

**BIG IMPLEMENTATION PLAN
FINAL VIDEO SCRIPT**

11/8/13

Houston is all about water. It began in 1836 when the Allen brothers bought 6600 acres of land where Buffalo and White Oak Bayous meet. Hoping to create a center for commerce and trade, they named their fledgling endeavor after General Sam Houston who had just won the decisive battle with Mexico for Texas independence. Just twenty years later, Main Street was a busy place – and right on the bayou.

(OPENING TITLE: The BIG Implementation Plan: Collaborating for Success
w/MUSIC under) [:10 sec.]

Now more than 175 years later, Houston is the 4th largest city in the United States. The area is hub of constant activity, and has become a world-class center for a host of endeavors in commerce and technology, and yet, it has more park acreage than any other major U.S. city.

In contrast to some areas of the country, the Houston-Galveston region has continued to grow, and shows no signs of stopping. By 2025, it's estimated the population in the Houston metropolitan area will have increased by almost 2.6 million people bringing the population of the 10-county area to just under 8 million.

As Houston and its surroundings have boomed, its waters have often paid the price. Many of its 2500 miles of bayous, rivers and streams are impaired by bacteria and other contaminants.

Ed Emmett: [Harris County Judge]

All of us know that absolutely water quality is going to be the issue that defines us going forward. If you lose quality of water, you lose your existence.

In 1996, Houston area waterways began appearing on the State of Texas list of impaired waters. Something had to be done.

With expectations of a growing population, and experts recognizing the need for more and cleaner water, the process of improving the waters in and around Houston was begun in earnest.

The Texas Commission on Environmental Quality worked with local people to begin to make things better. While the scope of the activities followed the federal Clean Water Act, local interest and expertise were the driving forces.

First there was studying, monitoring, and reporting. Then a group was formed to create a plan – a plan to clean up the bayous, lakes, and streams in and around Houston.

Centered at the Houston-Galveston Area Council, this 31-member team became known as the Bacteria Implementation Group, or simply, the BIG.

Jeff Taebel: [Director, Community & Environmental Planning, H-GAC]

We had originally a stakeholder process to design the ultimate stakeholder process, and spent a lot of time thinking about how could we create a group that would be representative of the parties that would be involved in implementing the plan but not so large as to be unwieldy.

And BIG they are: local professionals from all walks of life, some world-renowned in their fields. Many have lived in the area for decades and know it well. Meeting as one large committee, and concurrently as a series of subcommittees, the BIG worked for nearly 3 years to develop its Plan. Most assuredly, these local stakeholders brought diverse opinions and different needs to the table.

Rachel Powers: [Senior Environmental Planner, H-GAC]

There was never a time when I thought this was going to be an easy process. Fun and exciting, yes. Easy? No.

After finding its own way, the group developed not only an identity, but a resilience that served them well when things got complicated.

Rachel Powers: So the group came up with several recommendations and then they pretty much threw them out the window and started over from scratch. They liked the new start, the new approach.

The BIG plan dealt with a very large area: 2200 square miles, 10 counties, 56 cities, and more than 5 million people. Diversity and balance in the stakeholder mix were critical.

Jeff Taebel:

We spent a lot of time thinking about the appropriate composition of local government representatives, business and industry, environmental groups, citizens and how we would populate that.

The City of Houston and Harris County were the largest entities represented on the BIG, but smaller communities *were well represented --and played an integral role in the final plan.*

Pat Buzbee: [Director, Montgomery County Environmental Health Services] Quite a few of my staff are on those subcommittees and so we've all brought things to the table on what we want.

Buzbee's experience on the BIG showed the value of sharing problems and possible solutions.

Pat Buzbee: This was a good learning experience for us. Because a lot of these people up here, they didn't realize—our problems are very similar to some of those other entities, so we got to share different strategies.

In a *typical* year, the Houston-Galveston area gets over 50 inches of rain, often too much at one time. The land is flat and the area floods easily. The Harris County Flood Control District and the U.S. Army Corps of Engineers have combined to create many parks with detention basins and man-made wetlands. These basins hold storm water long enough to allow much of the bacterial contaminants to settle out – and at the same time, are beautiful, recreational areas. Texas Stream Team volunteer Diane Humes tests the water in Mason Park to check levels of bacteria. A master naturalist, Humes is excited about the plants and animals making the park their home—and about the park's ability to clean up storm water.

Diane Humes: [Texas Stream Team volunteer and Galveston Bay Area Chapter, Texas Master Naturalists] The storm water used to just go straight into the bayou. Now it goes through a series of three ponds that have been planted in native vegetation, and it cleans up the water and then empties into Brays Bayou. The idea is, if you slow down the water, you know, you give it a chance for the bacteria to die off and settle down to the bottom instead of just rushing into the rivers.

Walking in Mason Park is like being in a different world—seemingly detached from the city, but it's really not.

