

## 4 Conclusion and Lessons Learned

The Galveston Bay Status and Trends Project completed a number of tasks during the 2004-2006 project period. The tasks included:

- An update of the Project's Quality Assurance Project Plan (QAPP),
- An update of agency databases,
- Acquisition of new agency data sets,
- An update of indicators previously developed by the Galveston Bay Indicators Project with new Status and Trends data,
- Completion of specialized analyses on water and sediment quality data, coastal fisheries data, habitat data, and gaps in various data sets,
- A revision of the Status and Trends website ([www.galvbaydata.org](http://www.galvbaydata.org)) and addition of data portals to improve access to summarized and raw data,
- Development of issue papers for GBEP's Charting the Course project,
- Development of Status and Trends and indicator graphics for use in GBEP outreach publications; and
- Various presentations at GBC and technical subcommittee meetings as well as outreach presentations to non-GBEP organizations and student groups at the higher education and K-12 level.

While much progress was made in the 2004-2006 project year to update, acquire, analyze, and disseminate data describing the Lower Galveston Bay watershed, additional work needs to be done to urge the development of additional data sets, primarily for analysis of the Lower Galveston Bay watershed's changing landscape. Knowledge gaps exist for:

- Emerging water and sediment quality contaminants (pharmaceuticals and metabolites, endocrine disruptors/hormones, plasticizers, and fire retardants)
- Air deposition of pollutants such as nitrogen, mercury, and other contaminants
- Pathways of contaminant mobility through the food web
- Modeling ecosystem structure and function
- Monitoring of terrestrial plants and animals (particularly invasives)
- Acquisition of accurate data describing location and acreage of permitted wetland activities
- Acquisition of accurate data describing acreage and location of wetland mitigation and restoration projects

Additional work should also be done to transfer results of the current and previous Status and Trends Project years to the [www.galvbaydata.org](http://www.galvbaydata.org) website.

## 5 Bibliography

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## 6 Appendices

**Appendix A.** Water and sediment quality stations of the Clear Creek/Clear Lake watershed monitored by the Texas Commission on Environmental Quality and H-GAC Clean Rivers Program. Stations highlighted in red are estuarine stations (estuarine screening levels apply).

Distance to Bay (m)	Station Number	Station Description
16,495	16472	CHIGGER CREEK AT OAK DRIVE IN EAST FRIENDSWOOD
16,013	11448	CLEAR CREEK TIDAL AT FM 528 EAST OF FRIENDSWOOD
14,982	16611	MAGNOLIA CREEK UPSTREAM OF FM518, LEAGUE CITY, 30M UPSTREAM OF WWTP
14,909	16576	CLEAR CREEK TIDAL AT BROOKDALE DR IN LEAGUE CITY
12,471	16952	NASA BLVD AND GRISSOM ROAD
12,188	16577	CLEAR CREEK TIDAL AT CHALLENGER PARK BOAT RAMP
11,550	17485	TRIBUTARY OF HORSEPEN BAYOU AT PENN HILLS LANE
10,608	11447	CLEAR CREEK TIDAL AT IH 45 EAST OF FRIENDSWOOD
10,469	11505	ARMAND BAYOU TIDAL IMMEDIATELY DOWNSTREAM OF OILFIELD ROAD
9,641	11402	BIG ISLAND SLOUGH AT RED BLUFF ROAD IN SOUTHEAST HOUSTON
9,500	17623	ARMAND BAYOU TIDAL UPSTREAM OF BAY AREA BLVD
9,287	16575	CLEAR CREEK TIDAL AT WALTER HALL COUNTY PARK BOAT RAMP IN LEAGUE CITY
9,236	11409	HORSEPEN BAYOU AT BAY AREA BLVD. NORTH OF NASA
8,882	11503	ARMAND BAYOU TIDAL AT BAY AREA BLVD NORTH OF NASA
8,867	17318	HORSEPEN BAYOU AT UNIVERSITY DRIVE
8,790	17319	ARMAND BAYOU TIDAL AT BAY AREA PARK PIER
8,783	11446	CLEAR CREEK TIDAL AT SH 3 NEAR WEBSTER
8,608	17622	ARMAND BAYOU TIDAL AT BAY AREA PARK
8,512	17928	COW BAYOU AT NASA ROAD 1 IN WEBSTER
8,213	17631	HORSEPEN BAYOU AT STORMDRAIN AT MIDDLEBROOK ROAD
8,086	17317	HORSEPEN BAYOU AT MIDDLEBROOK DRIVE
8,038	11408	HORSEPEN BAYOU 1.4 KM DOWNSTREAM OF BAY AREA BLVD.
8,000	15458	CLEAR CREEK AT EGRET BAY BLVD. (FM 270) SE OF WEBSTER
6,820	11501	ARMAND BAYOU TIDAL/UPPER MUD LAKE 2.8KM UPSTREAM OF NASA 1 BRIDGE
6,624	16475	ROBINSONS BAYOU AT FM270 IN LEAGUE CITY
6,234	16572	CLEAR CREEK TIDAL AT THE MOUTH OF ROBINSONS BAYOU
6,078	16573	ROAD IN LEAGUE CITY
5,939	11500	ARMAND BAYOU TIDAL LOWER MUD LAKE 1.4KM UPSTREAM OF NASA 1 BRIDGE
5,509	11499	ARMAND BAYOU TIDAL AT NASA 1 BRIDGE
4,747	16571	CLEAR LAKE AT RED BUOY #22 ACROSS FROM HILTON HOTEL ON NASA ROAD 1
3,098	13335	CLEAR LAKE AT CM 17
2,331	16485	JARBO BAYOU AT LAWRENCE ROAD IN KEMAH
1,557	16671	CLEAR LAKE AT RED BUOY #14; NORTH OF SHORE ROAD IN CLEAR LAKE
1,351	16476	CONFLUENCE IN KEMAH
190	16563	CLEAR LAKE CHANNEL AT KEMAH WATERFRONT

