

Texas Clean Rivers Program

# **Basin Highlights Report**

Trinity-San Jacinto Coastal Basin San Jacinto River Basin San Jacinto-Brazos Coastal Basin Brazos-Colorado Coastal Basin

January 1996



## **Gulf Coast Basin Assessment Steering Committee**

Jim Adams - Chairman San Jacinto River Authority Montgomery County

Rob Barrett
Harris County Pollution Control

Teresa Battenfield

City of Houston Public Works & Engineering Department

Steve Bearden
Texas Department of Agriculture

Bennie Billington
Sam Houston Resource Conservation & Development

Clyde Bohmfalk
Texas Natural Resource Conservation Commission

Hon. J. Royce Burger Commissioner - Austin County

Tom Calnan
Texas General Land Office

Joe Cronin
San Jacinto County

Stephen Deiss
Texas State Soil & Water Conservation Board

Winston Denton
Texas Parks & Wildlife Department

Helen Drummond
Galveston Bay Estuary Program

Hon. Johnny Elstner Commissioner - Colorado County

Guy Grossman
Texas Railroad Commission

Guy C. Jackson III

Chambers County

Terry Johnson
Texas Department of Transportation

Tom Kessler

Galveston County

Lou Meyer
Liberty County

Gary Montgomery

Greater Houston Builders Association

Donald Mudd Brazoria County Environmental Health

Hon. Carl Nichols Jr.

Commissioner - Wharton County

Deborah Pickering
Texas Chemical Council

Doug Pitcock
Associated General Contractors - Heavy Branch

Hon. James "Buddy" Reynolds Commissioner - Walker County

Lori Roussel
Gulf Coast Waste Disposal Authority

Sidney Shaver
Fort Bend County Floodplain Management

Haskell Simon

Matagorda County

Cathy Sisk
Citizens Environmental Coalition

Hon. Larry Snook
County Judge - Grimes County

Danna Stecher & Dee Rice Texas Water Development Board

Pete Styner (Vice Chairman)
Association of Consulting Municipal Engineers

Kerry Whelan Houston Lighting & Power Company

(Vacant)
Texas Municipal League Local Govt. Representative

## **Texas Clean Rivers Program**

The Texas Legislature in 1991 passed the Texas Clean Rivers Act. The Act was intended to move Texas toward comprehensive water resources planning and management to ensure the integrity of the state's water supply over the long term. The Act requires an assessment of water quality conditions within entire river basins — a regional approach that water quality specialists have long been calling for.

The principal aim of the Clean Rivers Program is to ensure safe, clean water supplies for the future of Texas—for drinking water needs, for industry, for irrigation, for recreation, for healthy ecosystems, and for all other uses of this most valuable state resource. The Clean Rivers Program advocates a watershed management approach to identify key issues, establish priorities for corrective action, and work to implement those actions.

Now into its fifth year, this unique state program has enabled the Houston-Galveston Area Council (H-GAC) to create a regional forum for consideration of water quality issues and priorities among local governments, resource agencies, business and industry, agriculture and forestry interests, conservation groups, and various other basin interests. This has resulted in unprecedented interagency and intergovernmental coordination to improve water quality management in the region.

## **Basins Assessed by H-GAC**

H-GAC is leading the Clean Rivers Program basin assessments for the San Jacinto River Basin and three other coastal drainage basins in the Gulf Coast Planning Region (the Brazos River Authority, the Lower Colorado River Authority, and the Trinity River Authority are assessing their respective river basins within the region).

Trinity-San Jacinto Coastal Basin. A 247-square-mile area of coastal plain that covers portions of Chambers, Harris and Liberty counties between the Trinity and San Jacinto rivers. Cedar Bayou is the principal waterway in this small basin, which drains directly to the coastal waters of Trinity Bay and Upper Galveston Bay. Baytown is the principal city in the basin.

