2011-05-10

The Discourses of Energy and Environmental Security in the Debate Over Offshore Oil Drilling Policy in Florida

Emily Martens
University of Miami, e.martens1@umiami.edu

UNIVERSITY OF MIAMI

THE DISCOURSES OF ENERGY AND ENVIRONMENTAL SECURITY IN THE DEBATE OVER OFFSHORE OIL DRILLING POLICY IN FLORIDA

By Emily Joyce Martens

A THESIS

Submitted to the Faculty
of the University of Miami
in partial fulfillment of the requirements for
the degree of Master of Arts

Coral Gables, Florida

May 2011

UNIVERSITY OF MIAMI

THE DISCOURSES OF ENERGY AND ENVIRONMENTAL SECURITY IN THE DEBATE OVER OFFSHORE OIL DRILLING POLICY IN FLORIDA

A thesis submitted in partial fulfillment of
the requirements for the degree of
Master of the Arts

Emily Joyce Martens

Approved:

_____	_____
Mazen Labban, Ph.D.	Terri A. Scandura, Ph.D.
Professor of Geography	Dean of the Graduate School
_____	_____
Jan Nijman, Ph.D.	Anna Zalik, Ph.D.
Professor of Geography	Professor of Environmental Sciences, York University, Toronto

MARTENS, EMILY JOYCE (M.A. Geography and Regional Studies)
(May 2011)

The Discourses of Energy and Environmental Security in the Debate over Offshore Oil Drilling Policy in Florida

Abstract of a dissertation at the University of Miami.

Thesis supervised by Professor Mazen Labban.
No. of pages in text. (113)

Amid growing concern over access to sufficient and cheap energy resources, on March 31, 2010 the Obama Administration announced the opening of new exploratory and drilling sites for oil within the United States Outer Continental Shelf. The announcement concerning the Outer Continental Shelf Oil and Gas Strategy came only three weeks before the BP oil spill in the Gulf of Mexico that marked an unprecedented economic and environmental disaster. Though the concern over offshore drilling, especially regarding regulation and environmental impact, has increased in the wake of the oil disaster, the general debate regarding offshore oil drilling has been a concern of environmental activists and domestic energy policy for decades. This thesis examines the development of environmental activism and energy security discourses concerning offshore oil policy in the state of Florida. It places offshore oil drilling at the intersection of discourses of energy security and environmental security by looking at the construction of ocean space as both an informant and product of the discursive constructions of energy security and environmental security. The study aims to provide a deeper understanding of how ocean spaces are incorporated into the economic, national, environmental and social imaginations of Americans, particularly Floridians, and how these imaginations, in turn, dictate offshore oil drilling policy.

TABLE OF CONTENTS

Page

LIST OF FIGURES

Chapter 1 – Introduction

Amid growing concerns over access to reliable and cheap energy resources, on March 31, 2010 the Obama Administration announced the opening of additional exploratory and drilling sites for oil within the United States' Outer Continental Shelf. The announcement of an Outer Continental Shelf Oil and Gas Strategy for 2012-2017 came only three weeks before the BP oil spill in the Gulf of Mexico, an event that marked an unprecedented economic and environmental disaster, spilling an estimated 5 million barrels (172 million gallons) of oil into the Gulf of Mexico over the course of 86 days. This oil disaster renewed concerns over the environmental impacts of offshore drilling – many of which remain unknown; offshore oil drilling, however, has been a concern of environmental activists and domestic energy policy makers for decades. Since the oil crises of 1970s the political rhetoric regarding access to energy resources has focused on the creation of domestic supplies that can reduce heavy dependence on imports from volatile or hostile foreign producers. Yet, the rhetoric of energy security emanating from policy making circles has been, since its beginning, internally constrained by a rhetoric of environmental protection, because of an oil spill in January 29, 1969 resulting from a blowout on a Union Oil Co. drilling platform six miles off the coast of Santa Barbara, California. Thus the opening of new spaces for the purpose of oil exploration and drilling under the rubric of domestic energy security, ranging from removing protected place status from the Arctic National Wildlife Refuge in Alaska to new offshore spaces along the Atlantic and Gulf coasts, including the historically oil-rig free waters surrounding the state of Florida, has since been debated heavily in the public forum.

The impetus to open additional offshore spaces to oil drilling and selling more leases in offshore territory has been sustained by a dominant discourse of energy security that has called to expand the domestic oil supply in order to establish national energy independence and ensure access to cheap and "safe" energy supplies. More recently, this discourse has been lent urgency by geopolitical rearrangements that rendered US oil imports as an indirect means of funding terrorism and states hostile to the interests of the US. This discourse of energy security, however, is opposed to, and by an alternative expression of energy security emanating from the environmental movement — an environmental discourse of energy security that shares the goal of reducing the dependence of the US on foreign oil not by expanding domestic oil production but by reducing the dependence of the US on oil itself and therefore the development of alternative fuels.

