

**Communication Campaign
For Education & Outreach
to Improve Water Quality
at Cole And Ropes Parks Beaches
in Corpus Christi Bay,
Corpus Christi, Texas USA**

Segments 2481CB_03 and 2481CB_04

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Introduction

There are some familiar sayings relating to the principal that “water flows downhill.”

Sadly, not enough people understand the power and natural tendency of water to carry serious problems with it on its way down the hill. The result can be catastrophic for any body of water at the end of the line. Our bay, Corpus Christi Bay, is the end of the line for the Nueces River watershed near the Gulf of Mexico on the lower half of the Texas Gulf coast.

Our bay is at risk because untreated, uncontrolled runoff of pollutants, debris, and other contaminants from streets, parking lots, yards, and storm drains flows into the bay after rainfall. When this happens water in the bay at our signature parks, Cole and Ropes, carries many pollutants, and often tests above the federal legal limit for *Enterococcus* bacteria.

How do we know this? Water testing done by the Texas General Land Office’s Texas Beach Watch Program since 2006 has revealed that bay water at these beaches exceeds bacteria levels for recreational use. EPA recommends beach water samples be taken at knee depth, or within the first 12” of water, which is where the most vulnerable people, the elderly, people not physically able to go deeper, and children, recreate.

The bottom line of this Communication Campaign is a message to the public, “Our bay, Corpus Christi Bay, simply cannot improve on its own. We need everybody to do their part.”

Why should anyone care?

Federal regulations could close Corpus Christi Bay beaches at Cole and Ropes Parks to contact recreation if the current issues threatening the bay continue to grow. When the bay becomes too dirty and dangerous for us to utilize, we will lose one of the most beautiful and wonderful parts of our community, a part which makes our city unique, makes us want to live here, and makes others want to visit or take up residence. There will be amazing opportunities missed.

That’s the bad news, but there is good news. And, there is hope.

We are not alone in this problem. Other Texas communities, and communities across the United States and around the world, face these same issues. Many have made great strides. But first, they had to know there was a problem.

More than a few communities have risen to these same challenges, so there is hope our bay can recover. Successful communication and action models can inspire, and can also be copied, improved upon, and customized for our location. As a community we must act. Action changes things.

First, we must communicate. Then we must change our behavior.

Behavior change is ultimately what will save Corpus Christi Bay. Behavior change can be one of the most difficult goals in communication science, but it is what we need. Behavior will change with (1) the benefit of reputable research studies as a guide, (2) a commitment to the continuity of mission and goals, (3) measurable results, and (4) conscientious cost management. These are key to solving the problems of the “stuff”, or pollutants, that have been moving downhill. The path to water quality improvement depends on the community being made aware of the issue and how they can effectively contribute to the solution.

Money will be needed, but money could be lost without a comprehensive, well-developed communication strategy and plan. With that in mind, fiscal integrity will drive the proposed avenues of communication. The stakes are too high, and we have too much to lose to do otherwise.

The Communication Campaign will utilize research to avoid common mistakes made when attempting to change human behavior. The over-arching theme of the activities within this proposal will be a message of hope and community empowerment. Experience and research have shown that an approach imbued with hope and community-building is far more effective than contrasting approaches based upon fear and punishment.

Efforts will be customized as much as possible for a defined set of audience groups of like-minded individuals, such as members of Chambers of Commerce, the Convention and Visitor’s Bureau, Rotary Club, etc. Peer-to-peer communication is powerful. When someone you know, trust, and respect recommends a product or activity quite a few steps on the path to adopting a new concept can be skipped.

The proposed components of the campaign – message design, staffing, hardware and software acquisition, timing of the message, focus on hope, building on the strengths of the community, controlling costs, and creating effective change in our city’s awareness – will lead to changed behavior. In this case, changed behavior will result in a healthier bay.

History

When Corpus Christi Bay beaches at Cole Park and Ropes Parks (Figure 1) exceeded the *Enterococcus* state criteria for recreational use, a Total Maximum Daily Load (TMDL) was initiated in 2010. TMDL is a regulatory program under the U.S. Clean Water Act that defines the maximum amount of a pollutant a body of water can receive while still meeting water quality standards, and includes an implementation plan to restore the impaired waters (<https://www.epa.gov/tmdl>).