San Jacinto River Basin. A 5,600-square-mile area that covers all of Harris and Montgomery counties and portions of Fort Bend, Grimes, Liberty, San Jacinto, Walker and Waller. This important basin includes the most highly-urbanized and industrialized portions of the Houston metropolitan area. Major waters besides the river include Lake Conroe, Lake Houston, the Houston Ship Channel, Spring and Cypress Creeks, and the City of Houston's extensive bayou network, including Buffalo Bayou.

San Jacinto-Brazos Coastal Basin. A 1,440-square-mile area of flat coastal plain between the San Jacinto and Brazos rivers which includes numerous small tidal streams draining toward Galveston Bay in the east and directly to the Gulf of Mexico in the west. The basin encompasses all of Galveston County (except Bolivar Peninsula) and portions of Brazoria, Fort Bend, and Harris counties. Major waters include Clear Creek and Lake, Armand Bayou, Dickinson Bayou, and Chocolate Bayou as well as numerous small bays and waters associated with the Galveston Bay estuary, including the ecologically-significant Christmas Bay and several of importance to industry and shipping.

Brazos-Colorado Coastal Basin. A 1,850-square-mile area of flat coastal plain between the Brazos and Colorado rivers which drains directly to the Gulf of Mexico. This narrow, elongated basin stretches inland nearly 100 miles from Brazoria and Matagorda counties at the coast, then across Fort Bend and Wharton counties, and finally to Austin and Colorado counties near Interstate 10. Major waters include Caney Creek and the San Bernard River, which is one of the few rivers in Texas that flows directly into the Gulf rather than emptying into a coastal bay system.

## Texas Clean Rivers Program 1995 Basin Highlights Report

#### **Purpose**

The purpose of this annual Basin Highlights Report is to review key accomplishments under the Texas Clean Rivers Program during 1995 for the San Jacinto River Basin, Trinity-San Jacinto Coastal Basin, San Jacinto-Brazos Coastal Basin, and Brazos-Colorado Coastal Basin (since the publication of H-GAC's last basin assessment report in October 1994). This report also looks ahead to priorities and milestones for the coming year of basin assessment activities in these basins.

## 1995 Highlights

While continuing efforts toward various Clean Rivers Program objectives, a major focus in 1995 was the drafting of a new work plan for the next two crucial years of program milestones. However, before turning to what lies ahead in 1996, the next section reviews significant activities during 1995.

#### **Project Management & Coordination**

H-GAC continued its special emphasis on regional coordination through the Clean Rivers Program given the variety of concurrent environmental programs active in this major metropolitan and coastal area of Texas.

- Working with the Steering Committee and other advisory groups, developed a new two-year work plan for all major Clean Rivers Program tasks through August 1997.
- Continued to serve on the statewide Clean Rivers Program long-term planning committee to set
  program priorities and coordinate activities among the program Partners and with TNRCC officials
  and staff.
- Continued to coordinate as needed with neighboring program Partners for the Brazos, Colorado and Trinity River basins.
- Continued to work closely with management and staff of TNRCC Region 12 to identify issues that need attention in the region and to coordinate outreach activities.
- Continued to monitor other relevant environmental programs and projects in the region that relate to watershed assessment and water quality management.
- Participated in the inaugural meeting of the new Galveston Bay Council, comprised of various stakeholders who will advise the Galveston Bay Estuary Program on implementation of the Galveston Bay Plan.
- Continued regular briefings on activities and progress to H-GAC's Board of Directors and Natural Resources Advisory Committee.
- Monitored and provided input on TNRCC's ongoing efforts to re-orient its programs to a watershed
  focus, including the adoption of new rules for simultaneous expiration of discharge permits within
  watersheds to enable coordinated permitting.

#### Steering Committee

H-GAC continued to work with, and seek input from, individual members and sub-groups of the Gulf Coast Basin Assessment Steering Committee. Meetings of the full committee are reserved for major milestones in the Clean Rivers assessment process.