The fusion of energy security and environmental protection concerns has since the energy and environmental crises of the 1970s forged a policy aimed at creating environmentally safe extraction and production processes. The emphasis on *cheap* energy resources, however, has come into contradiction with requirements of costly regulation and oversight practices that are thought to better ensure environmental security. The attempt to reconcile offshore drilling with concerns about environmental protection during the Nixon and Carter years was torn asunder by the hostility to regulation during the Reagan and Clinton years. As a result, a heated debate developed between proponents of offshore oil drilling who argue that (unregulated) offshore oil drilling — and expanded domestic oil production in general — ensures energy security by making the United States energy independent and opponents of offshore oil drilling who do not

contest the goal of energy independence but who argue that this should not be at the expense of the protection of marine ecosystems and coastal economies from the destructive effects of offshore drilling, regulated or not. The debate, in other words, developed into a debate between a dominant discourse of energy security and a counter discourse of environmental security — at the core of it were questions of regulation as well as competing commercial interests. Though there are various actors and interests within each of these discourses, the primary tension between proponents and opponents of offshore oil drilling tends to reproduce the tensions embodied in the larger discourses of energy security and environmental security at different geographical scales. One of the main arguments of this thesis is that the credence given to either one of these two security discourses at any given time is the result of broader socio-political forces and the changing ideologies within which they operate. Underlying both seemingly opposed discourses, however, is a common logic that informs the path they take and the language they use to establish legitimacy — the logic of the commodity — an abstract representation of space that supports this logic. This space, as Lefebvre (2007: 53) points out, "includes the 'world of commodities', its 'logic' and its worldwide strategies, as well as the power of money and that of the political state". As will be shown in the following chapters, each of these competing discourses has organized its arguments around the logics of capitalism to gain public support and federal and local state protections. This is not an arbitrary association but rather the result of specific political developments in the US that have shaped environmental concerns, and the environment, according to free market principles.

Prior to the injection of neoliberal policies of deregulation and privatization into the environment and discourses on the environment under the Reagan Administration, the Nixon and Carter Administrations were caught between an environmental movement, which attempted to create a new perspective from which human activity could be viewed in light of its often negative impacts on the environment – especially offshore oil drilling as a result of the 1969 Santa Barbara oil spill – and the volatility of the international oil market which threatened oil imports. The Nixon and Carter strategies attempted to balance the two agendas through the expansion of domestic oil production in tandem with regulations and oversight that would monitor the offshore oil industry's compliance with environmental standards. This was thought and presented as a temporary measure. Ultimately the aim was to create alternative fuels in the not too distant future to replace oil, in light of evidence and concern that both the production and consumption of oil were proving to be detrimental to the environment which humans depended on for their own survival. Neoliberal restructuring under the Reagan Administration, however, promoted a market-based discourse of energy security above, or more precisely against the discourse of environmental security, advocating reduction of state oversights and reliance on market signals instead as the more efficient means to regulate offshore drilling. Environmental security, in the form of government oversight, became a threat to the accumulation of wealth — a *source of insecurity*. Instead, environmental security could be entrusted to the multiple interests operating in the free market. The argument rested on the neoliberal mantra that the government was not as efficient as private owners and the market in managing and protecting the environment. As a result, offshore oil drilling

activity has since enjoyed lax regulatory oversight, while day-to-day oil pollution continues to disrupt various ecological and economic activities that share ocean space.

The fact that the question of environmental protection and regulation concerns productive activity in ocean space lends it additional complexity deriving both from the nature of ocean space itself, and how it has been historically perceived and constructed, and from the peculiar political system in the US that divides sovereignty between the federal government an the individual states. This shared sovereignty over ocean space has shaped the interaction of policy-makers at the state and Federal level in their attempt to promote policy reconciling economic imperatives and environmental concerns that differed across scale. This scalar tension finds its origin in the Submerged Lands Act that President Eisenhower signed in 1945, which gave coastal states sovereign rights over coastal territory extending three miles from the shore. In the case of Florida and Texas, where a rather extensive continental shelf exists on their gulf coasts, they were granted 10.3 miles of territory into the Gulf of Mexico, which was to acknowledge historical use claims. Complementary ocean laws between the state and federal government appear to acknowledge the uncontainable nature of the ocean environment which can carry pollutants horizontally across space, which exacerbates not only the tension between states and the federal government but also the varying interests of different coastal states with different economies and ecologies. Where the government of Florida, a state heavily dependent on revenues from tourism, has found it commercially necessary to keep the ocean territory free of oil pollutants, at least for now, the Federal government has implemented a moratorium that extends what can only be seen as a buffer surrounding the state of Florida in order to reduce the risk of oil pollutants washing ashore. In Texas

and Louisiana, on the other hand, whose economies are dependent on revenues from and employment in offshore oil drilling (despite some tourism, and fishing and shrimping interests in the latter), the coastal territory has developed into a site of extensive drilling and production, with an extensive network of pipelines strewn over the ocean floor. Florida's coast, in contrast, is a protected area at both the state and Federal levels, with policy-makers at both levels acknowledging sensitive environments, such as the Everglades and a few marine sanctuaries that would be threatened by pollution from offshore oil activities and potential oil spills. But ocean space does not recognize political borders, and the shores of Florida are as susceptible to that ever present threat of a large oil spill as the spill from the explosion of the Deepwater Horizon oil rig might come to prove

