THE LOOP CURRENT

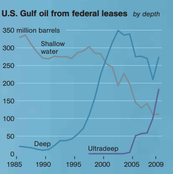
The Gulf's largest current, the Loop Current, enters from the Caribbean as the Yucatán Current. Running to depths of 2,600 feet, it can swing directly east to join the Gulf Stream or surge north before curling back through the Straits of Florida. If it penetrates deeply into the Gulf, it often sheds a great eddy, which drifts westward. The Loop Current could carry oil from a Gulf spill up the Atlantic coast.

Gulf of Mexico

A GEOGRAPHY OF OFFSHORE OIL

For the past half century, oil has driven the economy of the Gulf of Mexico. A third of U.S. oil production flows from nearly 3,500 platforms in the Gulf, with thousands of miles of pipeline delivering oil and natural gas to shore. Since the first Gulf well was drilled off Louisiana in 1938, in less than 15 feet of water, close-in reserves have been depleted and exploration has marched off the continental shelf, onto the continental slope, and beyond. Today Gulf oil is deep oil; the bulk of U.S. production draws from wells in more than a thousand feet of water. U.S. Gulf oil reserves are estimated at 44.9 billion barrels, but as the *Deepwater Horizon* disaster showed, the challenges of deep drilling are formidable.

U.S. Gulf oil from federal leases *by depth*



THE GULF HOLDS MORE THAN 50,000 WELLS AND SOME 43,000 MILES OF PIPELINE.

MEXICO'S OIL DROP

Daily output of Pemex, the state-owned oil monopoly, hit 3.4 million barrels in 2004 but has fallen to 2.6 million. The drop is blamed on poor management and declining close-in reserves. Three-quarters of the oil comes from the Gulf, where Mexico has estimated reserves of at least 11.3 billion barrels. Oil and gas sales fund a third of the federal budget; the U.S. is the top importer.

IXTOC I OIL SPILL

Mexico's Ixtoc I well blew out in the Bay of Campeche in 1979 and flowed for 295 days. Some 3.5 million barrels of oil fouled hundreds of miles of shore as far as Padre Island, Texas. Most habitat recovered, but three-inch-thick tar mats remain in some lagoons. Ixtoc I ranked as the world's largest accidental marine spill until it was surpassed by Macondo.

NEW DEPTHS

The world's deepest offshore well, the Tiber well (art, above) reaches nearly six miles below the Gulf's seafloor. Not yet operational, it was drilled in late 2009 by the rig *Deepwater Horizon*, which was destroyed months later drilling the Macondo well. Other record holders in the Gulf: The floating production platform *Perdido* operates in the deepest water—8,000 feet—and the Petronius tower, the tallest fixed platform, stands in 1,754 feet of water.

Map Legend

- Coastal wetland
- Coastal protected area

Active federal lease as of March 2010
- Shallow water
- Deep water (1,000 to 4,999 feet)
- Ultradeep water (5,000 feet or more)

- Oil or gas offshore platform
- Oil or gas well
- Crude oil or gas terminal
- Oil refinery
- Oil- or gas-related pipeline
- Maritime boundary
- Planning area boundary

The maximum depth of the Gulf is unknown. Estimates range from 12,303 to 14,370 feet.

U.S. PLATFORMS

A waterborne city of oil rigs rises off the coasts of Texas, Louisiana, Alabama, and Mississippi—but not Florida. Exploration off the Florida coast, starting in the 1940s, yielded largely dry holes, and the potential threat to the state's top industry, tourism, has been considered too great a risk.

DEEPWATER DISASTER

Working in 5,000 feet of water, the *Deepwater Horizon* rig had drilled 13,000 feet into the seabed when the exploratory Macondo well blew out on April 20, 2010. The explosion and fire sank the 58,000-ton mobile rig, killing 11 workers. An estimated 4.9 million barrels of oil flowed from the well, creating the worst accidental marine oil spill in history.

CUBA'S POTENTIAL

Estimates for Cuba's offshore oil reserves range as high as 4.6 billion barrels. No production has begun, but offshore development rights have been leased by the government to companies from Brazil, India, Malaysia, Norway, Spain, Venezuela, and Vietnam.

ECONOMY OF THE U.S. GULF

	Annual revenue (in $ billions)	Jobs (estimated)
Oil and gas	62.7	107,000
Tourism	38.1	524,000
Commercial fishing	0.7	14,000
Total	**101.5**	**645,000**

SOURCES OIL (2008): EIA. TOURISM (2009): TOURISM DEPARTMENTS OF ALABAMA, LOUISIANA, MISSISSIPPI, AND TEXAS. FLORIDA DEPARTMENT OF REVENUE. FISHING (2008 DOCKSIDE VALUE): NOAA. JOBS: MOST RECENT AVAILABLE DATA FROM MULTIPLE SOURCES

NATIONAL GEOGRAPHIC

Albers Conic Equal-Area Projection
Standard Parallels 20° and 28°
SCALE 1:2,643,000
1 CENTIMETER = 26 KILOMETERS or 1 INCH = 42 STATUTE MILES
KILOMETERS 0 50 100 150
STATUTE MILES 0 50 100 150
NAUTICAL MILES 0 50 100 150

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