- Hosted a Steering Committee meeting in Summer 1995 to provide updates on Clean Rivers Program activities and to discuss 1996-97 work plan priorities.
- Created a Basin Advisory Network which includes more than 60 individuals who have served on various Clean Rivers committees and working groups during the basin assessment process (including representatives of numerous cities, soil and water conservation districts, regional water authorities, other regional programs, county health and flood control districts, state agencies, chambers of commerce, local utility districts, colleges and universities, industry, agriculture, development companies, utilities, conservation organizations, national forests and wildlife refuges, marinas and wharves, and civic associations).
- Continued to use a special subcommittee of the Steering Committee -- the Long-Range Issues Group
   -- to discuss key program issues and preview upcoming Steering Committee agenda items for
   preliminary feedback to project staff and the TNRCC.

## Basin Monitoring

Page 2

H-GAC picked up in 1995 where the Galveston Bay National Estuary Program left off at the end of 1994. Working with an interagency team, H-GAC laid the foundation for a regional monitoring strategy to coordinate and better target surface water quality monitoring efforts in the four basins.

- Completed service on the Galveston Bay National Estuary Program's interagency Regional Monitoring Plan Work Group, which assisted with the development of a coordinated monitoring strategy as part of the Galveston Bay Plan.
- Established a Regional Monitoring Work Group (comprised of four federal agencies, four state agencies, two county agencies, one river authority, three City of Houston divisions, and a conservation foundation that all do some degree of ambient monitoring) to begin the interagency coordination and plan development process for H-GAC's four basins, building on the monitoring strategy and planning process just completed for Galveston Bay.
- Worked with individual monitoring agencies to document existing fixed-station monitoring sites and data collection activities and to review current Quality Assurance/Quality Control practices.
- Developed with the Regional Monitoring Work Group preliminary goals and objectives for the regional monitoring plan, and then worked with TNRCC Region 12 to develop potential network scenarios under a regional monitoring approach.
- Reached consensus within the Regional Monitoring Work Group to use TNRCC's own Quality
  Assurance Project Plan (QAPP) as the model for a regional QAPP that will govern implementation
  of the regional monitoring plan while allowing for local flexibility in monitoring and laboratory
  methods.
- Supported TNRCC Region 12's coordination of wastewater compliance monitoring agencies and personnel in the area to eliminate duplication of effort and work toward standard data collection, management and reporting methods that will promote data sharing.

1995 Basin Highlights Report

#### Basin Assessment

In this "in-between" year amid biennial basin assessment reports for 1994 and 1996, H-GAC continued efforts to establish a water quality baseline for the region's streams, lakes and bays against which future status and trends in water quality may be evaluated.

- Participated in a regional consortium, comprised of various public agencies and led by H-GAC's
  Data Service Department, to share the costs of acquiring high-resolution aerial imagery for the
  13-county planning region through an agreement with the Texas Department of Information
  Resources and the U.S. Geological Survey (one-meter, color infrared, digital imagery flown in
  1995 that will be very useful for land-use analysis and other GIS applications).
- Completed a database verification project (employing interns under the supervision of TNRCC Region 12 staff) to investigate extreme values in H-GAC's baseline database by checking them against original TNRCC sampling records.
- Completed an initial "action priority" ranking of designated stream, lake and bay/estuary segments in each basin for use by the TNRCC in statewide management planning.
- Continued to monitor the status of pending federal storm water discharge permits that EPA was to have issued by now for the City of Houston, City of Pasadena, Harris County and the Harris County Flood Control District.
- Continued to participate in the statewide Clean Rivers Program Data Analysis Task Force to discuss analysis methods and resolve technical issues among the program Partners and TNRCC staff.

#### Data Management

Much progress was made in 1995 toward the Clean Rivers Program goal of establishing H-GAC as a regional clearinghouse for water quality data and various forms of digital environmental data maintained through H-GAC's Regional Geographic Information System (GIS).