The Cole and Ropes Parks Coordination Committee (CARP), a group of interested citizens, representatives of private organizations, local businesses, and federal, state, and local governments, was formed and charged with creating the

implementation plan to restore the health of Corpus Christi Bay at Cole and Ropes Parks. Working since 2012, CARP created the “*Implementation Plan for Two Total Maximum Daily Loads for Bacteria at Cole and Ropes Parks Beaches in Corpus Christi Bay*” (I-Plan). In October 2016 the Corpus Christi City Council passed a resolution of support for the I-Plan.

Four work groups were formed by CARP to write the management measures and control activities found in the I-Plan: (1) Education and Outreach; (2) Monitoring and Research; (3) City Infrastructure; and (4) Ordinances and Regulations. Workgroups determined appropriate activities and schedules to accomplish the management measures and control activities in the I-Plan. This Communications Campaign is focused on the Education and Outreach management measures.

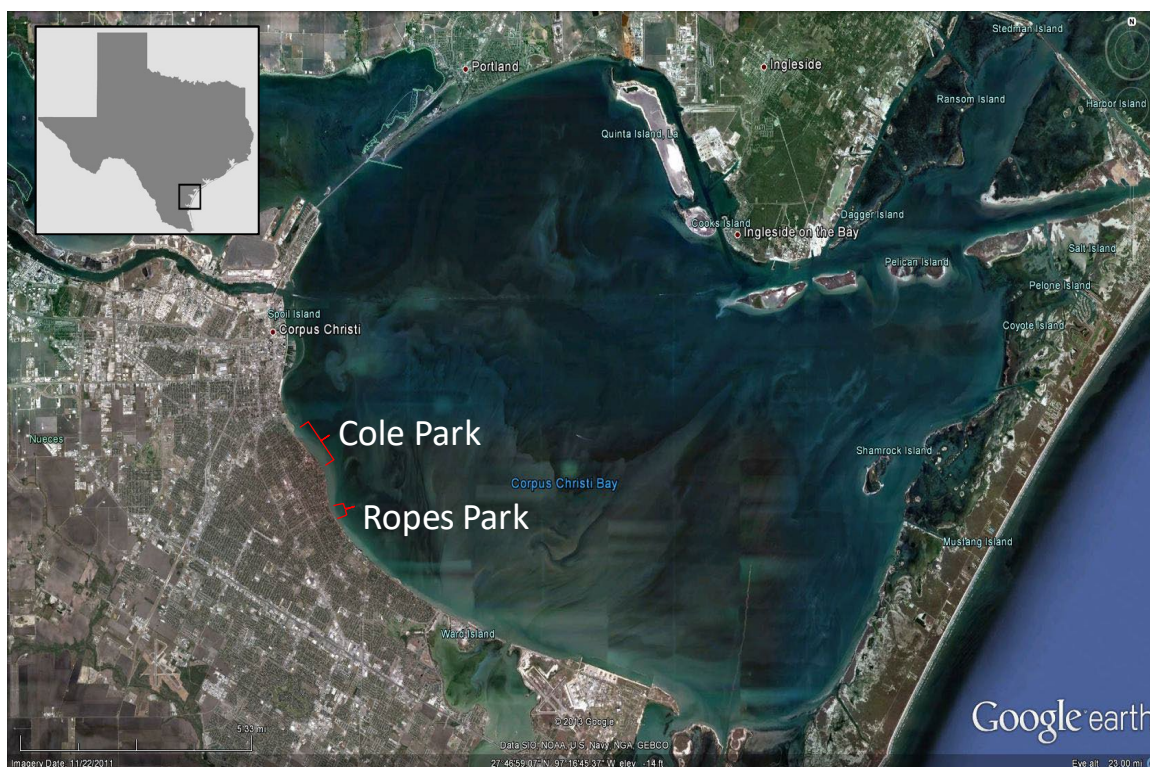


Figure 1. Location of Cole and Ropes Parks

Vision

In addition to control actions which are mandatory under law, permit, and/or City Ordinance, there are voluntary management measures detailed in Management Measure 1.0, Education and Outreach, that will be fundamental to the I-Plan's success.

