

The Environmental Threat of Cuba’s Deep Water Exploratory Drilling Under the Embargo†

Leo Oppenheimer*

I. Introduction.....	1
II. Identifying and Overcoming the Obstacles.....	3
A. Baseline Science.....	3
B. Regulatory Capabilities.....	5
C. Spill Liability.....	7
D. Disaster Response.....	8
III. Conclusion.....	10

I. INTRODUCTION

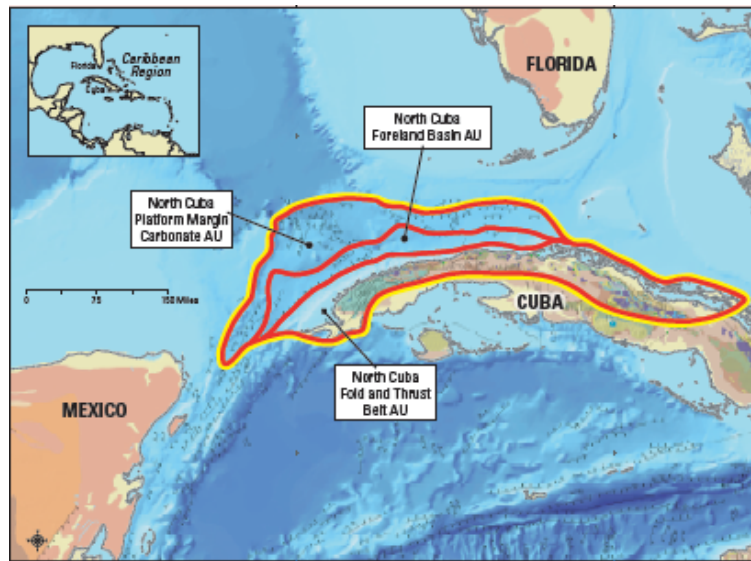
For the past decade, Cuba has permitted drilling offshore exploratory wells in the North Cuban Basin, just 60 miles from the United States’ coastline. As the *Deepwater Horizon* disaster made clear, offshore exploratory drilling can go disastrously wrong and the environmental consequences of a spill can be devastating. Unfortunately, the Cuban Embargo is creating several obstacles to working with Cuba to avert and respond to drilling related disasters.

The scope of the environmental threat created by the Embargo is alarming. A spill in Cuban waters could have drastic impacts on fisheries, coastal tourism, recreation, and natural resources in both Cuba and the United States for decades.¹

† This Field Report is adapted from a longer version of this article, forthcoming.

* J.D. Candidate, Columbia Law School, Class of 2016.

1. Emily A. Peterson, Daniel J. Whittle & Douglas N. Rader, *Bridging the Gulf: Finding Common Ground on Environmental and Safety Preparedness for Offshore Oil*



Three areas comprise the North Cuban Basin.²

Experts estimate that a spill in the North Cuban Basin could reach Florida in as little as six days and eventually travel from Florida all the way to South Carolina.³ From 2010 to 2012, in the wake of *Deepwater Horizon*, a flurry of literature drew attention to the ways in which the Embargo is serving as an obstacle to what should be an unfettered cooperative effort between a willing Cuba and a worried United States. What follows is a review of the key issues to emerge from the literature, an examination of how these issues are being addressed, and a cursory discussion of possible next steps.

The purpose of this preliminary excerpt is to expose to the legal community some of the challenges created by the Embargo in the hopes of stimulating dialogue on this pressing issue.

and Gas in Cuba, THE ENVTL. DEF. FUND 14–15 (2012), available at http://www.edf.org/sites/default/files/EDF-Bridging_the_Gulf-2012.pdf [<http://perma.cc/Q6JJ-8X98>].

2. *Id.*

3. Melissa Bert & Blake Clayton, *Addressing the Risk of a Cuban Oil Spill*, COUNCIL ON FOREIGN RELATIONS (Mar. 7, 2012), <http://www.cfr.org/cuba/addressing-risk-cuban-oil-spill/p27515> [<http://perma.cc/5YA4-NQ59>]; Peterson, Whittle & Douglas, *supra* note 1, at 12.