I found Florida to be a significant case for studying the interaction between the discourses of energy and environmental security and their perceived utility for ocean space because it allows for significant insight into the interaction between proponents and opponents of offshore oil drilling as well as how the logic of commodity comes to be expressed as a vital component in creating policies that protect commercially viable interests harnessed within the security discourses. Though a similar study could be done on California, I find the unique positioning of Florida in relation to the other Gulf States extremely intriguing, particularly due to Florida being the only state situated along the Gulf of Mexico to ban offshore oil drilling. Furthermore, the Gulf of Mexico is considered to be partially landlocked, which means that there is only one side that connects to the open ocean, where the rest is encapsulated by land. This means that pollution from offshore oil drilling would have to maneuver its way through the gulf,

possibly traveling around the Florida Peninsula on the Loop Current, before it would reach the open ocean. This situation is very unlike that of California, as there is no offshore oil production nearby to threaten its coasts.

Though it would be an interesting point of departure to compare Florida's offshore oil drilling policy and the reasons behind it with those of the other Gulf States of Alabama, Mississippi, Louisiana and Texas, my primary concern in this thesis is to understand the interaction between the discourses of energy and environmental security which compete to define the utility of ocean space and its relationship to society. The case study of Florida is significant, as it allows an analysis of how the security debate in crosses between the federal and state levels, and is not simply reiterated but is also localized, made pertinent to specifically local concerns. Secondly, the case of Florida allows a look into a state that has managed to successfully commodify a clean environment and create policy that protects that commodity from the threat posed by offshore oil drilling; and this in the Gulf of Mexico where offshore oil drilling is widespread.

The ban on offshore drilling in Florida and the uncertainty about potential, largely unexplored, offshore oil reserves lend the debate over offshore oil drilling in Florida more significance. With advancements in exploration and drilling technology it has been argued that larger oil deposits may lie in or around what were once commercially unproductive oil wells off the Florida coast. As a result, there has been a push at both the Federal and state levels to lift the ban on offshore oil drilling off Florida's coasts. The push to open offshore oil drilling around Florida has been met with objections from both environmentalist groups and industries dependent on maintaining a clean marine

environment, such as tourism and fishing. As a state dependent on beach tourism, with roughly $37 billion generated in revenue annually, the cost of offshore drilling in Florida depends more heavily on the creation of unsightly oil rigs and the potential for spills that can spoil beaches and thereby the local economy. Florida remains the only gulf state that does not allow drilling in either its coastal waters, or in the Federal waters within 100 miles from its coast, though some drilling did take place along Florida's coast before it was banned in 1990. Operating on the notion that offshore oil drilling within and near state waters will threaten the "pristine" marine environment and damage the local, tourism-dependent industries, environmental activism within the state, in conjunction with the local tourism industry, has played a key role in keeping oil rigs out of Floridian waters since 1990.

Prior to the BP oil spill in April 2010, however, a debate was underway within the Florida state legislature to allow offshore exploration and production within state waters. Though state waters – which extend some three miles into the Atlantic Ocean and ten miles into the Gulf of Mexico – ultimately remained closed to offshore oil drilling, President Obama announced a plan in March 2010 to open the Federal waters along Florida's northeast coast, as well as an area in the eastern Gulf of Mexico to offshore oil leasing. The policy generated a backlash by drilling opponents, even though the drilling would take place more than 100 miles from the Florida coasts. The sense of victory this created for offshore oil proponents did not last long, as the Obama administration reversed its decision to allow oil drilling off the Florida coast – in the eastern Gulf of Mexico and along the Atlantic coast – until 2017 as a result of the BP oil spill. The environmental devastation caused by the BP oil spill, along with the economic turmoil

suffered by the tourism and fishing industries along the Gulf coast, managed to table the discussion on offshore oil drilling along the Florida coast until a full investigation could be conducted as to the cause of the spill and the effects it had on the environment.

The intention of this thesis is to analyze the Florida offshore oil debate within the contexts of the energy security and environmental security discourses, in order to gain insight into the values and beliefs that lead to the implementation of policies regarding offshore oil drilling within the United States, and more particularly the state of Florida. Using a discursive analysis, I look at how arguments for and against offshore oil drilling are framed, justified and how they are incorporated into the policy-making process. Furthermore, I aim to understand why and when certain arguments come to dominate the discussion by looking at current events and socio-economic structures which inform how a discourse comes to be articulated to gain credence and policy support.