As stated in the I-Plan, education and outreach communication activities will exist

“To address the issue of excessive bacterial loading at Cole and Ropes Parks beaches, the CARP will need to engage the City of Corpus Christi across all demographic aspects through sustained education and outreach programs that specifically target environmental stewardship, green thinking, and cleanliness campaigns. These programs should address the critical aspects of education and outreach. Educational programs need to be created so they adhere to core learning objectives that reinforce knowledge and understanding of environmental stewardship. Outreach programs should be created and adopted to insure full coverage of the diverse demographic and socioeconomic background that the City of Corpus Christi represents. Through enduring City leadership, partnerships need to be established across government, public, business, industry, non-profit organizations, community associations, and academic institutions that will strengthen and sustain commitment and involvement for this plan.”

The Education and Outreach workgroup recommended five initial activities for this I-Plan management measure:

- 1.1) General Awareness
- 1.2) Leave It Better Than You Found It
- 1.3) Pet Waste Disposal
- 1.4) Prevent Intentional Dumping and Disposal
- 1.5) Slow the Flow (Low Impact Development) Initiative

These activities form the principal components of the Communication Campaign proposed in this document. The campaign will customize a few simple and powerful messages for specific audiences of like-minded individuals. Components of the campaign, proposed message design, staffing, hardware and software acquisition, support the goal of fiscal integrity.

The primary objectives of this proposal are to increase general public awareness of the Cole and Ropes Parks beaches water quality issues, and to initiate behavior changes needed to achieve the primary objectives of this proposal. Behavioral change is a primary beneficial outcome.

Campaign Objectives

For the general public each target audience will be grouped by common characteristics, i.e. like-minded groups of individuals with existing professional and social interaction patterns. A well-defined effort will include uniquely crafted, precise messages for each target audience.

Creativity has brought new approaches to old problems. For example, storm drain art in more than a few cities has been a very powerful, positive tool. The creative, customized, original images of marine life on storm drains has inspired people in towns and cities all across the country to quit throwing trash and debris into the drains. Art, as a universal language, has brought citizens' energy and positive intent to a front-line defense of their bays and rivers.

The following are primary messages which will be supported by the campaign:

- Contact recreation water quality in Corpus Christi Bay at Cole and Ropes Parks will continue to decline from safe concentrations if left unaddressed, and could result in legally mandated restrictions.
- Under no circumstances is it acceptable to allow continued decline of water quality at our city's premier bayside parks. Lack of public awareness, inattention, and non-intervention relative to pollutants contributing to unhealthy levels of bacteria in bay waters, should not be tolerated.
- No one individual or group is solely responsible for the decline in water quality in the bay at Cole and Ropes Parks.
- Community members can do positive things to improve bay water quality by working in coordination and drawing on their social networks
- Efforts to improve Corpus Christi Bay water quality will be supported by our peers.
- Efforts and activities to improve Corpus Christi Bay water quality can be easy and fun.
- The message should resonate with target audiences, and leave a lasting impression. The message should also:
 - State the problem clearly and simply in a way that shows, without exaggeration, that this is a serious problem which requires action.
 - Propose a solution.
 - Invite the audience(s) to take specific actions.

Campaign Strategies

(1) Data Acquisition Surveys

Measurable data acquisition opportunity resides in Management Measure 1.0, Education and Outreach, as documented in the I-Plan.

For I-Plan Management Measure Activities 1.1 - 1.5 surveys will be used to acquire campaign data. Awareness testing will be conducted through pre-campaign surveys and the data will be recorded, followed by post-campaign surveys one year later to determine targeted increases or reductions during that time period. Surveys should be quantitative and qualified. They should discern and establish pre- and post-campaign awareness and behavior relating to the health of Corpus Christi Bay and to ascertain the efficacy of any currently established programs that may exist.

Management Measure Activity 1.1

General Awareness

Creating, implementing, and sustaining education programs within the community that increase awareness of the impact human actions can have on the quality of local bodies of water (Figure 2). Improve community understanding of “Where does the water go?”.

Strategy

Pre-and post-campaign surveys will be designed to discern and establish the level of current public understanding of “Where does the water go?”.

