near FM 136, south of Bayside, and for depressed dissolved oxygen (DO) in the area near FM 188, west of Rockport.

There is a concern for depressed DO on Mission River Above Tidal (Segment 2002). Mission River Tidal (Segment 2001) is impaired for bacteria (contact recreation). There is a concern for depressed DO on Aransas River Above Tidal (Segment 2004). Aransas River Tidal (Segment 2003) is impaired for bacteria (contact recreation) and has a concern for orthophosphorus.

A Total Maximum Daily Load (TMDL) study to address the bacteria in oyster waters in Copano Bay was initiated in 2003 by TCEQ. There are two major components to the study. The first is the development of a Bacteria Loadings Model for the Mission and Aransas Rivers subbasins of the San Antonio–Nueces Coastal Basin. Nonpoint source contributions were based primarily on land use/land cover information and estimated livestock densities of each county. Point source contributions include wastewater treatment plants, septic systems, and direct deposition by water birds.

The second component of the study is Bacteria Source Tracking for the area around and in Copano Bay. This is a technique to determine sources of fecal contamination in a water body. TAMUCC conducted antibiotic resistance analysis and found contributions from humans/sewage and livestock under high river flow and rainfall events, and ducks. Other wildlife and gulls contributed relatively little contamination.

The Texas Department of State Health Services (DSHS) uses fecal coliform as the indicator bacteria to access bacteria contamination in oyster waters. TCEQ uses *E. coli* and enterococcus as the indicator bacteria to access bacteria contamination in fresh and marine waters, respectively, for contact recreation use. This SWQM for Copano Bay TMDL project will collect fecal coliform samples at all locations, and *E. coli* samples at fresh water locations and enterococcus samples at marine locations.

TCEQ has hosted several public meetings regarding the TMDL project for Copano Bay. Stakeholders at those meetings have expressed concern regarding the limited dataset, both in number of samples used in the analysis and in the geographic extent of samples. SWQM data collected through this project may be utilized to better understand fate and transport mechanisms of bacteria in the Copano Bay watershed. SWQM data collected through this project may be utilized to enhance the TMDL model, as well as, to clarify the 5c impairments in the tidal portions of Mission and Aransas Rivers. Additionally, SWQM data collected through this project may be utilized to monitor water quality improvement and implementation progress of any TMDLs adopted for the Copano Bay watershed.

Project Narrative

General Project Description

Currently, routine ambient water quality data is collected quarterly at 4 river stations and 3 bay stations by NRA (12943, 12944, 12947, 12952, 12945, 13404, and 13405); and at two bay stations by TCEQ (14783 and 17724).

This project will generate data of known and acceptable quality for surface water quality monitoring of river stations on Segments 2472 (Copano Bay), 2001 and 2002 (Mission River), and Segments 2003 and 2004 (Aransas River) for field, conventional (TSS and turbidity), flow (non-tidal river segments), and bacteria parameters to support the TMDL for bacteria in oyster waters in Copano Bay in Aransas and Refugio Counties. This SWQM for Copano Bay TMDL project will provide for surface water quality monitoring for three years. Three types of surface water quality monitoring will be conducted: routine ambient, targeted watershed, and effluent.

This SWQM for Copano Bay TMDL project will provide for up to six surface water quality monitoring events for each of the three years of the contract at up to 30 sites. Two dry weather samplings will be scheduled for July and September of each year, and there will an attempt to capture up to four wet/runoff events each year. Specific sampling sites will be re-evaluated each year. Wastewater Treatment Plant (WWTP) dischargers will be asked to submit end-of-pipe samples for the days of each of the sampling events. There are 16 permitted dischargers in the Copano Bay watershed. TCEQ will collect fecal coliform samples for NRA during their routine quarterly sampling, and NRA will add fecal coliform to its samples during routine quarterly sampling.

NRA will conduct most of the work performed under this project including technical and financial supervision, preparation of status reports, surface water quality monitoring sample collection, and data management. TAMUCC and CRWR will supply students to help during sampling. Bacteria analysis will be conducted by the TAMUCC Microbiology Laboratory and conventional data analysis will be performed by the Lower Colorado River Authority (LCRA) Environmental Services Laboratory under NRA's current agreements for Clean Rivers Program (CRP) data analysis. NRA will participate in the Copano Bay TMDL stakeholder meetings in order to efficiently and effectively achieve project goals and to summarize activities and achievements made throughout the course of this project.

