

The H-GAC Region

The Gulf Coast Region follows the southeast Texas coastline from Boliver Island to Palacious, reaching northward into the piney woods to Huntsville and Lake Livingston, and westward through Columbus to Weimar. The region encompasses approximately 12,500 square miles in 13 counties including Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty, Matagorda, Montgomery, Walker, Waller & Wharton. According to the 2000 Census, the region's population numbers 4,854,454, an increase of 957,312 people (25%) over that in 1990. Forecasts project an increase of 40% over the next twenty years with the greatest growth expected in Harris, Brazoria, Fort Bend, Galveston and Montgomery Counties.

Land use in the region is diverse, ranging from urban development to grazing lands to pine forest to coastal wetlands. The largest use of land in the region is still for agricultural purposes. However the Houston metropolitan area, the fourth largest in the nation, includes heavy industry, high-rise office buildings, large apartment complexes, museums, sporting event complexes, and regional shopping malls as well as single-family residential developments. Other urbanizing areas are located in Galveston, eastern Fort Bend, and southern Montgomery Counties. Industrial activities including a large petro-chemical base, are found in the Baytown and Pasadena areas of Harris County, Freeport in Brazoria County and Texas City in Galveston County. Clear Lake City is home to NASA's Johnson Space Center.

The H-GAC region is comprised of **diverse types of waterbodies**. Galveston Bay and its complex estuarine system are located in the southeast section of the region. The San Jacinto River, and its associated watershed of creeks and bayous traverses from north to south, flowing into the Houston Ship Channel, and eventually Galveston Bay. The Trinity, Brazos, San Bernard and Colorado River watersheds also find their way to the coast. Large freshwater bodies include Lake Conroe in Montgomery County and Lake Houston in Harris County, both of which are drinking water supplies for the City of Houston, the Wallisville Reservoir in Chambers and Liberty counties, and the southern reaches of Lake Livingston, also a City of Houston drinking water source, in Walker County.

Program History/Background

The Houston-Galveston Area Council (H-GAC) has had an active water quality management program (WQMP) **for over 30 years**. At the time of the initial the primary regional water quality issues in the region were related to point source discharge from cities, utility districts and industry. H-GAC studies addressed the need for wastewater treatment facilities and the issue of regionalization in 1971 (Eight County Regional Sewer Study) and 1976 (Gulf Coast State Planning Region Waste Treatment Management Study). These studies were conducted with state and local funds. In 1975, the Governor designated H-GAC as the planning agency to develop the comprehensive Area wide Waste Treatment Management Plan for the Greater Houston Area. This plan, authorized by Section 208 of the Federal Water Pollution Control Act Amendments of 1972 and commonly known as the 208 Plan was totally funded by the U.S. Environmental Protection Agency. Subsequent planning efforts have assessed a range of water quality issues including:

- Identification of existing and potential water quality problems caused by point and nonpoint sources of pollution;
- Determination of water quality levels needed to ensure progress toward the national goal of fishable/swimmable waters;
- Identification of agencies to implement the plan and assessment of impacts associated with the recommended plan.

Over the years, H-GAC has worked with local governments to resolve a variety of water quality issues affecting the Gulf Coast Region. These efforts have been funded through a combination of local, state and federal funds and include:

- *Establishing Regional Goals and Objectives for Water Quality.* Periodic review and development
- *Collecting and Forecasting Wastewater Effluent Quantities.* Determine present and project future needs and encourage regionalization of small WWTPs.
- *Assisting Local Government in EPA Stormwater Permit Program Implementation .* Present workshops including regulatory compliance timelines, support the identification of nonpoint sources of pollution, and promotes best management practices for their control through regular workshops.
- *Groundwater Protection.* Addressed through the Wellhead Protection Program.
- *Conducting Environmental Reviews.* Provide comment on state and federally funded projects.
- *Supporting Galveston Bay Protection Initiatives.*
- *Coordinating Water Quality Management Activities of Galveston Bay Estuary Program.*
- *Assessing Water Quality of Region Coastal Basins, Rivers and Streams.* See the Texas Clean Rivers Program (CRP).
- *Coordinating Activities of the Texas Coastal Management Plan -* coordination with local governments
- *Increasing Knowledge of Local Government Surveys -* Land use management techniques and construction site erosion control measures

Annual Report to TCEQ and EPA

Each year water quality management planning activities are summarized in a document entitled *Gulf Coast Region Water Quality Management Program Update*. The report is submitted to the H-GAC Natural Resources Advisory Committee (NRAC) and Board of Directors and then to the Texas Commission on Environmental Quality (TCEQ) and EPA for review, comment and approval. Questions and requests for copies of reports related to water quality planning in the H-GAC Gulf Coast Region should be directed to:

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