Measure of Success

Campaign launch interviews regarding awareness “where does the water go” will be repeated and quantified after one year of campaign efforts.



Figure 2. Photo of Cole Park Louisiana Parkway Storm Drain during rain event (CCS file photo)

Management Measure Activity 1.2

Leave it Better Than You Found It

Targeted at reducing litter in the community (Figure 3). Principal focus will be on reducing and discouraging litter from vehicles and by individuals around restaurants, shopping areas, parks, beaches and all other places.

Strategy

Pre-and post-campaign surveys will be designed and conducted to discern and establish the type and amount of litter found around restaurants, shopping areas, parks, beaches and all other places within the Cole Park and Ropes Park watersheds.

Measure of Success

Pre-campaign launch survey will identify type and amount of litter currently in restaurants, shopping centers, parks, and beaches within the Cole Park and Ropes Park watersheds. The survey will be repeated and quantified after one year of campaign efforts.



Figure 3. Photo of trash cleanup at Ropes Park (CCS file photo and quote from Bill Nye <http://www.azquotes.com/quote/823040>).

- ***Management Measure Activity 1.3***

Pet Waste Disposal

Establish coordination with key stakeholders to facilitate the reduction and eventual elimination of improper pet waste disposal.

Strategy

Pre and post-campaign surveys will be designed and conducted to discern and establish current levels of improper pet waste disposal within the Cole and Ropes Parks Watershed.

Measure of Success

Pre-campaign launch survey of improper pet waste disposal within the Cole and Ropes Parks Watershed will be repeated and quantified after one year of campaign efforts.



Figure 4. Photo of Clean Water Campaign focusing on picking up pet waste (<http://www.cleanwatercampaign.com>).

- ***Management Measure Activity 1.4***

Prevent Intentional Dumping and Disposal

Facilitate the reduction of improper waste disposal and dumping.

Strategy

Pre and post-campaign surveys will be designed and conducted to discern and establish the levels of improper waste disposal and dumping.

Measure of Success

Pre-campaign launch survey of improper waste disposal and dumping will be repeated and quantified after one year of campaign efforts.



Figure 5. Photo of trash at Ropes Park beach (CCS file photo).

- ***Management Measure Activity 1.5***

Slow the Flow (Low Impact Development) Initiative

Educate and promote Low Impact Development (LID) by focusing on practices which improve environmental conditions and water quality.

Strategy

Pre-and post-campaign surveys of the current level of understanding of practices that improve environmental conditions and water quality through LID will be designed and conducted.

Measure of Success

Pre-campaign launch survey of the level of understanding of practices that improve environmental conditions and water quality through LID usage will be repeated and quantified after one year of campaign efforts.



Figure 6. Photo of a “Slow the flow” initiative from the City of Paso Robles, California (<https://landarchs.com/award-winning-21st-street-turns-roadway-into-green-and-complete-street/>).

(2) Logo Design

Will help reduce public confusion about the purpose of the campaign and encourage support and participation. A logo will allow for the continuity of concept and campaign identification, will consistently support the positive message of hope and creative solutions, and will help enhance the visibility of the campaign.

Strategy

Facilitate stakeholders in designing a campaign logo.

Measure of Success

Quantification of the number of events, presentations, and publicity activities where the logo is aired, and a survey for logo recognition conducted and quantified one year after campaign efforts have been initiated.

(3) Slogan Design

As a component of community-building, a slogan will be the product of creative competition among students, for the continuity of concept and campaign identification. This will consistently support the positive message of hope and creative solutions. The slogan should be short, engaging, leave a lasting impression, reinforce the positive benefit of hope, and inspire action.

Strategy

Facilitate stakeholders in developing a slogan that provides information about the mission and goals of the campaign.

Measure of Success

Quantification of the number of events, presentations, publicity activities where the slogan is aired, and a survey for slogan recognition will be conducted and quantified one year after campaign efforts have been initiated.

(4) Website

Development and optimization of the website where the campaign will reside. As the slogan, or any other search of related information, is entered into search parameters, the hosting website should be among the top five sites the search engine lists. This will support the continuity of concept and campaign identification.

Strategy

Facilitate stakeholders in developing a campaign-based website that provides users information about the mission and goals of the campaign.