Diane Humes: It's very urban here. It is very urban. We are surrounded by concrete and all kinds of businesses, heavily industrial area. And yet people use this park all the time. There are people jogging and biking every day, every hour of the day.

Another project to clean up water flowing into the bayou with detention basins and a created wetland is Willow Waterhole Park. It's also part of Project Brays, the \$450 million effort to create places to handle storm water and at the same time, change the face of a neighborhood.

Becky Edmondson: [Director, Willow Waterhole Greenspace Conservancy]
To have 300 acres of green space in our backyard has just been an incredible gift to the neighborhood and has really changed the view that people have about southwest Houston. This is really a green oasis.

When finished, Willow Waterhole will be another example of cooperation addressing problems and creating a beautiful park in the process.

Becky Edmondson: So we just have the opportunity to reduce the risk of flooding, to rediscover the beauty of nature, and to clean the water at the same time.

Part of the BIG's Implementation Plan involves reminding people how important water is, why it needs to be kept clean, and how to use it wisely...starting with young people. The City of Houston's WaterWorks Education Center is a place for wonder and learning.

Susan Smyer: [Administrative Coordinator, City of Houston, WaterWorks Education Center]

The kids walk into the exhibits and they go, "Wow!" and that happens a lot. And then we do hands-on activities for the kids too that reinforce the experiences they've learned in the exhibit hall. We had one mother and daughter that came to an event and the mother was telling us how her daughter was chastising her for leaving the water on when she brushed her teeth. The kids are getting it and it's a wonderful thing to see when their faces light up.

North of Houston, in Montgomery County, the Spring Creek Nature Center is another place where people of all ages can learn about the critical role water plays in each of our lives.

Teri MacArthur: [Manager, Spring Creek Nature Center]

You know we're all about water. Water is our main stock in trade for our educational programs. They come in and because it's touch-screen TV they can touch something and play the game that's on there or listen to the message that's on there... (*Plays game*). And a little bit further you get to choose a raindrop and it asks you a question about water quality or how to prevent pollutants or contaminants from going into storm water and they'll stand here and play this game all afternoon.

This plan *is* comprehensive. It is *not* magic. It took many years to get Houston area waterways in the shape they are in. It will take decades to clean them up. But the BIG not only has a Plan, but things are already being done.

Rachel Powers: We've already started a series of workshops for local municipal separate storm sewer system –MS4—operators in the region, trying to build their capacity and their ability to work together and learn from each other.

Other parts of the Plan already being implemented include working with the Texas Real Estate Commission to make it easier for inspectors to check septic systems in homes being sold, and they've begun to analyze self-reported data from wastewater treatment facilities to check bacteria levels in the effluent.

The BIG implementation plan addresses bacteria impairments in 11 basic ways, involving many parts of the community. While there are many sources of bacteria, the Plan focuses on four: wastewater treatment facilities, sanitary sewer systems, home septic systems, and storm water... all the while helping the public understand their role in making Houston's water cleaner.

Jeff Taebel: The other thing I guess that I was heartened by is everyone is very much committed to addressing the problem. Where we had debates was about the causes of the problem and the cost effectiveness of various potential solutions.

Taebel says the stakeholders quickly decided they needed to back their recommendations with good data, and not use cookie-cutter approaches.

Jeff Taebel: We need to be careful about just taking a menu approach to possible implementation measures. I think we really need to start and discuss with the stakeholders what makes sense here, what makes sense in this context.

While every part of Texas has its own unique features, other parts of the state can learn from the BIG experience.

Jeff Taebel: Going through this crucible of this 3-year intensive planning process and at times debate I think strengthened existing relationships and built new relationships among the many entities represented on the BIG.- The good thing about working with stakeholders is we had the very agencies and representatives of the very groups that will be responsible for implementing the recommendations in the plan. They're at the table for 3 years running.

Pride of accomplishment seems to be driving those who created the plan, turning it from something on paper into focused activities.

Jeff Taebel: I don't hear our members talking so much just about the words on the paper. I really think this is a movement and I think if we all commit to keeping it going that's really the exciting thing for us, is creating this sustained partnership to tackle this problem on many levels.

Annise Parker: [Mayor of Houston] We can make a difference by coming together, working together and remembering that the primary goal is to make sure that these water courses serve the needs not only of today but of the future.

The BIG Implementation Plan is a tribute to knowledge, collaboration and mutual respect. It is a sign that people who care about their communities, their water, and the kind of environment their children and grandchildren will enjoy, can get involved, can persevere, and can make a difference. Their achievements are a credit to their community and a model for other Texas communities who also want their water to be as good as it can possibly be.