- Completed a data management survey of the various monitoring entities participating in the Regional Monitoring Work Group as the first step toward implementing electronic data-sharing among these agencies and with TNRCC in Austin.
- Continued to coordinate with TNRCC Austin and Region 12 staff on GIS development, computer networking, and data exchange issues, and also explored data exchange opportunities with other agencies such as the Texas General Land Office.
- Continued to work with the TNRCC, Galveston Bay Estuary Program, and Trinity River Authority to coordinate GIS and data management activities associated with ongoing assessment of Galveston Bay.
- At the suggestion of the Galveston Bay Estuary Program Director, participated in a workshop of the Gulf of Mexico Program's Data & Information Transfer Committee, which is developing similar methods and protocols for information exchange at the federal and state agency level.
- Continued to participate in internal H-GAC user groups and policy and technical committees which
  are guiding the agency's evolution as a regional data and GIS clearinghouse for many functions,
  including regional water quality management.
- Participated in the inaugural meetings of various agencies, universities and other organizations
  interested in developing a "Texas Water Web" to coordinate electronic exchange of -- and public
  access to -- water resources information statewide via the Internet.

- Attended a briefing by the Texas Attorney General's office on Freedom of Information and public access issues related to electronic data.
- Acquired Global Positioning System (GPS) equipment and completed the required TNRCC certification course to prepare to verify locational data within the basins as required under the 1996-97 work plan.

## Basin & Feepayer Outreach

H-GAC continued to provide information and lend assistance to various agencies and groups in the basins who have sought H-GAC's help as a result of the Clean Rivers Program.

- Briefed the City of Houston Mayor's Environmental Task Force (comprised of various city department representatives) on regional initiatives made possible by the Clean Rivers Program, including GIS development and H-GAC's role as a data clearinghouse -- as well as highlighting extensive City of Houston staff involvement in the basin assessment process since 1992.
- Participated with TNRCC staff in meetings of the newly-formed Clear Creek Waste Stream
   Assimilation Committee, which was created by area dischargers in response to the TNRCC's basin-wide permitting rule and to support and improve wasteload forecasting for Clear Creek through information exchange.
- Hosted a well-attended community roundtable meeting in Bay City to facilitate discussion among Matagorda County citizens, elected officials, and resource agency representatives in response to water quality concerns raised by area residents and Clean Rivers advisory committee members for the Brazos-Colorado Coastal Basin.
- Met with county officials and community representatives in Austin County to discuss possible strategies for addressing wastewater treatment needs and alleviating problems from septic tank discharges to ditches and waterbodies.
- Met with the Matagorda County Judge and the county's Clean Rivers Program representative to discuss drainage and environmental concerns county-wide and in several key watersheds.
- Provided findings on Lake Houston from H-GAC's 1994 Clean Rivers Program report to staff of the City of Houston Public Works & Engineering Department who were beginning a preliminary evaluation of potential intake locations for a new water treatment plant to be sited near the southern end of the lake.
- Provided technical support to a Galveston Bay Foundation committee that is working to track selfreporting data for permitted dischargers in the bay vicinity.
- Made a field tour of lower Caney Creek in Matagorda County to view streambank erosion problems and drainage activities in the area.
- Made a field tour of Lake Conroe to view watershed management activities implemented by the U.S.
   Forest Service within the Sam Houston National Forest, which covers extensive areas of the upper San Jacinto River Basin.
- Helped to promote among local governments in the region the "Water Conservation '95 Conference" co-sponsored by the City of Houston, the Harris-Galveston Coastal Subsidence District, the American Water Works Association - Texas Section, the Texas Water Development Board, and the TNRCC.

- Hosted a public meeting and an industrial water users workshop at H-GAC sponsored by the City of Houston's Water Conservation Program.
- Provided information on various funding agencies and programs, including the Section 319 Nonpoint Source Management program, to local governments who participated in an H-GAC grants workshop.

