

## **Resources at Risk for Galveston Channel, Galveston Bay, Texas**

### **I. Spill Source Information**

This report was prepared at 1230 EDT on 20 July 2009. On 19 July at 1100 CDT the *M/V Chios Liberty* released an estimated 2000 gallons of IFO 180 while at berth at pier 34 in the Port of Galveston (29° 18'30 N, 094° 48'32W).

### **II. Geographic Region Covered**

This report covers the Galveston Channel, Pelican Island, and Bolivar Roads. Consult other Hotline reports for oil location information.

### **III. Shoreline Resources at Risk**

Shorelines along Galveston Channel on Galveston Island include: exposed and sheltered solid man-made structures, exposed riprap, and small pockets of sand beaches and sheltered scarps. The Galveston Island shoreline along Bolivar Roads is exposed riprap, salt marsh, and tidal flats.

Shorelines along Pelican Island are composed primarily of marshes, mixed sand and shell beaches, fine-grained sand beaches, clay scarps, and sheltered and exposed solid man-made structures. The shoreline of the island to the northwest of Pelican Island is mostly composed of salt marshes, mixed sand and shell beaches, and scarps and steep slopes in clay.

### **IV. Biological Resources at Risk**

Several federally and state listed species occur around Pelican Island and Bolivar Roads (Table 1).

**Table 1. Federally and State Listed Species Present in Pelican Island Region**

<b>Species</b>	<b>Geography</b>	<b>Activity/ Abundance</b>	<b>Timing</b>
Brown pelican (federally endangered)	Island off of NW corner of Pelican Island; Bolivar Roads;	Present Nesting	Year-round Apr-Sept
Reddish egret (state threatened)	Island off of NW corner of Pelican Island	Present Nesting	Year-round Apr-Sept
White-faced ibis (state threatened)	Island off of NW corner of Pelican Island	Present Nesting ~30 birds	Year-round Feb-Sept
Loggerhead sea turtle (state endangered, federally threatened); Kemp's ridley sea turtle (state and federally endangered)	Bolivar Roads	Present Low concentrations	Year-round

## **Other Birds**

Magnificent frigatebirds and black skimmers may be present in Bolivar Roads year round.

Colonial waterbirds: There are numerous nesting colonies in this region.

- Over 19,000 birds may be nesting on Northwest Pelican Island. Species include (nesting seasonality in parentheses): black skimmer (Apr-Sep), brown pelican (see above), laughing gull (Feb-Sep), royal tern (Feb-Sep), sandwich tern (Feb-Sep), reddish egret (see above), Forster's tern (Mar-Sep), black-crowned night-heron (Apr-Sep), cattle egret (Apr-Aug), great blue heron (Feb-Jul), great egret (Mar-Aug), gull-billed tern (Feb-Sep), roseate spoonbill (Apr-Sep), snowy egret (Apr-Aug), tricolored heron (Apr-Sep), white ibis (Feb-Jul), and white-faced ibis (see above).
- Over 21,000 laughing gulls may be nesting on Pelican Island. Other nesting species include gull-billed tern, brown pelican, and Forster's tern.
- Least terns (not federally listed in Texas within 50 miles of the coast) may be present from March through October and nesting from April through October at Fort Point.

## **Fish and Invertebrates**

Concentration areas for fish and invertebrates in this region include:

- Bay side of Galveston Island: Atlantic croaker, pinfish, striped mullet, and brown shrimp.
- West side of Pelican Island: bay anchovy, red drum, seatrout, southern flounder, American oyster, blue crab, and brown shrimp.
- North side of Pelican Island: bay anchovy, red drum, seatrout, spotted seatrout, blue crab, brown shrimp, and white shrimp.
- Tip of Texas City Dike: pinfish, red drum, crevalle jack, blue crab, stone crab, and brown shrimp.
- Old Fort San Jacinto marsh: longnose killifish.
- Bolivar Roads: Atlantic croaker, black drum, Florida pompano, gulf menhaden, king mackerel, red drum, seatrout, sheepshead, southern flounder, Spanish mackerel, striped mullet, tarpon, blue crab, and brown shrimp.

Most fish and invertebrates are present in Galveston Bay year round. Table 2 describes seasonal presence for sensitive life-history stages for several species, highlighting those life-stages occurring in the summer months.

**Table 2. Pelican Island Region of Galveston Bay Fish and Invertebrate Life-History**

<b>Species</b>	<b>Sensitive Life-History Stage</b>	<b>Seasonality</b>
Pinfish	N/A	N/A
Red drum	Spawning	Aug-Nov
Creville jack	N/A	N/A
Sheepshead minnow	Spawning Larvae/Juv.	Mar-Oct Mar-Dec
Southern flounder	N/A	N/A
Spotted seatrout	Spawning & Larvae/Juv.	Jan-Dec
Atlantic croaker	N/A	N/A
Striped mullet	N/A	N/A
Seatrout	N/A	N/A
Bay anchovy	Spawning & Larvae/Juv.	Jan-Dec
Sand seatrout	Larvae/Juv.	Mar-Dec
Black drum	N/A	N/A
Florida pompano	N/A	N/A
Gulf menhaden	Spawning	Aug-Nov
Spanish mackerel	N/A	N/A
King mackerel	N/A	N/A
Tarpon	N/A	N/A
Longnose killifish	N/A	N/A
Blue crab	Spawning/ Larvae/Juv.	Apr.-Jul May-Aug.
Brown shrimp	N/A	N/A

### **Marine Mammals**

Bottlenose dolphins concentrate along the Bay side of Galveston Island, along Pelican Island, and in Bolivar Roads. They are present throughout the area and mating/calving year round.

### **Reptiles**

Gulf salt marsh snake occurs along Fort Point on Galveston Island. Loggerhead sea turtles (state endangered and federally threatened) and Kemp's ridley sea turtles (state/federally endangered) may be present in low concentrations in Bolivar Roads.

### **Human-Use Resources**

The Galveston Yacht Basin and boat ramp is located near the east end of the island. Recreational fishing occurs throughout the area. There is a USCG station on Galveston Island. The Port of Galveston is an important industrial/economic area.

## **Management Areas**

Essential Fish Habitat occurs in Galveston Bay for the following species:

- brown shrimp adults and juveniles
- gray snapper juveniles (abundance is rare)
- gulf stone crab adults and juveniles
- pink shrimp adults and juveniles
- red drum adults and juveniles
- Spanish mackerel adults and juveniles
- white shrimp adults and juveniles