Measure of Success

Website analytics will measure visitors to the campaign's primary site.

(5) Presentations

Pre-recorded presentations will be created and made available for use at meetings of groups such as chambers of commerce and civic organizations. The presentations will visually illustrate positive approaches taken by other communities to solve their problems with contaminated bays and rivers, including images of storm drain art, successful LID practices, rain barrel art, Scoop the Poop and Slow the Flow. The campaign will also promote car wash giveaways, and creative community building events and approaches.

Strategy

Potential Audiences - Potential audiences will be contacted and informed about the availability of the pre-recorded program. Potential audience groups will be prioritized loosely by emphasis on: existing communication networks; groups representing or directly involved with children; groups representing or directly involved with art; groups actively involved in our community's health and well-being; groups with strong potential influence on responsible behavior; groups actively involved in our community's education; groups with central meeting locations; groups related to construction and development; and groups involved in horticulture.

Standard audience presentations of pre-recorded presentations - A campaign-owned projector will be available for loan through a system developed and coordinated by (to be determined) to allow spokespersons for the campaign to present to various groups. The presentations will also be made available as commercial-free online downloads, distributable jump drive memory sticks, DVD copies, and other universally useable media.

Cole Park Presentations - In short-form, videos will be presented routinely at the Cole Park Amphitheater at outdoor concerts, movie nights, and

Corpus Christi City Parks and Recreation events when power is used, and when audiences are anticipated to be more than 20 people.

Website Uploads - One or more versions of the presentation will be uploaded to a designated campaign-supported website, YouTube, and social media, including neighborhood coalition websites.

Measure of Success

Message contact quantification will be gathered by the specific activity, with the actual count or estimation of the number of attendees at events, and the number of requests for and presentation of pre-recorded presentations.

(6) Events

The following events are examples of ways to promote *the communications campaign* by creating, implementing, and sustaining education events within the community that increase awareness of the impact human actions can have on the quality of local bodies of water. Additional events that promote I-Plan Management Measure Activities 1.1 - 1.5 would be developed in the course of the campaign. New ideas will be promoted, or successful campaign methods will be employed, to achieve maximum success.

Strategy

Storm Drain Painting Events - Assist in the coordination and publicizing of community storm drain painting events (e.g., neighborhoods, bayfront, schools).

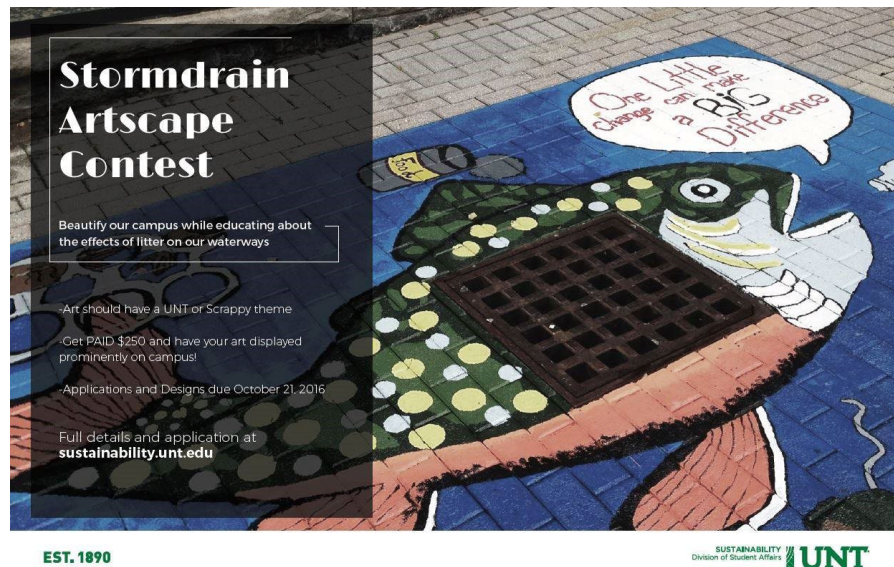


Figure 7. Photo of a Storm drain art contest from the University of North Texas, Division of Student Affairs, Sustainability website (<http://studentaffairs.unt.edu/sustainable>).

Rain Barrel Workshops - Assist in the coordination and publicizing of rain barrel workshops (e.g., Ag. Extension, Nueces River Authority).