The sampling period extends over 36 months. The specific sites have yet to be determined but at least 39 potential sites have been identified, beyond the 9 sites currently being sampled quarterly. Most of the sites are located on unclassified tributaries of the Mission and Aransas Rivers.

NRA will develop and implement a QAPP to ensure water quality data of known and acceptable quality are generated through this project. See table on page 6 or map on page 7 for all potential monitoring sites. Existing NRA and TCEQ sites and WWTP discharge locations are included on the map. The QAPP will precisely identify sites. NRA will manage monitoring data for use in support of the TMDL for bacteria in oyster waters in Copano Bay. NRA will submit monitoring data to TCEQ for inclusion in the TCEQ SWQM database.

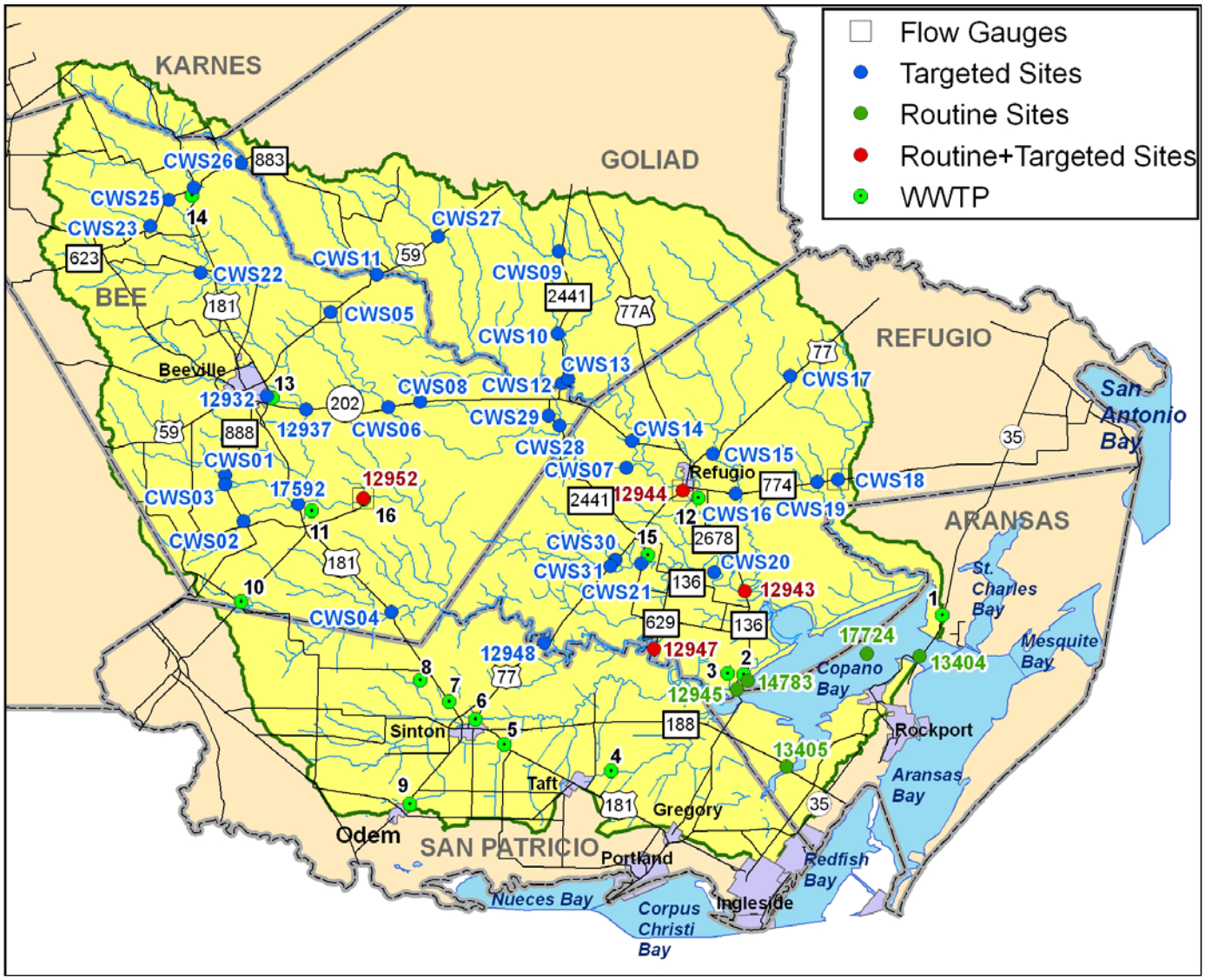
NRA will post monitoring data to the NRA website in a timely manner. NRA will summarize the results and activities of this project through inclusion in NRA's Clean Rivers Program Basin Highlights Report and/or Basin Summary Report. Additionally, the results and activities of this project will be summarized in the TMDL for bacteria in oyster waters in Copano Bay.