II. IDENTIFYING AND OVERCOMING THE OBSTACLES

A. Baseline Science

One of the many hard lessons of the *Deepwater Horizon* explosion is about the need for baseline science.⁴ Assessing the extent of the damage to the environment is essential for restorative efforts, as well as for assessing environmental destruction, economic liabilities, and penalties. After *Deepwater Horizon*, scientists quickly realized there was not enough baseline knowledge of the Gulf Coast environment to assess how much damage it had suffered due to the massive spill. Without the proper baseline knowledge, it is impossible to analyze the efficacy of the Gulf Coast cleanup efforts, and to what extent cleanup chemicals and methods may be further degrading the environment.

There are similar challenges for Cuba's deep-water exploratory drilling in the North Cuban Basin. Developing baseline knowledge for the ecosystems implicated in Cuba's deep-water drilling is vital to understanding a potential spill's long-term effect on the environment. For example, without knowledge of the ecosystem-supporting microscopic life in the area, it is impossible to predict the cascading effects the destruction of these microscopic organisms may have on the ecosystem.⁵

Such information is also vital for effectively planning cleanup procedures. For example, Cuba's north shore is heavily populated with mangrove forests that, due to their dense growth patterns and shallow-water habitat, are not fit for mechanical clean up and would require immediate and intensive manpower.⁶ These mangrove forests, and other Cuban based ecosystems, are a priority for the United States because they provide the "upstream" habitats crucial to sustaining the "downstream" commercial fishing industry in the Gulf and up the Atlantic Coast. Without understanding the extent of Cuban based habitats like the mangrove forests, and how much of these habitats are at risk, ensuring the availability of adequate response resources is a guessing game.

4. Peterson, Whittle & Douglas, *supra* note 1, at 22.

5. *Id.*

6. *Id.*

In the United States, over 8,200 oil-covered birds were collected from the area affected by the *Deepwater Horizon* spill.⁷ The effort to collect and attempt to rehabilitate these birds required massive resources. Without a baseline understanding of the environment in Cuba, it is impossible to calculate the resources that would need to be made available in a similar situation. Despite these and other vital applications of a baseline scientific understanding of Cuba's north coast, the Embargo continues to thwart scientific collaboration between the United States and Cuba.

Science in Cuba is severely curtailed by U.S. sanctions. Strict trade prohibitions mean that Cuban scientists cannot get the equipment necessary for determining the baseline status of the ecosystem, among other important scientific undertakings. There is a dire funding shortage in Cuba due to the United States Treasury's Office of Foreign Assets Control's ("OFAC") strict limits on the expenditure of private funds in Cuba, and the complete prohibition of U.S. government funds for environmental research projects there.⁸ Collaborative projects with Cuban organizations must be approved by an array of Cuban agencies, a process that can be daunting and unpredictable for U.S.-based organizations.⁹ Once a project is approved by OFAC, all U.S. citizens must then attempt to obtain visas from the Cuban government. To engage in research activities in Cuba, a special "research visa" is required, which is granted by presenting approval from a Cuban research counterpart. However, it is usually necessary to meet personally with the Cuban research counterpart first in order to negotiate and set out the details of the project and gain the researcher's approval, creating a frustrating and time-consuming "Catch-22" situation.¹⁰

Any collaboration that does occur does so in the highly restrictive contexts of the Trading with the Enemy Act of 1917¹¹ ("TWEA") and the Foreign Assistance Act of 1961¹²

7. *Id.*

8. Brian M. Boom, *Biodiversity Without Borders: Advancing U.S.-Cuba Cooperation Through Environmental Research*, 1 SCI. & DIPL. 8-9 (2012), available at http://www.sciencediplomacy.org/files/biodiversity-without-borders_science_diplomacy.pdf [<http://perma.cc/6LST-KW23>].

9. *Id.* at 8.

10. *Id.* at 9.

11. 50 U.S.C. app. §§ 1-44 (2014).