Free Rain Barrel Workshop

Receive a free recycled barrel and fittings and learn how to build a rain barrel to manage storm water on your property!

Rain Barrels:

- Reduce Water Pollution
- Reduce Local Flooding
- Provide Free Garden Water
- Save you Money

Attendees will learn about the problems associated with stormwater runoff, ways to conserve water in their homes, and watershed friendly landscaping techniques. The workshop will also cover the basics of how to construct, install and maintain a rain barrel. After the workshop, participants will be provided with a recycled barrel and fittings to install a rain barrel on their property.

Registration Required
 Register online at: www.prc.org
 Call: (610) 353-1555 x 232
 Online Registration is Preferred

Rain Barrels limited to 50 per workshop and 1 per household

WHEN
 Thursday, October 13, 2016
 6:30 PM

WHERE
 Chester City Hall
 Community Room
 1 E 4th St,
 Chester, PA 19013

Logos: PRC Pennsylvania Resources Council, CHESTER CITY, DARBY CREEK VALLEY ASSOCIATION

Funding Provided by PADEP Growing Greener Grants Program

Figure 8. Example of free Rain Barrel Workshop flyer from the Pennsylvania Resources Council website (<http://www.prc.org>).

Rain Garden Workshops - Assist in the coordination and publicizing of rain garden workshops (Master Gardeners, plant nurseries, landscaping companies).

Rain Gardens
 ADD BEAUTY AND FUNCTIONALITY

This rain garden (also called a bioretention filter) gathers stormwater flowing from the adjacent road. A well constructed rain garden may look just like a garden planting bed, but it is in fact much more! By using a combination of mulch, compost, well-drained soil, and plants, rain gardens store and clean rainwater by slowly releasing it into the ground.

Rain gardens benefit both people and the natural environment by:

- **Filtering Pollution** mixed in stormwater runoff.
- **Resupplying Groundwater** by allowing clean water to slowly soak into the earth.
- **Maintaining Stream Flows** during summer months.
- **Providing Habitat** for butterflies, birds, and other creatures.

For more information, visit www.redmond.gov

Logos: Redmond, Stewardship Partners, City of Redmond

Figure 9. Benefits of rain gardens poster from the City of Redmond, Washington website (<http://www.redmond.gov/cms/One.aspx?portalId=169&pageId=55230>).

Measure of Success

Groups who sponsor or support public activities on the list will receive a questionnaire and a request to rate their experience as a host, and the apparent rating expressed by attendees. These feedback questionnaires will include such questions as, “How effectively did we communicate our objectives?”, and “What could we improve upon next time?”.

Event workshop attendance numbers will be counted (or estimated). Attendees will receive an anonymous questionnaire requesting information about what the attendee learned, and what other information they may request as a result of the presentation.

(7) Publicity

Publicity for campaign related events (storm drain painting; car-wash promotion; seminars by supporting groups; beach cleanups, etc.)

Strategy

Newspaper - Guest columns and editorials on the significance of the campaign and the benefits of low impact development. Volunteers from stakeholder groups who know the history of the issues and have technical knowledge of the current situation, should be encouraged to submit guest columns and first-person experience stories. Also, advertisements will be published in the Corpus Christi Caller Times to promote campaign-related events.

Radio - Guest interviews on the significance of the awareness campaign and activities. Volunteers from stakeholder groups who know the history of the issues and have technical knowledge of the current situation, should be encouraged to offer interview opportunities for talk radio programming. Radio advertisements and PSA’s will be created to promote campaign-related events.

Social Media - Assist in the coordination and publicizing of campaign information and activities on Facebook, neighborhood news web sites, educational websites, etc. Upload YouTube videos of selected Pre-Recorded Programs.

Billboards - To feature campaign logo, slogan, “Scoop the Poop,” “Storm Drain Art,” “Rain Barrel Art,” programming aimed at reducing improper waste disposal and dumping, and campaign-related events, as appropriate.

Television - Advertisements and PSA’s will be created to promote campaign-related events.

Press releases - Press releases will be distributed for broadcast and print media.

Measure of Success

Billboard viewing quantification will be provided by the billboard company based upon possible views with traffic statistics per location.