Federal funds will provide for water quality sample collection and analysis of water quality samples. NRA and TCEQ CRP, TCEQ SWQM, TAMUCC, and CRWR will each provide portions of the non-federal match.

Proposed Monitoring Locations

Station_ID	Lat_dd	Long_dd	Task	Short_Description
12943	28. 183332	-97. 212502	2 - ROUTINE	MISSION RIVER AT FM 2678
12944	28.088333	-97. 278893	2 - ROUTINE	MISSION RIVER ABOVE TIDAL AT US 77
12945	28.077999	-97. 221161	2 - ROUTINE	COPANO BAY AT FM 136
12947	28.121666	-97. 309723	2 - ROUTINE	ARANSAS RIVER TIDAL AT FM 629
12952	28.282639	-97. 622139	2 - ROUTINE	ARANSAS RIVER NEAR SKIDMORE
13404	28.113611	-97. 025002	2 - ROUTINE	COPANO BAY ALONGSIDE SH 35
13405	27.995001	-97. 167946	2 - ROUTINE	PORT BAY AT FM 188
14783	28.087500	-97. 209167	2 - ROUTINE	COPANO BAY E BAYSIDE
17724	28.116112	-97. 081390	2 - ROUTINE	COPANO BAY SW OUTER LAP BANK
12932	28.392944	-97.725166	3 - TARGETED	POESTA CREEK AT US 181 BYPASS
12937	28.378334	-97.683334	3 - TARGETED	POESTA CREEK AT SH 202
12943	28. 183332	-97. 212502	3 - TARGETED	MISSION RIVER AT FM 2678
12944	28.088333	-97. 278893	3 - TARGETED	MISSION RIVER ABOVE TIDAL AT US 77
12947	28.121666	-97. 309723	3 - TARGETED	ARANSAS RIVER TIDAL AT FM 629
12948	28.127899	-97.427902	3 - TARGETED	ARANSAS RIVER TIDAL AT US 77
12952	28.282639	-97. 622139	3 - TARGETED	ARANSAS RIVER NEAR SKIDMORE
17592	28.777000	-97.691833	3 - TARGETED	ARANSAS CREEK AT US 181
CWS01	28.308083	-97.770050	3 - TARGETED	ARANSAS CREEK AT FM 888
CWS02	28.258633	-97.750450	3 - TARGETED	OLMOS CREEK ATFM 888
CWS03	28.297950	-97.770133	3 - TARGETED	ELM CREEK AT FM 888
CWS04	28.161150	-97.592000	3 - TARGETED	PAPALOTE CREEK AT US 181
CWS05	28.482967	-97.656983	3 - TARGETED	MEDIO CREEK AT US 59
CWS06	28.381217	-97.595367	3 - TARGETED	MEDIO CREEK AT SH 202
CWS07	28.315983	-97.339700	3 - TARGETED	MEDIO CREEK AT KELLY RD
CWS08	28.386817	-97.560583	3 - TARGETED	NEDDY CREEK AT SH 202
CWS09	28.548508	-97.411728	3 - TARGETED	SARCO CREEK AT FM 2441
CWS10	28.460239	-97.413225	3 - TARGETED	SALT CREEK AT FM 2441
CWS11	28.523075	-97.607719	3 - TARGETED	BLANCO CREEK AT US 59
CWS12	28.406967	-97.408833	3 - TARGETED	BLANCO CREEK AT FM 2441
CWS13	28.411450	-97.402300	3 - TARGETED	SARCO CREEK AT FM 3410
CWS14	28.345067	-97.333933	3 - TARGETED	BLANCO CREEK AT SH 202
CWS15	28.331167	-97.247033	3 - TARGETED	MELON CREEK AT US 77
CWS16	28.288100	-97.222000	3 - TARGETED	MELON CREEK AT FM 774
CWS17	28.414783	-97.164033	3 - TARGETED	COPANO CREEK AT US 77
CWS18	28.303617	-97.112630	3 - TARGETED	COPANO CREEK AT FM 774
CWS19	28.300600	-97.134650	3 - TARGETED	ALAMEDA CREEK AT FM 774
CWS20	28.203908	-97.245644	3 - TARGETED	SAUS CREEK AT FM 136
CWS21	28.213358	-97.323989	3 - TARGETED	CHOCOLATE CREEK AT FM 136
CWS22	28.524936	-97.796308	3 - TARGETED	DOMINGO CREEK AT COUNTY RD WEST OF NORMANNA
CWS23	28.575172	-97.850811	3 - TARGETED	TORO CREEK AT FM 623
CWS24	28.616644	-97.803750	3 - TARGETED	MEDIO CREEK AT FM 623
CWS25	28.603647	-97.830517	3 - TARGETED	DRY MEDIO CREEK AT FM 623
CWS26	28.643411	-97.752864	3 - TARGETED	BLANCO CREEK AT FM 883
CWS27	28.564358	-97.541600	3 - TARGETED	MUCORRERA CREEK AT US 59
CWS28	28.361400	-97.411367	3 - TARGETED	MEDIO CREEK AT FM 2441
CWS29	28.371572	-97.422953	3 - TARGETED	NEDDY CREEK AT FM 2441
CWS30	28.216814	-97.351181	3 - TARGETED	DEVLIS RUN AT US 77
CWS31	28.210433	-97.356681	3 - TARGETED	SAUS CREEK AT US 77

