Fruit Helps U.S. Test Oil Spill Response

JENNIFER KAY,Associated Press

MIAMI (AP) — Grapefruit and oranges floated across part of Biscayne Bay on Thursday to test federal plans to protect shorelines that would be vulnerable to damage from an offshore oil spill in the Caribbean Sea.

The fruit was a stand-in for oil. The U.S. Coast Guard and other state and federal agencies wanted to see how well boom configured into a sort of arrow diverts the fruit out of swift currents.

In the event of a major spill, the boom would deflect oil onto beaches or into weaker currents where it would be easier to clean up or collect. This Tidal Inlet Protection Strategy is designed to mitigate oil's effect on inland waters.

"Nobody likes to get oil on the beach but we know it's easier to clean oil off a sandy beach than when it gets into mangroves," said Capt. John Slaughter, chief of planning, readiness and response for the Coast Guard's Miami-based 7th District.

The 7,500 feet of boom stretched across Bear Cut off downtown Miami was the same kind used in the response to the 2010 Deepwater Horizon oil spill in the Gulf of Mexico.

Building on lessons learned from that catastrophe, a new federal International Offshore Response Plan was developed this year to stop offshore oil spills as close to their source as possible, even in foreign waters. The plan covers waters off Florida, Georgia, South Carolina, Puerto Rico and the U.S. Virgin Islands.

A significant oil spill in foreign waters in the region could potentially reach U.S. waters within a couple days and hit shore within a week, the plan estimates.

The new plan adapts previous booming tactics for major currents such as the Gulf Stream flowing through the Florida Straits. Boom is vital to corral spilled oil, but officials warn that it's most effective in light currents, and its anchors can damage coral reefs or sea grass beds.

"You can't put a necklace around Florida and say we're protected," said Gwen Keenan, director of emergency response for the Florida Department of Environmental Protection. "People like to see a barrier, and that's not really what boom does."

Boom can help stop oil from soaking wetlands but it's used to steer oil away from inlets, angling it from one barrier to another until it can be recovered.

"Imagine pinball with oil," Keenan said.

On Thursday, officials dropped roughly 240 citrus fruits into Bear Cut to see how many would get caught by the boom. Similar tests have been run elsewhere using peanut shells, dog food and popcorn, but the state and the National Oceanic and Atmospheric Administration have determined that floating fruit is the best material to simulate an oil spill without actually spilling oil, Slaughter said.

The boom worked when it was set at the correct angle in the current, successfully diverting about 60 percent of the fruit, Slaughter said. When the angle was off, the boom curved into a horseshoe shape, making it easier for the choppy waters to push the fruit over the boom.

In a real disaster, crews would have been monitoring and adjusting the boom to keep it straight. Slaughter called the test a success.

"What we learned is when we have the boom the way we want it, it works exceptionally well. The difficulty is getting the boom exactly the way we want it," Slaughter said.

Exploratory drilling off Cuba, a Caribbean island just 90 miles from Florida's shores, also pushed U.S. officials to review their offshore oil spill response plans. After crude oil stained Gulf Coast beaches in 2010, state and federal officials are eager to block even the perception of oil spreading across the reefs and beaches that feed tourism.

While two drilling projects off Cuba so far have come up dry, the U.S. won't back off its planning, Slaughter said.

"The plans are just as valid if there's a Cuba oil spill, two vessels colliding or a vessel running aground," Slaughter said.

Source URL (retrieved on *07/22/2014 - 11:49am*):
http://www.chem.info/news/2012/08/fruit-helps-us-test-oil-spill-response