YouTube provides a metric for the number of views.

Radio stations who broadcast guest interviews on the significance of the awareness campaign and activities, will provide program ratings information.

Campaign Considerations

Getting good quality air time for the Communication Campaign messaging is important, however, it can be challenging at various times of the year, and availability can vary from year to year. Election campaigns, the holiday shopping season, and other considerations drive the competition for air time, and push up costs for prime spots in the messaging lineups.

For these reasons, the campaign will initially focus on potential staffing, recruitment of volunteers, slogan and logo creation, surveys of existing levels of awareness of the issues, equipment acquisition, production of the pre-recorded programs, and community-building through group presentations.

Corpus Christi Bay, a highly prized natural resource of vast economic, social, cultural, and environmental value, is facing an uncertain future unless behavioral changes can be made that lead to improved water quality. The bacterial impairment at Cole and Ropes Parks beaches, which threatens the recreational use of the water along this highly visible and popular part of our Bayfront, cries out for attention and immediate action.

The steps outlined in this Communication Campaign are the initial roadmap to Corpus Christi Bay's future health. By harnessing the energy of a broad network of civic, commercial, educational, and social groups all pulling together, there is hope for improvement. When our citizens and visitors become engaged in solving this problem, thanks to positive messages, promotion of the Campaign, and community leadership, the necessary behavioral changes will follow, and Corpus Christi Bay's future will be strong and secure.

Example of associated costs

Category	Cost	Note
Salaries	TBD	May be accomplished with volunteers or matching time/funds
Office Space	TBD	May be accomplished with donated space
Office Equipment	TBD	May be accomplished with donated equipment
Office Supplies	TBD	May be accomplished with donated supplies
Website Creation and Optimization	\$7,500.00	
Travel Expense	\$2,500.00	
Audio-Visual Production Equipment	\$6,000.00	
Licensing Fees (Music and Images)	\$3,000.00	
Audio-Visual Presentation Equipment	\$3,000.00	
Audio-Visual Duplication Costs	\$300.00	
Campaign Printing Expenses	\$2,000.00	
Postage	\$1,000.00	
Miscellaneous Operating Costs	\$1,800.00	
Advertising Costs (per Type)		
Logo Design	\$1,000.00	
Slogan Development	\$4,500.00	
Social Media (Facebook, Twitter, YouTube, etc.)	\$0.00	
Billboards	\$800.00 \$12,000.00	Set Up Fee \$1000/Month (Rotational Location)
Newspaper (1/4 page B&W 7 days)	\$1,400.00	
Full Page BW M-Sat	\$2,700.00	
Full Page Sun	\$3,000.00	
Add Color	\$600.00	
Digital (Minimum)	\$1,000.00	
Radio		
KEDT on air interview only	\$0.00	
Online listing Arts Calendar	\$0.00	
iHeart Media 10 Stations		
Minimum ad Buy 25 - 54 spots	\$0.00	
Production Costs		
:30 sec ad	\$200.00	25 ad minimum
:60 sec ad	\$2,800.00	25 ad minimum
Television		
Major station costs	\$600.00	per 30 sec spot Prime time 10:00 news
Production on-site/studio	\$150.00	/hr
Editing	\$150.00	/hr
Voice Over	\$50.00	/hr
Commercial Copies	\$50.00	each

Resources

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TCEQ. Technical Support Document: Two Total Maximum Daily Loads for Indicator Bacteria in Corpus Christi Bay at Cole and Ropes Parks, Corpus Christi, Texas - In Press.

TCEQ TMDL Program - <https://www.tceq.texas.gov/waterquality/tmdl>

Ten Mistakes in Behavior Change - generationone.com/wp-content/uploads/2014/.../10-Mistakes_6_2014.pdf.

Texas Beach Watch Program - <https://cgis.glo.texas.gov/Beachwatch/>

Texas Surface Water Quality Standards - https://www.tceq.texas.gov/waterquality/standards/eq_swqs.html

University of Arkansas Division of Agriculture Research and Extension Cooperative Extension Service .2014. Up Stream Art at the convergence of public art and education, Fayetteville, Arkansas.

USEPA. 2017. - <https://www.epa.gov/tmdl>