Proposed WWTP Outfall Sample Locations		
Map #	**WWTP Permit #**	**Description**
1	WQ0004290-000	Holiday Beach WSC
2	WQ0003487-000	Town of Bayside
3	WQ0013892-001	Town of Bayside
4	WQ0010705-001	City of Taft
5	WQ0013412-001	TxDOT
6	WQ0010055-001	City of Sinton
7	WQ0013641-001	City of Sinton – Rob and Bessie Welder Park
8	WQ0014119-001	St. Paul WSC
9	WQ0010237-001	City of Odem
10	WQ0014123-001	Tynan WSC
11	WQ0014112-001	Skidmore WSC
12	WQ0010255-001	Town of Refugio
13	WQ0010124-002	City of Beeville
14	WQ0010748-001	Pettus MUD
15	WQ0010156-001	Town of Woodsboro
16	WQ0010124-004	City of Beeville – Chase Field



Water Quality Impairment

Describe all known causes (pollutants of concern) of water quality impairments from any of the following sources: 2002 Water Quality Inventory and 303(d) List, 2002 Summary of Waterbodies with Water Quality Concerns (Secondary Concerns List) or Other Documented Sources (ex. Clean Rivers Program Basin Summary or Basin Highlights Reports).

- *2002 TWQI* – Segment 2472 – oyster waters use impairment, nutrient enrichment concern (total phosphorus), and aquatic life use concern
- *2004 TWQI* – Segment 2472 – oyster waters use impairment, nutrient enrichment concern (total phosphorus), and aquatic life use concern

- *2002 TWQI* – Segment 2001 – contact recreation use concern
- *2004 TWQI* – Segment 2001 – contact recreation use concern impairment

- *2002 TWQI* – Segment 2002 – contact recreation use concern and aquatic life use concern
- *2004 TWQI* – Segment 2002 – aquatic life use concern; contact recreation use concern removed
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- *2002 TWQI* – Segment 2003 – contact recreation use concern and nutrient enrichment concern (orthophosphorus)
- *2004 TWQI* – Segment 2003 – contact recreation use impairment and nutrient enrichment concern (orthophosphorus)
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- *2002 TWQI* – Segment 2004 – aquatic life use concern
- *2004 TWQI* – Segment 2004 – aquatic life use concern

Project Goals

Data of known and acceptable quality are generated for surface water quality monitoring (routine ambient, targeted watershed, and effluent) of the Copano Bay (Segment 2472) watershed, including the two rivers that flow into it, Segments 2001 and 2002 (Mission River Tidal and Non-tidal) and Segments 2003 and 2004 (Aransas River Tidal and Non-tidal) for field, conventional (TSS and turbidity), flow (non-tidal river segments), and bacteria parameters.

