



The U.S. Department of Energy's Office of Fossil Energy (FE) supports research and development of technologies that can reduce the volume of natural gas (e.g., methane) flared or vented (released) into the atmosphere during crude oil and natural gas exploration, production, processing, transportation, and storage operations. This fact sheet was created by FE to inform stakeholders on state-level production and regulatory activity regarding natural gas flaring and venting. FE's research portfolio includes efforts to reduce methane (and other hydrocarbon) flaring through the application of improved technologies to capture and utilize small volumes of natural gas at remote locations, as well as technologies to reduce (primarily) methane release during midstream gas processing and transportation. Intermittent flaring that occurs as a result of routine well testing, production facility process shutdowns, or facility and pipeline infrastructure maintenance, are normal aspects of safe oil and natural gas production. Increases in domestic oil and natural gas production have resulted in significant infrastructure buildouts, however, natural gas pipeline capacity constraints have led to regional increases in the flaring of associated gas in some unconventional plays (e.g., Permian Basin in Texas and New Mexico and Bakken Shale in North Dakota) in order to enable oil production.

Florida Producing Plays and Basins

Florida has two oil and gas producing basins: the easternmost limit of the Gulf Coast Salt Basin in the western Panhandle and the South Florida Basin (Figure 1). A number of Florida oilfields have been abandoned, but there are currently seven producing fields in the South Florida Basin and two in the western Panhandle. Annual production from those two regions peaked in 1978 with the development of Jay Field in the Panhandle, but it has declined steadily since then. The [Jay Field](#) accounts for 36 of the 57 producing oil wells in the state. Florida has no significant natural gas resources under development, and the state only has a small amount of associated natural gas production. Nearly

all of that gas comes from the Jay Field, where natural gas withdrawals are used primarily to re-pressure oil reservoirs to maintain or improve oil production. The [U.S. Geological Survey](#) has estimated that the South Florida Basin holds undiscovered technically recoverable resources totaling 35 million barrels of oil and 12 billion cubic feet of natural gas (mean totals). Geologists believe there may be substantial additional oil and gas reserves in federal waters in the Gulf of Mexico, off Florida's western coast. However, [state and federal policies](#) have restricted drilling in Florida. These restrictions include a state drilling ban for state waters enacted in 1990. Additionally, in 2006, Congress enacted a restriction on oil and gas leasing of federal offshore

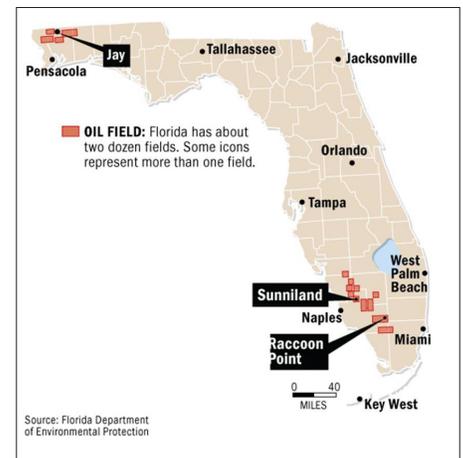


Figure 1: Florida producing basins with oil fields identified
Source: Florida Department of Environmental Protection

Florida Oil and Natural Gas Statistics (EIA)

	2013	2014	2015	2016	2017	2018
Crude Oil Production (Average Thousand Barrels/Day)	6	6	6	5	5	5
Natural Gas Gross Withdrawals and Production (Average MMcf/Day)	49	9	16	34	41	N/A
Natural Gas Gross Withdrawals and Production (Vented and Flared) (Mcf/Day)	Florida does not have aggregated state-wide venting or flaring data available. Annual flaring data is available by field via Form 11 documentation on the Oculus Document Management System.					
Natural Gas Gross Withdrawals and Production (Oil Wells) (MMcf/Day)	4	9	16	34	41	N/A
Natural Gas and Gas Producing Oil Wells	72	73	73	69	69	N/A

MMcf - million cubic feet
Mcf - thousand cubic feet

2017 ranking among 32 U.S. oil and natural gas producing states — Oil: 24 Natural Gas: 27

areas within 125 miles of Florida's Gulf Coast until at least 2022.

Florida Key Regulations Associated with Flaring and Venting

The Florida Department of Environmental Protection (DEP) is the state's lead agency for environmental management and stewardship, protecting the state's air, water, and land. The [Oil and Gas Program](#) of DEP is the regulatory and permitting authority for oil and gas activity and for companies interested in exploration and production of hydrocarbons in Florida. Primary responsibilities of the program include conservation of oil and gas resources and environmental protection. The DEP addresses these concerns through a system of permits and field inspections to ensure compliance. Key activities include the permitting and oversight of drilling and operating wells, as well as geophysical operations. The DEP [Division of Air Resource Management](#) also has involvement with permitting oil and gas facilities with respect to air quality monitoring and emission compliance. Natural gas flaring and venting data is not available from the DEP because there are currently no facilities subject to permit reporting requirements. The state Division of Air Resources Management explained that given low gas content

from oil well production, most operators in Florida address associated gas through gas treatment and reinjection into the well.

[Chapter 377, Florida Statutes](#) and [Rules 62C-25 through 30, Florida Administrative Code](#) describe the state's oil and gas production regulations and rules. Florida does not have flaring- and venting-specific regulations for oil and gas production, Section [377.20](#) of the Florida Statute [Title XXVIII, Chapter 377](#); prohibits the waste of oil and gas. This statute [defines](#) waste as 1) the escape of gas into the open air from a well producing both oil and gas, in excess of the amount that is necessary in the efficient drilling or operation of the well; or 2) the escape of gas produced from a gas well into the air. Section [377-371](#) requires that operators report all spills or leakage of oil, gas, other petroleum products, or waste material to the division. Operators should report those of any quantity that they cannot immediately control to the division and the appropriate federal agencies. In addition, Section [377.2407](#) (natural gas storage facility permit application to inject gas into and recover gas from a natural gas storage reservoir), requires a gas-migration response plan and a field-monitoring plan that involves, at a minimum, monthly field inspections of all wells that are part of the natural gas storage facility.

Florida State Points of Contact

Florida Department of Environmental Protection; Oil and Gas Program

Contact Florida DEP's Oil and Gas Program for more information about oil and gas production, regulations, permitting processes, conservation of oil and gas resources, as well as utilization of the Oculus Document Management System.

Website: <https://floridadep.gov/water/oil-gas>

Email: David.M.Taylor@dep.state.fl.us

Phone: 850-245-7536

Florida Department of Environmental Protection; Division of Air Resource Management

Contact Florida DEP's Division of Air Resource Management for questions about air quality monitoring and emissions regulations.

Website: <https://floridadep.gov/air>

Email: hastings.read@dep.state.fl.us

Phone: 850-717-9017

Visit energy.gov/fe/state-natural-gas-flaring-and-venting-regulations for a digital version of this fact sheet that includes hyperlinks to information sources.