I begin by looking at how ocean space is constructed as a result of perceptions about its utility to society. Social constructions of the ocean's position in relation to the social sphere, as well as its perceived utility, serve as a prominent point of departure for the security discourses analyzed later on. The dominant energy security discourse seeks to maintain the ocean as a source of resources and wealth accumulation external and resistant to socialization, while simultaneously promoting a sense of national security through attempts to reduce dependence on oil imports by increasing domestic production. On the other hand, offshore oil drilling opponents, who have adopted an environmental security discourse, have a negative reaction to expanded offshore oil drilling as it signifies a threat to the long-term environmental sustainability and commercial interests that depend on an ocean free of dangerous pollutants. The opposition attempts to

reconstruct the ocean as a pristine environment, an essential element in the Earth's ecosystem as well as coastal tourism and fishing industries, while simultaneously promoting a counter-hegemonic energy security by advocating for alternative fuels. The discussion regarding the construction of the ocean in Chapter 2 uses a historical optic through which one can view the evolution of ocean space in its relationship with human society. More importantly it looks at how perceptions and representations of ocean space inform how policy is made and how States, as the sources of legitimate territorial jurisdiction, manage to acquire and secure ocean territory in order to utilize it for exclusive resource exploitation.

Chapter 3 and 4 look at the historical evolution of energy security and environmental security in relation to offshore oil drilling first at the level of the federal state (chapter 3) and then at the level of the state of Florida (chapter 4), with the aim of deconstructing the discourses in the historical contexts from which they emanate. The 1970s mark a key turning point for, if not the initial emergence in the United States of concerns about environmental sustainability as well as concerns about the foreign oil supplies. The analysis focuses on the articulation of concerns about oil dependence and environmental protection in the speeches of United States Presidents as a representation of hegemonic policy discourse. This is important beyond the discursive level, at the level of policy making, because US presidents have the power to directly appoint key decision-makers, such as the Secretary of the Interior – the department which then appoints the head of the Minerals Management Service which is in charge of leasing, overseeing and collecting revenues from the oil industry – the Secretary of Energy, and the Director of the Environmental Protection Agency. These appointed officials are in charge of the

agencies that implement policy and oversee compliance with regulations in the area of offshore oil drilling. Therefore, the sentiments towards offshore oil drilling that are held by the president tend to reflect those held by these appointed leaders and dictate regulations and how strictly they will be enforced. The discourses of US presidents on energy and environmental security are what Wolford (2010: 8) calls "strategic essentialisms", "intentional simplifications of an otherwise complex subject for the purposes of democratic engagement." Engagement in what? Thus, the primary question behind the discursive analysis I exercise in chapters 3 and 4 is: in the discourse on energy and environmental security, what is it that needs to be made secure, why does it need to be secured, and what are the potential threats to its security?

Chapter 2 - The Construction and Securitization of Ocean Space

To look upon the ocean is to place it within a particular social context according to a perceived utility. For the Florida beachgoer, the ocean is a pristine environment, where the horizon seems to extend infinitely as it meets the sky. For the oil entrepreneur, it holds great mineral wealth, which, at some point in time, must be exploited to fuel the economy and expand the industry. For the ecologist the ocean contains essential biophysical processes that are not only necessary for marine life, but part of the larger, global ecosystem that sustains all life forms on the planet. For the fisherman, the ocean is a space where both income and sustenance may be obtained.

The ocean has been used for transportation, commercial and military activities for several thousand years, but only recently has much credence been given to its location within the global ecosystem. Today, these divergent interests find themselves competing over ocean space in order to define its utility as well as the international and State legislation required to secure these interests against potential threats.

In the case of offshore oil drilling, ocean space is the physical arena upon which the security discourses, such as energy and environmental, create knowledge, portraying counter-realities of the ocean and its value for society. Though the security discourses discussed in depth in chapters 3 and 4 attach new images and values to ocean space through the perpetuation of their associated knowledges, the ocean has, throughout history, been the subject of social representations and value constructions that persist within these discourses. In particular, marine or ocean space, most notably in terms of its relationship to terrestrial space, has often held the position as the spatial 'other' in respect to human processes. As Steinberg (2001) points out, the ocean has held many positions in

its relationship with society, namely as a space for transportation, resource extraction, and, more recently, an intricate part of the biophysical processes that sustain human life. Regardless of the attempts of the latter imagination to integrate ocean spaces into a complex argument about the long-term sustainability of life on earth, the more traditional notion that the ocean is "merely a distance and not a *place*" where social rules do not apply, persists in contemporary discourses, managing to distance ocean spaces from social controls and oversight (Steinberg 2001: 49; Zalik 2009). During the centuries before widespread seafaring, the ocean was a 'resource provider', furnishing littoral communities with food and the occasional luxury items (i.e. pearls). With God, Glory and Gold in mind, the Imperial quest to map and mine the world sent many explorers across the oceans, but with little interest given to the content of the oceans themselves. This has resulted, especially under the auspices of capitalism and neoliberalism, which emphasize material and financial accumulation in tandem with deregulation and privatization, in policies that often ignore or belittle social and environmental consequences to the very social processes transpiring within ocean space.