("FAA").¹³ This creates practical problems for any collaborative scientific effort. For instance, GPS units cannot be taken into Cuba, and most large equipment requires permits from each of the U.S. Department of Commerce's Bureau of Industry and Security, the Department of Homeland Security, and the Department of Defense.¹⁴ In 2009, the Obama administration enacted much-welcomed policies that have greatly facilitated professional scientific travel between the countries.¹⁵ However, these and existing policies are interpreted inconsistently, resulting in some organizations being denied licenses for activities approved for others.¹⁶ Also, the length of time it takes to get approved or disapproved is unpredictable, making planning collaborative projects difficult.¹⁷

As Dr. Brian Boom, Director of the Caribbean Biodiversity Program, states in a recent article, "[t]he ecological stakes are too high for Cuba and the United States to rely on anything short of a government-to-government accord to formalize, catalyze, and facilitate cooperation on environmental problems of mutual concern."¹⁸ A complete overhaul of the myriad sanctions applying to Cuba is not necessary for current purposes. Small policy carve-outs limited to scientific collaboration would be adequate to meet these pressing and critical research goals. If necessary, the U.S. government could limit these carve-outs even further to only apply to scientific collaborations designed to protect the coastal environment from oil spills.

B. Regulatory Capabilities

Too often, the interests of oil companies do not align with those of the particular country in whose territory they are drilling, oil companies cut corners to save money, and their human workers make mistakes. Therefore, it is critical for a government to have effective regulatory oversight of offshore drilling operations. In order to have such effective regulatory

12. 22 U.S.C. § 2151 (2000).

13. Peterson, Whittle & Douglas, *supra* note 1, at 28.

14. Boom, *supra* note 8, at 9.

15. *Id.*

16. *Id.* at 7–8.

17. *Id.* at 10.

18. *Id.*

oversight, regulators must intimately understand the industry they are regulating.

Cuba has hired reputable companies (like Respol) to drill in the North Cuban Basin. However, for the reasons stated above, and as the *Deepwater Horizon* spill proved, even the most reputable companies need regulatory oversight.¹⁹ Unfortunately, the Embargo is ensuring that our island neighbor is jumping into deep-water drilling with very little experience in the industry. William K. Reilly, Co-Chair of the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, recently stated, “Regulation could be the most difficult lesson for the Cubans because they have no history with the industry. They are genuinely working on familiarizing themselves, but they lack a background to even understand the industry’s specialized language.”²⁰ The United States needs to take a proactive stance in helping Cuba understand the industry and provide regulatory oversight. This could entail bringing delegates from Cuba to the United States for training sessions or “exporting” American training and “know-how” to Cuba.

The United States, however, also needs to take the more direct step of establishing international agreements that would allow American personnel—with Cuba’s permission—to work with Cuba in a collaborative regulatory effort. These carve-outs from the Embargo must be made soon, or there may be deep-water exploratory drilling 60 miles from Florida while Cuba lacks the industry knowledge to provide effective oversight. Furthermore, the United States will have no legal means of assisting Cuba’s regulatory efforts or of knowing what kind of equipment is being used, the level of training employed, or the disaster response capabilities of Cuba and their foreign operators. As the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling writes in its final report to the President, “It is in our country’s national interest to negotiate now with these near neighbors [Cuba and Mexico] to

19. For a discussion of the regulatory failures contributing the *Deepwater Horizon* disaster, see NAT’L COMM’N ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING, *DEEP WATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING* (2011), available at <http://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf> [<http://perma.cc/ZC99-Q6WQ>] [hereinafter “DEEP-WATER COMM’N REPORT”].

20. Peterson, Whittle & Douglas, *supra* note 1, at 24.

agree on a common, rigorous set of standards, a system for regulatory oversight, and the same operator adherence to the effective safety culture.”²¹

C. Spill Liability

The *Deepwater Horizon* disaster released over 200 million gallons of oil into the northern Gulf of Mexico.²² BP, the party ruled to be at 67 percent fault, has already paid \$28 billion in spill response, cleanup costs and damages, and is facing up to another \$18 billion in penalties.²³ BP was held liable despite being a foreign company because it was operating within the United States' Exclusive Economic Zone.²⁴ Due to the chance position of the central Gulf Loop Current at the time, the oil spill did not cross international boundaries, and questions of international liability never arose.²⁵ Based on the Oil Pollution Act of 1990 (“OPA 90”), no legal remedies exist for U.S. citizens and property impacted by a spill stemming from outside United States territory.²⁶ U.S. citizens could submit claims originating from foreign spills to the Oil Spill Liability Trust Fund (“OSLTF”), which only has about \$1 billion in funds available for, among other important purposes, “uncompensated removal costs and damages.”²⁷ Unfortunately, the Embargo has kept the United States and Cuba from ironing out these liability issues, leaving Americans no legal recourse and inadequate

21. DEEPWATER COMM'N REPORT, *supra* note 17, at 300.

22. John W. Tunnell, Jr., *An Expert Opinion of When the Gulf of Mexico Will Return to Pre-Spill Harvest Status Following the BP Deepwater Horizon MC 252 Oil Spill*, HART RESEARCH INST. FOR GULF OF MEX. STUDIES 18 (2011) available at http://media.nola.com/2010_gulf_oil_spill/other/Tunnell-GCCF-Final-Report.pdf [<http://perma.cc/97C2-8Y3Z>].