Tasks, Objectives and Schedules

Task 1:	Project Administration and Coordination					
Costs:	Federal:	$0	Non-Federal:	$40,229	Total:	$40,229
Objective:	To effectively coordinate and monitor all work performed under this project including technical and financial supervision and preparation of status reports.					
Subtask 1.1:	NRA will prepare electronic quarterly progress reports for submission to TSSWCB. Progress reports shall document all activities performed within a quarter and shall be submitted by the 15th of January, April, July, and October. All progress reports will also be provided to TCEQ.					
	Start Date:	December 1, 2006		Completion Date:		November 30, 2009
Subtask 1.2:	NRA will perform accounting functions for project funds and will submit appropriate Reimbursement Forms to TSSWCB at least quarterly.					
	Start Date:	December 1, 2006		Completion Date:		November 30, 2009
Subtask 1.3:	NRA will participate in the Copano Bay TMDL stakeholder meetings in order to efficiently and effectively achieve project goals and to summarize activities and achievements made throughout the course of this project.					
	Start Date:	December 1, 2006		Completion Date:		November 30, 2009
Deliverables	• Quarterly Reports in electronic format. • Reimbursement Forms in either electronic or hard copy format.					

Tasks, Objectives and Schedules						
Task 2:	Routine Ambient Surface Water Quality Monitoring					
Costs:	Federal:	$23,864	Non-Federal:	$13,098	Total:	$36,962
Objective:	To provide water quality data to support the on-going TMDL for bacteria in oyster ways in Copano Bay by enhancing current routine ambient monitoring regimes.					
Subtask 2.1:	Currently, routine ambient monitoring is conducted quarterly at 7 stations by NRA (12943, 12944, 12945, 12947, 12952, 13404, and 13405) and quarterly at 2 stations by TCEQ (14783 and 17724). NRA and TCEQ will add fecal coliform samples to their routine sampling in support of the project. TMAUCC Microbiology Laboratory will conduct the bacteria analysis.					
	Start Date:	January 1, 2007	Completion Date:	November 30, 2009		
Deliverables	• Water quality data from routine ambient monitoring as reported through Tasks 1 and 6.					

Tasks, Objectives and Schedules						
Task 3:	Targeted Watershed Surface Water Quality Monitoring					
Costs:	Federal:	$160,791	Non-Federal:	$81,890	Total:	$242,681
Objective:	To provide water quality data to support the on-going TMDL for bacteria in oyster ways in Copano Bay by enhancing current routine ambient monitoring regimes through targeted watershed monitoring.					
Subtask 3.1:	Prior to any wet weather sampling events, NRA will conduct field surveys to document stream bed profiles at sites without USGS flow gauges. This will allow for flow estimates to be used during times when high flow prohibits actual measurements.					
	Start Date:	January 1, 2007	Completion Date:	November 30, 2009		
Subtask 3.2:	NRA is expecting to conduct targeted sampling at up to 30 sites to support the modeling effort. The specific sites have yet to be determined. These sites may vary for each of the three years of the project and will most likely be located on unclassified tributaries of the Mission and Aransas Rivers. See table on page 6 and map on page 7 for potential sites. The QAPP, as detailed in Task 5, will precisely identify sites. Sampling period extends through 36 months. Total number of sample events scheduled for collection through this subtask is 6 dry weather events and up to 12 wet events. It is anticipated that some of the sites will be dry during the dry weather events. LCRA's Environmental Services Laboratory will conduct sample analysis for conventional parameters and the TAMUCC Microbiology Laboratory will conduct bacteria analysis. Field parameters are pH, temperature, conductivity, dissolved oxygen, physical water qualities, current weather conditions, and flow severity. Conventional parameters are TSS and turbidity. Flow parameters (non-tidal segments) are flow collected by gauge, electric, mechanical, Doppler, or flow estimates. Bacteria parameters are *E. coli* (fresh water), enterococcus (marine water), and fecal coliform.					
	Start Date:	January 1, 2007	Completion Date:	November 30, 2009		
Deliverables	• Water quality data from targeted watershed monitoring as reported through Tasks 1 and 6.					