Due to the anthropocentric nature of exploration and resource extraction, the oceans have tended to play merely a service role, as they are viewed simply as the matter lying between the more easily inhabitable terrestrial formations. Social constructions or representations of the ocean, attempt to provide a static image of this space in order to define the parameters of its usefulness to society. In the processes of resource extraction, multi-use preservation, and environmental sustainability, the often competing representations of ocean space have seen little compromise, with regulatory policies

constantly being implemented, lifted, or ignored in view of competing interests, and their associated ocean-space imaginations.

This chapter seeks to highlight the evolution of social constructions and securitization of the ocean, namely in the United States, by deconstructing and analyzing a few of the dominant perspectives regarding ocean space throughout history. I hope to show that despite an increase in scientific inquiry aimed at increasing an understanding of ocean spaces and reconfiguring the spatial imagination, the ocean as a resource provider and the 'other' to terrestrial spaces remains a prominent vision that serves to inform human actions within that space. As a result of the ocean's seemingly fixed construction as the 'other', limited authority is placed on any knowledge that conceptualizes ocean space as a vital element within the Earth's ecosystem, and the subsequent need for protections and regulations to ensure its sustainability. In fact, where protections of ocean space exist it is most frequently in light of efforts to maintain the ocean as a multiple use space for commercial enterprises, and not as a result of an incorporation of a new knowledge that seeks to protect ocean space for the purpose of environmental sustainability or ecosystem protection. In the case of energy and environmental security, the conceptualization of the ocean provides the frame of reference from which each discourse imagines the ocean's relationship and utility to society. For instance, under the discourse of energy security the ocean is constructed as the frontier for oil resources, that would be produced and used domestically in order to secure the American oil supply from the volatile foreign oil market and oil-funded terrorism. In the case of environmental security, the ocean is perceived as [1] a vital element in the larger ecosystem on which humans rely upon for long-term survival; and [2] is the site where

the commodification of the pristine, unspoiled by dirty offshore drilling activities and rigs, is able to generate thousands of jobs and billions in annual income for coastal tourism.

Historical Construction and Subsequent Regulation

In the 16th and 17th centuries, the oceans trade had been well established with routes expanding the globe, encompassing the majority of the earth's continents save for the northern expanse of Asia and North America. The command of the sea was increasingly heralded as the central motor for economic prosperity, leading States to invest in new schemes in which to dominate ocean spaces. However, this view of trade and transit endorsed a vision of ocean space as a flat surface, a vast expanse, or an "abstract space to be crossed" (Steinberg 2001: 49). Even the fishing industry possessed a limited vision of ocean spaces, as humans remained, mostly, on the surface of the ocean, casting nets into the depths to extract their fare.

Ocean space has been constructed and reconstructed in its relation to the social world; embodying attributes and valuations that are accompanied with advances in technologies and changing perceptions about its utility to society. Under the mode of industrial capitalism ocean space was revalued, separating it as a distinctive place outside of society, with characteristics of a "great void", unamenable to development or investment (Steinberg 2001). However, as shipping became an increasingly prominent component of the expanding international economy, a requirement to standardized codes of conduct on ships and between ships, as well as between ships and the states whose territorial waters they might be conducting business in, seemed necessary (ibid:125). Initial debates centered on private property rights in ocean space. In 1609 Hugo Grotius,

a Dutch jurist considered by many as the father of international law published *Mare Liberum* (Free Sea). In it, Grotius suggested that ocean space was incapable of being enclosed as private property, and that the need for enclosure was unnecessary since the oceans contained unlimited resources and the activities of one activity did not impede other activities (Juda 1996: 10; Johnston 1988). However, at this time, the primary activities taking place in ocean space were transit, trade and fishing. It is noteworthy to add here that Grotius was working on behalf of the interests of the Dutch and their desire to participate in East India trade. The enclosure of the seas would limit movement and participation in trade. However, this is namely in reference to the enclosure of the high seas or open ocean and even Grotius distinguished between inner and outer seas.