#### Public Outreach

After initial efforts in 1992 and 1993 to obtain public input on basin issues and priorities, H-GAC has emphasized "hands-on" volunteer activities that enable area residents to learn first-hand about water quality management and the importance of a watershed-based approach. In the meantime, while the Clean Rivers Program has been busy with the various building blocks of watershed assessment and management (e.g., comprehensive monitoring plans, data management and access plans, baseline analysis methods), H-GAC has used various means to "get the word out" on the benefits to the region from this unique state program.

- Continued to report on Clean Rivers Program progress and upcoming activities in H-GAC's Regional
  Resources newsletter, which is received by a 1,000-person mailing list including local elected
  officials, local government staff, H-GAC advisory committee members (including Clean Rivers
  committees), federal and state legislative delegations, chambers of commerce, libraries, news media,
  various state and federal agencies, and numerous other groups and individuals.
- Distributed several thousand copies of H-GAC's 1995 Report to the Region, a concise one-page overview of Clean Rivers Program accomplishments since 1992 and upcoming priorities through Fall 1997.
- Distributed H-GAC's 1994 Clean Rivers Program report to the Steering Committee, Basin Advisory Network, H-GAC's Natural Resources Advisory Committee (and in response to specific requests, to the Library of Congress, the Academy of Natural Sciences, the U.S. Geological Survey Houston Subdistrict, the Texas Department of Criminal Justice environmental compliance division in Huntsville, the City of Houston Public Works & Engineering Department, the Galveston Bay Foundation, an environmental law class at Sam Houston State University, and a biologist for the Texas General Land Office's oil spill bioremediation pilot project on the lower San Jacinto River).
- Mailed special Clean Rivers Program packages to public libraries across the region for public display and distribution of various program materials and reports.
- Made presentations in 1995 to the Baytown Rotary Club, the Texas Association of Environmental Professionals, and the Texas Watch statewide Partners Meeting.
- Distributed Clean Rivers Program materials and discussed the basin assessment process with
  interested individuals through display booths at the annual Bay Day festival in La Porte, a Texas
  Recycles Day Fair at Houston City Hall, the annual Texas Watch statewide Meeting of the Monitors,
  the annual Regulatory Symposium of the Texas Association of Environmental Professionals, and at
  H-GAC's Annual Meeting of local elected officials from the 13-county area.

#### **Texas Watch**

Through the Houston-Galveston Texas Watch Partners Network — a partnership with the TNRCC, the Galveston Bay Foundation, local industries, and others — H-GAC continued to expand and support (with training, certification, QA/QC field checks, data management, equipment and supplies, and annual symposia) the state's largest concentration of volunteer citizen monitors of water quality — now some 1,700 volunteers.

- Completed a Memorandum of Agreement between H-GAC, the TNRCC, and the Galveston Bay Foundation to formalize coordination of volunteer citizen monitoring activities in the region.
- H-GAC's Texas Watch coordinator was elected to serve on the statewide Texas Watch Advisory Council.

#### Trash Bash

Working for a second year with an enthusiastic public/private event committee, H-GAC and its local partners hosted some 5,000 area volunteers in the 1995 "River, Lakes, Bay 'n' Bayous Trash Bash" -- the state's largest annual volunteer trash cleanup event -- with Trash Bash sites stretching from Lake Conroe near the top of the San Jacinto River Basin all the way to the Houston Ship Channel and Galveston Bay at the Texas City Dike.