[Credits w/Music under]

Narrator
Carl Masterson

Aerial and Houston Location Video
Texas Parks and Wildlife Department
Richard Roberts

TPWD Video Transfers
Kyle Banowsky

Water Down the Drain (Alex the Frog video)
Center for Global Environmental Education
Hamline University

Video of Mayor Annise Parker and Judge Ed Emmett
Bayou Preservation Association

Lake Houston video: Lake Houston Watershed film by
CORE Design and Chris Nelson Creative

Wastewater treatment plant video
Courtesy of City of League City
Jody Hooks, Public Works Manager
For Water and Wastewater

Photo Credits:
300 block of Main Street
Facing north at Preston Avenue 1856
University of Houston Digital Library

Sam Houston
Texas History Stories: Sam Houston, David Crockett
By E.G. Littlejohn
Portal to Texas History
University of North Texas

Allen brothers
Houston History Voices

Houston City Hall
Ed Uthman

Satellite Imagery
Houston-Galveston Area Council

Videography
Rob Burneson
Chip Morris
Andrea Tantillo

Editor
Rob Burneson

Meeting facilitation and yummy snacks
Rachel Powers

Music: Jewelbeat.com

BIG Members

BIG Members

Michael Bloom
Geosyntec

John Blount
Harris County Architecture and Engineering

Patrick Buzbee
Montgomery County Environmental Health

Marilyn Christian
Harris County Public Health & Environmental Services

Joe Clark

City of Conroe

Robert Collins
Montgomery County

Catherine Elliott
Harris County Flood Control District

Mike Garver
Buffalo Bayou Partnership

Carol Haddock
City of Houston

Teague Harris
Pate Engineers

Shannon Hicks
City of Webster

Bruce Heiberg
Bayou Preservation Association

Jason Iken
City of Houston

Tom Ivy
Concerned Citizen

Ronald Kelling
San Jacinto River Authority
Helen Lane
Houston Audubon Society

Graig Maske
Dodson & Associates/HCEC

Cathy McCoy
Harris County Soil & Water Conservation District

Michael Mooney
The Woodlands Joint Powers Agency

Becky Olive
AECOM

Mitchell Page

Schwartz, Page, & Harding

**Raymond Pavlovich
Nottingham Country MUD**

**Linda Pechacek
LDP Consultants**

**Ceil Price
City of Houston**

**Kathy Richolson
Gulf Coast Waste Disposal Authority**

**Jim Robertson
Cypress Creek Flood Control Coalition**

**Linda Shead
Texas Coastal Partners**

**Brian Shmaefsky
Lone Star College, Kingwood**

**Bob Stokes
Galveston Bay Foundation**

**Michael Turco
US Geological Survey**

Previously served:

**Joe Ferro
City of Webster**

**James Tynan Kelly
Bayou Preservation Association**

**Jim Meley
Harris County Soil & Water Conservation District**

**Melvin Solomon
City of Conroe**

BIG Alternates

**Stephen Archer
Archer Environmental**

**Jessalyn Ballard
Buffalo Bayou Partnership**

**Susie Blake
City of League City**

**Richard Jay Chapin
City of Houston**

**Jon H. Connolly
Lone Star College, Kingwood**

**Brian Craig
City of League City**

**Gina Donovan
Houston Audubon Society**

**Jesse Espinoza
City of Webster**

**Phyllis Frank
Gulf Coast Waste Disposal Authority**

**Frank Green
Montgomery County**

**Pamela Guillory
City of Webster**

Gregory M. Hall, Jr.

**Jonathan Holley
Harris County Flood Control District**

**Stephen Hupp
Bayou Preservation Association**

**Scott Allen Jones
Galveston Bay Foundation**

**Ronald D. Kelling
San Jacinto River Authority**

Carol LaBreche
City of Houston

Fred Lazare
Avenue Community Development Corporation

Michael Lee
US Geological Survey

Michael Lindsey
Montgomery County

Jason M. Maldonado
Atkins

Alisa S. Max
Harris County

Sarah "Sam" Metzger
City of Pasadena

Jeannette H. Oden
US Geological Survey

Snehal R. Patel
Harris County

Mary L. Purzer
AECOM

Nick J. Russo
Harris County

Scott Saenger
Jones & Carter

Michael Schaffer
Harris County

Richard "Dick" Smith
Cypress Creek Flood Control Coalition

Robert Snoza
Harris County Flood Control District

Maria E. Stone

AECOM

**Michael Thornhill
Southwest Water Company**

**Carolyn White
Harris County Flood Control District**

**Mary Ellen Whitworth
EarthShare of Texas**

**Jim Williams
Sierra Club**

**Guyneth Williams
City of Houston**

Previously served:

**Johnny Arrendondo
City of Webster**

**Scott Barnes
Buffalo Bayou Partnership**

**Tony Bennett
AECOM**

**Lisa Miller-Marshall
Galveston Bay Foundation**

Vanessa Mintzer

**Philip Moore
Montgomery County**

**Joe Myers
Harris County Flood Control District**

**Walid Samarneh
City of Houston**

**Mark Stendahl
Nottingham Country MUD**

Nancy Sullins
Klotz Associates

Alex Van Keuren
City of Houston

Produced by the Total Maximum Daily Load Program
Texas Commission on Environmental Quality
Copyright 2013

In Memoriam
Patrick H. Buzbee
1946-2012