In response to Grotius' claims that the ocean contained inexhaustible resources and, therefore, did not require enclosure, counter-arguments were voiced laying claim that the sea is not only exhaustible, but that enclosure was necessary to ensure national security, the endurance of coastal fisheries, and the profitability of marine resources. In *Mare Clasum* (Enclosed Sea) John Selden, a contemporary of Grotius, expressed "fear that should others be allowed to use the sea and to exploit its resources freely, then less profit would arise for the state which would own that area of the ocean" (ibid: 12). Selden's solution was, therefore, to enclose ocean spaces in order to limit access to resources that were not only potentially exhaustible, but more importantly had the potential to create more profit if access to resources was controlled by the State, or made scarce through a process of exclusion. The Grotius-Selden debate remains a focal point in the creation, use and regulation of space. Grotian theory emphasizes the ability of collective security to create the impetus for regulation, where John Selden saw enclosure

as a necessary component in the regulation of space as well as the creation of exchangeable commodities. This debate emerged during the rise of the mercantilist economic system in Europe, whereby State power was dependent on its ability to produce capital and trade locally produced commodities with those produced by other States. Selden's position on ocean space is in accordance with the mercantilist vision using enclosure policies that would grant the State control over the exploitation of resources. For Selden, not only did this mean that exhaustible resource were not overexploited, but that the profits (and rents) from the exclusive exploitation of ocean resources would bolster the State's wealth. For Grotius, enclosure was unnecessary for maintaining ocean stocks because the ocean contained unlimited resources, at least in "outer" ocean space, and that collective use of ocean space would create a system of collective bargaining between multiple interests, so that they would not impose on one another's endeavors within that space.

In 1613, another Dutch jurist, William Welwod, contended that coastal fisheries were prone to exhaustion, and that the best possible way to ensure their viability as a source of food and trade, was to enclose space for the purpose of regulation (Juda 1996: 14 and 10). Distinctions were made regarding inner and outer ocean space, where, even Grotius argued, that the sea directly adjacent to landed territory (the inner sea) is subject to national jurisdiction, and due to its limited span (though unspecified at the time) was in fact exhaustible; a notion that cultivated the concept of the territorial sea (ibid: 13; Johnston 1988). The distinction between inner and outer seas served to define the parameters of subsequent debates, whereby, even to this day, the outer or high seas, beyond the sovereign space of the territorial sea, is considered unenclosable and

therefore, according to United Nations General Assembly Resolution in 1973, the "common heritage of mankind" (Juda 1996: 191; Mansfield 2004: 314). The resulting construction and territorialization of ocean space is one that combines the Grotian and Seldenian concepts with an enclosed State territory extending off of the coast, and the open ocean, or high seas, remaining the "common heritage of mankind." The creation of State territory within the ocean was seen as an essential element in managing access to ocean resources both for the purpose of creating a buffer for national defense purposes, and regulating use so sedentary fisheries and other resources near the coast would not be depleted and could provide revenue to the state through the collection of rent. In the 20th century, the notion of enclosure of ocean space for the purpose of claiming exclusive access to resources amplified with the introduction of oil as the primary fuel. The concept of the Outer Continental Shelf, seen as the extension of terrestrial space that simply lay beneath the water, was derived in order to lay claim to the vast oil wells that it was believed to contain.

Despite the recognition in the 1600s that the inner or coastal waters were subject to state jurisdiction and generally required some form of regulation due to the exhaustibility and slow regeneration of near-shore resources, the outcome of the debate, at least at an international level, remained inconclusive until the late 19th and early 20th centuries. Ocean boundary-making prior to what Johnston (1988) refers to as the "classical period", dating from the 16th-19th centuries, is conceived to have "lacked any degree of precision or sophistication" due to "primitive" technology, law, politics, morals, and administration (ibid: 76). To emphasize the primitive notion of boundary-making prior to the use of a mileage formula, Johnston describes the "canon-shot rule" or

"gunshot rule" for jurisdiction, whereby "the state's authority extends as far as the range of gunfire" (ibid: 79-80). This meant that the lines drawn around ocean territories were quite vague and up to constant interpolation, which does not produce what might be considered a sound sense of territorial security.

The delineation of ocean territories started to become more concrete at the end of the 19th century to the turn of the 20th century as transformations in shipping, primarily in petrol as both fuel and cargo, generated a concern over the marine environment. This concern revolved *not* around the sustainability of the ocean as a space of unique and vital biophysical activity, but rather around the multiple *commercial* uses of ocean spaces which were threatened by an increase in pollution associated with the use, transportation and extraction of petroleum in ocean spaces. Both fisherman and the emerging coastal tourism industry saw their activities threatened by oil pollution in the oceans. Unlike the 1740 argument by German scholar Christian Wolf that "neither navigation nor fishing activity interfered with the possibility of others making use of those seas…since the high sea is a 'thing of unlimited use'", the early 20th century ships were "fouling" the oceans through both the normal operation of relieving the oil contaminated ballast water, and through spills by way of shipping accidents (Wolf quoted by Juda 1996: 13; and 54). Now, it appeared as though there were activities taking place in the ocean that endangered its multiple uses. This launched the first international efforts to create a consistent set of laws establishing jurisdiction over ocean spaces for the explicit purpose of inciting regulation that would maintain the ocean's multi-use. It was recognized that contaminants within ocean spaces were untamable, prone to move across established borders, affecting fishing and tourism activities in the coastal areas of surrounding States.