Tasks, Objectives and Schedules						
Task 4:	Effluent Surface Water Quality Monitoring					
Costs:	Federal:	$29,733	Non-Federal:	$14,198	Total:	$43,931
Objective:	To provide water quality data to support the on-going TMDL for bacteria in oyster ways in Copano Bay by enhancing current routine ambient monitoring regimes through effluent monitoring.					
Subtask 4.1:	WWTP dischargers will be asked to supply end-of-pipe samples on the days of the targeted monitoring events. There are 16 permitted dischargers in the Copano Bay watershed. LCRA's Environmental Services Laboratory will conduct sample analysis for conventional parameters and the TAMUCC Microbiology Laboratory will conduct bacteria analysis. Conventional parameters are TSS and turbidity. Bacteria parameters are *E. coli* (fresh water), and fecal coliform.					
	Start Date:	January 1, 2007	Completion Date:	November 30, 2009		
Deliverables	Water quality data from effluent monitoring as reported through Tasks 1 and 6.					

Tasks, Objectives and Schedules						
Task 5:	Quality Assurance					
Costs:	Federal:	$0	Non-Federal:	$2,959	Total:	$2,959
Objective:	To develop and implement DQOs and QA/QC activities to ensure water quality data of known and acceptable quality are generated through this project.					
Subtask 5.1:	NRA will develop a QAPP for activities in Tasks 2-4 consistent with *EPA Requirements for Quality Assurance Project Plans (QA/R-5)* (May 2006) and the *TSSWCB Quality Management Plan* (July 2006). All monitoring procedures and methods prescribed in the QAPP shall be consistent with the guidelines detailed in the *TCEQ Surface Water Quality Monitoring Procedures, Volume 1: Physical and Chemical Monitoring Methods for Water, Sediment, and Tissue (RG-415)* (December 2003) and *Volume 2: Methods for Collecting and Analyzing Biological Community and Habitat Data (RG 416)* (August 2005).					
	Start Date:	December 1, 2006	Completion Date:	December 31, 2009		
Subtask 5.2:	NRA will implement approved QAPP.					
	Start Date:	January 1, 2007	Completion Date:	November 30, 2009		
Deliverables	• QAPP for Tasks 2-4 approved by TSSWCB and USEPA in both electronic and hard copy formats. • Data of known and acceptable quality as reported through Tasks 1 and 6.					

Tasks, Objectives and Schedules						
Task 6:	Data Management and Final Report					
Costs:	Federal:	$0	Non-Federal:	$10,571	Total:	$10,571
Objective:	To manage and transfer monitoring data for use in the TMDL for bacteria in oyster waters in Copano Bay and for inclusion in the TCEQ SWQM database and to develop a final report summarizing the results and activities of the project.					
Subtask 6.1:	NRA will submit Station Location Requests as needed to obtain TCEQ stations numbers for new monitoring sites from activities in Tasks 3-4.					
	Start Date:	December 1, 2006	Completion Date:	November 30, 2009		
Subtask 6.2:	NRA will submit monitoring data from activities in Tasks 2-4 to TCEQ for inclusion in the TCEQ SWQM database. Data will be transferred in the correct format using the TCEQ file structure, along with a completed Data Summary. Data Correction Request Forms will be submitted to TCEQ whenever errors are discovered in data already reported.					
	Start Date:	January 1, 2007	Completion Date:	November 30, 2009		
Subtask 6.3	NRA will post monitoring data from activities in Tasks 2-4 to the NRA website in a timely manner.					
	Start Date:	January 1, 2007	Completion Date:	November 30, 2009		
Subtask 6.4	No independent final report will be prepared for this project. Rather, NRA will summarize the results and activities of this project through inclusion in NRA's Clean Rivers Program Basin Highlights Report and/or Basin Summary Report. Additionally, the results and activities of this project may be summarized in the TMDL for bacteria in oyster waters in Copano Bay.					
	Start Date:	December 1, 2006	Completion Date:	November 30, 2009		
Deliverables	• Station Location Request Forms (as needed) in electronic format. • Monitoring data files and Data Summary in electronic format. • Data Correction Request Forms (as needed) in electronic format. • Monitoring data updates posted to the NRA website. • Final report (NRA CRP BHR and/or BSR) at culmination of project in both electronic and hard copy formats.					