23. Margaret Cronin Fisk and Laurel Brubaker Calkins, *BP Seeks Revised Verdict or New Trial on Spill Negligence*, BLOOMBERG (Oct. 3, 2014, 11:42 AM), <http://www.bloomberg.com/news/2014-10-02/bp-seeks-revised-judgment-or-new-trial-in-gulf-spill-case.html> [<http://perma.cc/NZK3-7KF8>].

24. See Bert & Clayton, *supra* note 3.

25. Peterson, Whittle & Douglas, *supra* note 1, at 12, 21.

26. Bert & Clayton, *supra* note 3.

27. U.S. DEP'T. OF HOMELAND SEC., *The Oil Spill Liability Trust Fund* (OCT. 22, 2013), http://www.uscg.mil/npfc/About_NPFC/osltf.asp [<http://perma.cc/96UD-PSWD>]. The OSLTF is also meant to fund “[r]emoval costs incurred by the Coast Guard and EPA[;] [s]tate access for removal activities; [p]ayments to federal, state, and Indian tribe trustees to conduct natural resource damage assessments and restorations; ... [r]esearch and development; and [o]ther specific appropriations.” *Id.*

domestic funds should a spill emanating from Cuban water harm U.S. citizens or property.

Lawmakers need to amend OPA 90 to increase the amount of funds kept in the OSLTF. Considering that BP is approaching the \$30 billion mark for domestic cleanup and damages, \$1 billion is an unrealistically low number for a fund meant to, among other important functions like disaster response, remedy all potential damage from offshore oil spills. In addition, lawmakers need to immediately amend OPA 90, or put in place another legal mechanism, to ensure that there is a legally responsible party for oil spills that emanate from foreign waters and cause damage in the United States. This provides notice to foreign companies drilling in Cuba's waters of their liability and ensures a legal remedy to injured Americans and their property. In turn, providing legal remedies for individual American citizens will take pressure off of the OSLTF to provide compensation for damages to private citizens, thus ensuring its ability to support the other important functions for which the fund was created, such as disaster response.

D. Disaster Response

In the event of an oil spill, an adequate response is absolutely critical to protecting the environment. This includes swift action and adequate resources. As discussed above, the Embargo is preventing both Cuba and the United States from conducting the scientific research necessary to understand the environmental assets at stake and, in turn, what resources are necessary to adequately address an oil spill. Under the current National Contingency Plan, if a spill emanates from foreign waters, the Coast Guard's response effort would have to be entirely funded by the OSLTF.²⁸ Currently, OPA 90 provides that the President may only allocate up to \$50 million per year for disaster response without Congressional appropriation, and only up to \$150 million per year even with Congressional

²⁸ *Offshore Drilling in Cuba and the Bahamas and Coast Guard's Oil Spill Readiness and Response Planning: Hearing Before the H. Comm. on Transp. and Infrastructure, Subcomm. on Coast Guard and Mar. Transp.*, 112th Cong. (2012) (testimony of William Baumgartner, Rear Admiral and Cari Thomas, Rear Admiral), available at 2012 WL 273812.

appropriation.²⁹ As *Deepwater Horizon* proved, this number is alarmingly inadequate.