Juda (1996: 54-6) notes that the discharge of oil "was a menace to maritime, fishing, and coastal tourist industries" and that even if discharged "on the high seas, [it] could reach and pollute territorial waters and shorelines." Therefore, it was agreed that an international solution had to be codified, with marine territories recognized, under a uniform international law, to serve the purpose of regulation. However, disputes arose regarding the extent of territorial waters (ranging from 3 to 12 miles from the coast), and the debate regarding the need for enclosure against those who saw the sea as a common space unamenable to enclosure reemerged.

Following World War II the United States, as an emergent world power, saw an opportunity to unilaterally claim ocean territory that was seen as a vital element in State security, both militaristically and economically. In the early 1900s it was believed that large oil deposits existed within 40 miles off of the U.S. coastline extending into the Gulf of Mexico. In 1942 Secretary of the Interior Harold Ickes wrote a letter to President Roosevelt following an Interior Geological survey, which claimed that there were known oil deposits offshore. Ickes said

> The war [(WWII)] has impressed us with the necessity for an augmented supply of natural resources. In this connection I draw your attention to the importance of the Continental Shelf not only to the defense of our country, but more particularly as a storehouse of natural resource. The Continental Shelf extending some 100 or 150 miles from our shores forms a fine breeding place for fish of all kinds; it is an excellent hiding place for submarines; and since it is a continuation of our continent, it probably contains oil and other resources similar to those found in our States. I suggest the advisability of laying the ground work now for availing ourselves fully of the riches in this submerged land and in the waters over them (ibid: 95-96).

The above statement not only allows us to understand the desire to reconstruct particular ocean space as an extension of territory in order to meet desired ends, but also points out the connection between the military, energy and the environment; particularly where these three concepts interact to either supplement or hinder the success of the others. As

was mentioned before, the pollution produced through the use and transport of oil in ocean space was perceived as a threat to the environment upon which other commercial activities, such as fishing and tourism, depended on to conduct their commerce. As a result regulations, such as restricted ballast release, were put in place in order to keep the ocean safe for multiple uses. However, when oil, as the dominant source of energy, was seen to be vital to the military's success, the combination of military success with energy security managed to push for an increase in oil activities in ocean space, which now extended beyond fuel and cargo to production, thereby increasing the potential threat to environmental security.

Estimates for onshore oil reserves in the 1940s predicted that "the total known oil reserves of the United States were less than 12 years' supply at peacetime use rates" (Juda 1996: 94). Therefore the push to move drilling operations offshore was met with the government's expediency on the matter, seeing that this would allegedly affect the outcome of the war and increase the domestic supply of petroleum. The Truman Proclamation on the Continental Shelf in 1945 "pointed out that 'the continental shelf may be regarded as an extension of the land mass of the coastal nation and thus naturally appurtenant to it'" (ibid: 96). The proclamation served as the first instance in which the continental shelf was defined as an extension of terrestrial space, and this reconstruction of what was formerly ocean space allowed for exclusive resource exploitation. Many other States followed suit, asserting their claims over continental shelves and adjacent waters that extended some 200 miles or more from the shoreline. Though shortages of steel and financing during the Second World War slowed the offshore oil industry's

expansion, the desire to integrate the continental shelf as an exclusive zone for the purpose of resource exploitation persisted.

In terms of offshore oil drilling the Truman Proclamation was a significant turning point, particularly so for the securitization of ocean space for the explicit purpose of exploitation. This was an attempt by the United States, whose power had increased greatly with the success of the war, to unilaterally declare jurisdiction over ocean space as a means of exploiting the mineral wealth it was suggested to have. The justification for this proclamation lay in a redefinition of ocean's layers. No longer do we have a great void upon which ships travel, but the continental shelf, which is an extension of the land space that simply lies beneath some water. Since the continental shelf consisted, generally, of the same material (granite) as that of the adjacent land, then it was clearly a part of that land's territory, at least for resource exploitation. The bottom of the ocean, as opposed to the continental shelf, on the other hand, was primarily composed of basalt, and was therefore conceived of as a different space entirely; still that of the great void.

To emphasize the perspective of the ocean as the great void I will reflect here on the attitudes of prominent naval theorists and commanders of the early 20th century, whose perspective on ocean space, first places prominence on the ocean as an important tactical space, but ultimately manages to render it an asocial space. With an amplification of military activity in the early 20th century, large naval fleets were erected for the purposes of national security during the two World Wars, and were increasingly seen as the predominant form of an advanced military. With oil replacing coal as the primary input for fuel into naval fleets, oil and the military became inextricably interconnected.