Measures of Success
• Data of known and acceptable quality are generated for surface water quality monitoring (routine ambient, targeted watershed, and effluent) of Segment 2472 (Copano Bay) and the two rivers that flow into it, Segments 2001 and 2002 (Mission River Tidal and Non-tidal) and Segments 2003 and 2004 (Aransas River Tidal and Non-tidal) and for field, conventional (TSS and turbidity), flow (non-tidal river segments), bacteria and effluent parameters.

2005 Texas Nonpoint Source Management Program Document Reference
Goals &/or Milestone(s)
NPS Management Program - Element One – Explicit short- and long-term goals, objectives and strategies that protect surface and groundwater.
Short-Term Goal One – Data Collection and Assessment – Objective A - Identify surface waterbodies…from the *Texas Water Quality Inventory and 303(d) List*…that need additional information to characterize non-attainment of designated uses and quality standards.
Short-Term Goal One – Data Collection and Assessment – Objective B - Ensure that monitoring procedures meet quality assurance requirements and are in compliance with EPA-approved TCEQ and/or TSSWCB Quality Management Plans.
Short-Term Goal One – Data Collection and Assessment – Objective C - Conduct special studies to determine sources of NPS pollution and gain information to target…BMP implementation.
Short-Term Goal One – Data Collection and Assessment – Objective D – Develop and adopt, at the state level, TMDLs, Implementation Plans, and Watershed Protection Plans to maintain and restore water quality in waterbodies identified as impacted by NPS pollution.
Short-Term Goal One – Data Collection and Assessment – Objective E – Conduct monitoring to determine effectiveness of TMDL Implementation Plans, Watershed Protection Plans, and BMP implementation as appropriate.
NPS Management Program - Element Two – Working partnerships and linkages to appropriate state, interstate, tribal, regional, and local entities, private sector groups, and Federal agencies.
NPS Management Program - Element Five – The state program identifies waters and their watersheds impaired by nonpoint source pollution and identifies important unimpaired waters that are threatened or otherwise at risk. Further, the state establishes a process to progressively address these identified waters by conducting more detailed watershed assessments and developing watershed implementation plans, and then by implementing the plans.

Part III – Financial Information

Budget Summary			
Federal 319(h)	$ 214,388	% of total project	57%
Non-Federal Match	$ 162,945	% of total project (≥ 40%)	43%
Total Project Cost	$ 377,333	Total project %	100%

Category	Federal 319(h)	Non-Federal Match	Total Project Cost
Personnel	$ 72,480	$ 80,601	$ 153,081
Fringe Benefits	$ 15,728	$ 17,490	$ 33,218
Subtotal Personnel & Fringe	$ 88,208	$ 98,091	$ 186,299
Travel	$ 3,000	-	$ 3,000
Equipment	-	-	-
Supplies	$ 600	$ 4,500	$ 5,100
Contractual	-	-	-
Construction	-	-	-
Other (Analysis)	$ 106,440	$ 33,694	$ 140,134
Other (Volunteer Expenses)	$ 8,892	$ 18,600	$ 27,492
Subtotal	$ 118,932	$ 56,794	$ 175,726
Total Direct Costs	$ 207,140	$ 154,885	$ 362,025
Indirect Costs (≤ 15%)	$ 7,248	$ 8,060	$ 15,308
Total Project Costs	$ 214,388	$ 162,945	$ 377,333

Budget Justification		
Category	Total Amount	Justification
Personnel & Fringe Benefits	$186,299	The funds will cover the cost of two field personnel, sampling expenses, data analysis, administrative costs, and data management costs.
Travel	$3,000	The funds will cover the cost of field personnel including rental cars, fuel costs, and meals.
Equipment		
Supplies	$5,100	The funds will cover the cost of sampling supplies, e.g. DO membranes, calibrating solutions, etc.
Contractual		
Construction		
Other (Analysis)	$140,134	The funds will cover the cost of lab analysis. LCRA and TAMUCC quotes for CRP FY 2006 analysis were used to estimate analysis costs.
Other (Volunteer Expenses)	$27,492	The funds will cover salaries and travel cost of volunteer monitors from CRWR and TAMUCC.
Indirect	$15,308	10% of personnel salaries.