Under current law, American companies must obtain licenses from the U.S. Treasury Department and the U.S. Commerce Department in order to provide clean-up assistance in Cuban waters.³⁰ The number of companies licensed by the government is not public record.³¹ What is known is that at the peak of the *Deepwater Horizon* response, fifty-two contractors and more than 47,000 personnel provided their services.³² Without knowing how many contractors the United States government has licensed, it is impossible to know whether the licensed capacity is adequate to deal with a spill or whether \$50 to \$150 million is enough to fund the effort. If the available funds, supplies, and contractors from the United States are not adequate, Cuba will have to rely on assistance from Asia and Europe while the United States works to license more contractors. Foreign assistance could take weeks or months to arrive in a situation where hours are critical.³³

Today, it is estimated that it would take 14 days for the United States to respond to a spill in Cuba.³⁴ This is entirely too long for an oil spill in the North Cuban Basin. If the amount of licensed contractors proves inadequate, licensing new contractors after a spill would only add to this delay. Furthermore, no matter how quickly the United States could respond, the U.S. Coast Guard and any private companies would need explicit authorization from the Cuban government before entering Cuban waters.³⁵

Fortunately, there has been some recent progress towards coordinating for disaster response efforts. In March of this year, Cuba, the United States, and other countries around the Caribbean agreed to the *Wider Caribbean Region Multilateral Technical Operating Procedures for Offshore Oil*

29. *The Oil Spill Liability Trust Fund*, *supra* note 27.

30. Peterson, Whittle & Douglas, *supra* note 1, at 17.

31. *Id.*

32. *Id.*; see also OCCUPATIONAL SAFETY AND HEALTH ADMIN., *Deepwater Horizon Oil Spill: OSHA's Role in the Response 2* (2011), available at https://www.osha.gov/oilspills/dwh_osh_response_0511a.pdf [<http://perma.cc/ZC4U-GC6G>].

33. Peterson, Whittle & Douglas, *supra* note 1, at 17.

34. *Id.*

35. See Bert & Clayton, *supra* note 3.

Pollution Response (MTOPT).³⁶ The purpose of the MTOPT is to “build a responder-to-responder network so that in the event of a large oil spill, participating countries can work effectively together to minimize environmental impacts of the spill.”³⁷ The MTOPT calls for a “Multilateral Coordination Team” comprised of delegates from each participating country working towards coordinating response efforts with all other states.³⁸ While the MTOPT is a step forward, the agreement lacks teeth. The document provides only “non-legally binding guidance” and does not give rise to international legal rights or obligations.³⁹ Furthermore, this agreement does not provide many proactive options for the United States. The U.S. can reach out to Cuba to coordinate response procedures but can do nothing towards bolstering Cuba’s scientific preparedness, industry oversight, or response capabilities.

With the environmental stakes this high, the U.S. needs policies that allow it both to provide adequate domestic funding for spill response swiftly and to take a more direct approach to assisting Cuba to develop adequate spill response resources. A recent article published by the Council on Foreign Relations recommends that President Obama issue an “export-only industry-wide general license for oil spill response in Cuban waters.”⁴⁰ The article points out that presidential action of this nature does not need congressional approval, and that the license could allow offshore drilling companies to “export” vital spill response work to Cuba, such as well-capping or drilling relief wells.⁴¹

III. CONCLUSION

Recently, former U.S. Senator and two-time Florida governor Bob Graham stated, “If there is an accident [in the North Cuban Basin], there is zero capability in Cuba today to respond

36. UNITED NATIONS ENV’T PROGRAMME, WIDER CARIBBEAN REGION MULTILATERAL TECHNICAL OPERATING PROCEDURES FOR OFFSHORE OIL POLLUTION RESPONSE (MTOPT) (2014), available at http://cep.unep.org/racrempeitc/regional-oprc-plans/Final_MTOP_Public_version.pdf [<http://perma.cc/98ZV-UQ3B>].

37. *Id.* at 3.

38. *Id.* at 3–4.

39. *Id.* at 2.

40. Bert & Clayton, *supra* note 3.

41. *Id.*

to that accident.”⁴² Mr. Graham co-chaired a presidential commission on the *Deepwater Horizon* spill in 2010 and made this statement after returning from Cuba earlier this year. This is the reality of the Embargo: an unprepared Cuba and a sidelined United States. This excerpt is meant to raise awareness in the legal community of the environmental concerns created by the Embargo and Cuba's deep-water exploratory drilling because the legal community is well situated to address these problems. But awareness is the only the first step. The hope is that awareness will foster discussion, and discussion will foster action.

42. William E. Gibson, *Russia Plunges into Cuban Oil Exploration*, SUN SENTINEL, June 15, 2014, http://articles.sun-sentinel.com/2014-06-15/news/fl-russia-cuba-oil-drilling-20140612_1_jorge-pinon-oil-spill-oil-exploration [<http://perma.cc/VZ23-D32N>].