**Appendix B.** Common names of species captured with bag seine, shrimp trawl or gill net in the Galveston Bay system and analyzed in the biodiversity analysis.

Atlantic Bumper	Gulf Stone Crab	Sargassum Fish
Atlantic Brief Squid	Hard Head Catfish	Scaled Sardine
Atlantic Croaker	Inland Silverside	Seabob
Atlantic Cutlass Fish	Lane Snapper	Sergestid Shrimp
Atlantic Rangia	Least Puffer	Sheepshead
Atlantic Stingray	Lesser Blue Crab	Sheepshead Minnow
Bay Anchovy	Lined Seahorse	Shrimp Eel
Bay Whiff	Lined Sole	Silver Perch
Black Drum	Longnose Anchovy	Silver Sea Trout
Blue Catfish	Longnose Killifish	Slender Sargassum Shrimp
Blue Crab	Longnose Spider Crab	Smallmouth Buffalo
Brown Rangia	Longnose Swimming Crab	Smooth Mud Crab
Brown Shrimp	Longwrist Hermit	Smooth Puffer
Cabbagehead	Mantis Shrimp	.Southern Flounder
Code Goby	Molly Miller	Southern Kingfish
Common Carp	Naked Goby	Southern Stingray
Daggerblade Grass Shrimp	Ocellated Flounder	Spanish mackerel
Diamond Killifish	Opossum Pipefish	Speckled Worm Eel
Dusky Pipefish	Pigfish	Spot
Estuarine Snapping Shrimp	Pinfish	Spotfin Mojarra
Flag Mojarra	Pink Shrimp	Spotted Gar
Fringed Flounder	Rainwater Killifish	Spotted Seatrout
Fringed Pipefish	Red Drum	Star Drum
Fringed Sole	Rock Sea Bass	Striped Anchovy
Gafftopsail Catfish	Rough Silverside	Striped Mullet
Gizzard Shad	Roughback Shrimp	Tarpon
Grass Carp	Roughneck Shrimp	Thinstripe Hermit
Grass Shrimp	Roughtail Stingray	Threadfin Shad
Gray Snapper	Sailfin Molly	Tidewater Silverside
Gulf Flounder	Sand Perch	Triple Tail
Gulf Butterfish	Sand Seatrout	Western Mosquitofish
Gulf Killifish	Sargassum Shrimp	White Mullet
Gulf Menhaden	Sargassum Swimming Crab	White Shrimp
Gulf Pipefish	Sargassum Triggerfish	