- For the second annual Trash Bash in 1995, added cleanup sites at Baytown, Dickinson Bayou and along Buffalo, White Oak and Brays bayous within the City of Houson and also recruited former Houston Oilers coach Bum Phillips as the event's "Chief Trash Basher," which was part of a greatly-expanded publicity effort across the area that attracted television, radio and newspaper coverage.
- Working with area school districts and science teachers, involved some 7,000 schoolchildren in art and essay contests associated with the 1995 Trash Bash, exploring the theme of "What is a Watershed?" as an educational spin-off of the event.
- In association with the 1995 Trash Bash, H-GAC staff taped a 30-minute interview with KIKK-FM 95.7 (one of the event sponsors) which highlighted various activities under the Clean Rivers Program in addition to the volunteer cleanups.
- Involved new TNRCC Commissioner Ralph Marquez in a Phillips 66 luncheon at which the company's CEO and President presented an \$8,500 check to the Texas Conservation Fund to fulfill Phillips' annual pledge in support of the Trash Bash (\$1 for every bag of trash filled by the volunteers, which provides valuable seed money for the next annual event).
- Due to the success of the annual Trash Bash, received a Clean Houston Mayor's Proud Partner
  Award from Houston Mayor Bob Lanier and two national awards from Keep America Beautiful -including one in the "Take Care of America" public lands program -- as well as receiving recognition
  from Governor Bush and the TNRCC Commissioners as one of eight statewide finalists in the
  Government category of the 1995 Governor's Environmental Excellence Awards.

#### Storm Drain Stenciling

Local stenciling projects, in which volunteers paint anti-dumping messages near storm sewer inlets, are another way that area residents have been involved in pollution prevention and water quality education efforts in their own communities.

- In partnership with the City of Houston, the Gulf Coast Waste Disposal Authority, and TNRCC, initiated an ongoing, neighborhood-based storm drain stenciling program for the city (with the inaugural Saturday morning event on Washington Avenue attended by TNRCC Commissioner Peggy Garner and the city's Director of Environmental Policy, Mary Ellen Whitworth).
- Arranged a Saturday morning storm drain stenciling event in the City of Columbus in cooperation with the Lower Colorado River Authority, the Girl Scouts of America and city officials.

Page 6 1995 Basin Highlights Report 4600

• Received recognition for the City of Houston's storm drain stenciling efforts in the July/August issue of the popular *Houston Life* magazine.

## Nonpoint Source Pilot Project

1995 marked the start of a much-anticipated water quality investigation of Dickinson Bayou in Galveston County. The project is designed to assess the extent and impacts of pollutant loadings into the bayou from storm runoff in the surrounding watershed. H-GAC is pursuing this project through a subcontract with the U.S. Geological Survey and in partnership with TNRCC Region 12, the Galveston County Health District, Galveston County Water Control & Improvement District No. 1, the City of League City, and the Natural Resources Conservation Service (formerly the U.S. Soil Conservation Service).

- Completed 10 months of a one-year sampling program for Dickinson Bayou and selected watershed sites, including wet-weather monitoring during four storms and an intensive survey of the bayou in August.
- Hosted a public meeting in Dickinson just before the start of monthly sampling in the bayou and watershed to introduce the project to the community and explain its purpose and timeline.
- Participated in the Galveston Bay Estuary Program's Dickinson Bayou Watershed Work Group, which includes representatives of all agencies and organizations that have current or planned projects in the watershed.

#### Other Activities

- Continued to participate in the Greater Houston Partnership's Clean Water Coordinating Council, which tracks progress and developments in the Galveston Bay Estuary Program, the Clean Rivers Program, the Texas Coastal Management Program, and other regional programs.
- Assisted TNRCC Austin staff to develop an EPA-funded pilot project to explore Total Maximum
   Daily Load (TMDL) development using GIS technology, for which H-GAC will provide GIS support
   and technical assistance based on it Clean Rivers Program experience.
- Made presentations on basin monitoring strategies, GIS development, and public involvement at the
  national conference of the American Water Resources Association, which was held in Houston, and
  also moderated the "Public Policy and Social Issues" session during the Water Management in Urban
  Areas portion of the conference (in addition to assisting the local host committee during the year).
- Continued to monitor the Clean Water Act reauthorization process in Congress, which has implications for all aspects of water quality assessment and management.

#### 1996 Milestones

1996 and 1997 will be crucial years in the evolution of the Clean Rivers Program since its creation by the Texas Legislature in 1991. Now that significant progress has been made in establishing the building blocks of watershed management at the region level, the program is turning the corner toward various action steps. While H-GAC will continue to handle overall project management, coordination and priority-setting along with its regional Steering Committee, we will be looking to involve other agencies and local governments more directly in specific watershed protection and enhancement actions.

With this next critical phase of the Clean Rivers Program approaching, 1995 became a year of extensive strategic planning and preparation. H-GAC worked closely with an environmental consulting team

during November 1995 to consider logistics and develop more detailed strategy for effectively implementing key elements of its work plan over the next two years. Based on this planning effort -- in which the overwhelming theme was the wise use of limited resources to produce meaningful results in the region -- H-GAC in 1996 will:

- Complete a regional monitoring plan that coordinates surface water monitoring activities among agencies at all levels of government, targets monitoring to specific concerns and areas within the basins, and generates reliable data to support more effective decision-making and management.
- Complete a regional Quality Assurance Project Plan (QAPP) to ensure that data collected under the regional monitoring plan will be valid and consistent, acceptable for use in statewide and national water quality databases, and suitable for sharing among agencies and with researchers and the public.
- Fund an extensive biological monitoring effort within the basins, including testing of fish-tissue samples and other well-established methods, as a cost-effective way to assess stream health and investigate priority concerns while generating valuable new information that does not duplicate existing surface water monitoring in the region.
- Complete the analysis of recent monitoring data collected in the basins -- including newer data for 1992-94 that was not reflected in the 1994 basin assessment report -- to establish a baseline for ongoing water quality trends in the region and to help target future monitoring efforts toward emerging concerns and priority watersheds.
- Fund a "targeted monitoring" initiative in the basins which proposes an area-wide study of low-flow conditions in waters which receive wastewater treatment facility discharges to provide valuable new background information on local water conditions for both the TNRCC and individual applicants engaged in the permitting process.
- Establish H-GAC as a regional data clearinghouse to promote efficient and reliable "uploading" of surface monitoring and other environmental data from local agencies to the TNRCC via the Internet and other electronic means as well as "downloading" of state-maintained data for access and dissemination within the region.
- Implement a regional data management plan that ensures appropriate handling, transfer and storage of environmental data for use in the Clean Rivers Program (and by others) via H-GAC's Regional Geographic Information System (GIS), while also providing for the use of Global Positioning System (GPS) technology to verify the locational accuracy of basin data.
- Complete all field work for the Dickinson Bayou pilot project, followed by extensive data analysis and evaluation, that will lead to the publication of findings and nonpoint source management recommendations for the watershed in Spring 1997.
- Publish a 1996 basin assessment report which meets the information needs of the TNRCC, local basin interests, and the public as reflected in public forums held across the area during 1996 to provide for public comment on the draft report.
- Maintain one of the most active Steering Committees in the state, along with a supporting Basin Advisory Network of interested individuals and organizations across the region, to ensure that the Clean Rivers Program serves its purpose and makes a difference in the basins.

#### For More Information

If you would like more information on the Texas Clean Rivers Program or any specific program activities cited in this report, please contact a member of H-GAC's project team by calling 713/627-3200 or by writing to the address below.

## **Clean Rivers Program Staff**

Jeff Taebel, AICP
Manager, Community & Environmental Planning

Carl E. Masterson
Environmental Program Coordinator

Gary Mitchell, AICP Senior Regional Planner

Todd Running
Lily Wells
Senior Environmental Planners

Chris Havstad
GIS Analyst

Melanie Goldstone

Administrative Assistant



## Houston-Galveston Area Council

Community & Environmental Planning Department PO Box 22777 - 3555 Timmons Houston, Texas 77227-2777 713 / 627-3200

> Jack Steele Executive Director

Steve Howard

Director of Program Operations

The Houston-Galveston Area Council (H-GAC) is the regional voluntary association of local governments and local elected officials in the 13-county Gulf Coast Planning Region. Through H-GAC, local governments consider shared problems and cooperate in developing area-wide solutions.