The ocean in the context of what became a naval arms race between the Allies and the Axes, was not merely a form of transport and commerce, but a superior surface from which to project a State's power; though still seen more generally as an empty, asocial void, with little or no reflection on either it's biological interconnectivity to society, or its amenability to regulation in the high seas. In 1904 Halford Mackinder, a professor of geography at Oxford University and the acclaimed father of modern geopolitics, presented and published a paper titled *The Geographical Pivot of History*, which contained an environmentally deterministic analysis of geography and power. This paper also served to contextualize a dominant view of ocean spaces in view of their use for British imperial pursuits, with particular reference to their use as 'containers' of the Russian heartland. Prior to heavy naval power, political domination relied heavily on a State's ability to cross land quickly and efficiently, and, as Mackinder (1904) argues, by using the natural impediments of the landscape to defend against one's enemy. For this he cites the steppes in the west of Russia as a natural barrier to sustained invasion of Europe by Asiatic forces. Mackinder was concerned with the ability of horses and camels commanded by the Asiatic forces to sweep into Europe, leading to the subsequent downfall of the British Empire. He, along with his predecessor's Alfred T. Mahan and Spenser Wilkinson, both naval officers, argued that "mobility upon the ocean is the natural rival of horse and camel mobility in the heart of the continent", and that sea power allowed Europe, particularly Great Britain, to "wrap her influence around the Euro-Asiatic land-power which had hitherto threatened her very existence" (Mackinder 1904: 432-3). This distinction between land and ocean mobility served as an interesting point of departure for what might be termed the "othering" of ocean space, not only based

on social context but also on a material context, which for Mackinder (1904: 433) constituted "the material conditions of its mobility" (i.e. solid vs. liquid). Similar to arguments about the untamable nature of ocean spaces, this reference highlights a direct recognition that land and ocean spaces, based on their material form, create different social and political spaces. A notion that has been recognized throughout history, not only in the lack of human development of marine space for habitation (unless drudged and transformed into terrestrial space), but in its function as a space outside of order where "social rules were not needed" and the "widespread practice of raiding and piracy" was common and similarly untamable (Steinberg 2001: 49). The asocial valuation of ocean space positions it against the highly socialized sphere of terrestrial space, where human life functions, interacts, makes decisions, enforces order and oversight of the social order is more readily conducted. With the ocean existing outside of this traditional sense of social ordering, and its remoteness in relation to day to day social activities, it becomes a space that is also external to much social observation and therefore regulation. This becomes more important with concerns over pollution in the ocean, particularly when deregulation is incorporated into governance schemes.

Despite Mackinder's recognition of the ocean as an essential element in the containment strategy of the Russian Heartland, his vision of the ocean as an extensive void, useful only for its service to society, maintains previous constructions of the ocean, and informs policies moving forward. These policies include limited concern for regulation of ocean space activities except where the use of the ocean for one activity interferes with the other ocean dependent, commercial activities. For example, the use of petroleum based fuel and cargo, in which the discharge of oil was seen to have negative

and “injurious” effects not only on the fish and food stock, but also where slicks caused a fire hazard to vessels and ports (Juda 1996: 56). The ocean, as a result of its othering, was (and is) not a concern for a stringent regulatory regime other than in the maintenance of its multiple commercial uses, where even, as will be argued in chapter 4, environmental security must first commodify an unspoiled environment in order to find protection from the environmental degradation caused by offshore oil drilling.

The United Nations Convention on the Law of the Sea (UNCLOS) in 1958 served as the first official international platform upon which a uniform set of boundaries could be established regarding property rights and jurisdiction over maritime space. International law following the 1960 UNCLOS ascertained that States were to have an exclusive fishing zone of 12 miles with a territorial sea (that is, national *sovereignty* over the seabed, subsoil, marine space and airspace) at a maximum of 6 miles from the coast, as well as jurisdiction over the continental shelf for exploitation of resources either under the soil or sedentary fisheries, which are “natural resources permanently attached to the bed of the sea” (Juda 1996: 149). Jurisdiction over the high seas remained open, subject only to vague laws governing the sustainability for multiple uses of ocean space, as well as a general code of conduct for the shipping industry. Many States grew concerned that if they did not claim extensive adjacent waters for their own they would find the larger States (the United States and former colonial powers) encroaching on ocean space, decreasing stocks and access to resources for nearby coastal states. This generated an ongoing discussion regarding ocean sovereignty and economic rights that led to the 1982 Law of the Sea.

The 1982 Law of the Sea extended the territorial sea to an area not to exceed 12 miles off the coast, with a contiguous zone that extended an additional 12 miles (See Figure 2.1). The new laws also included an Exclusive Economic Zone (EEZ) that did not contain rights to sovereignty, but solely "rights over natural resources" (ibid: 229; Cuyvers 1984: 152). The EEZ extends roughly 200 miles from the coast (i.e. exclusive economic rights over 200 miles off a State's coast) The 1982 Law of the Sea also extended the continental shelf to include the slope and rise, where the continental shelf (composed primarily of granite) meets the Oceanic crust (composed primarily of basalt) (Cuyvers 1984: 153). Due to the addition of an EEZ, the area contained within the breadth of the continental shelf was no longer limited to exploitation of mineral deposits and sedentary fisheries, but also included fishing in the open marine space above the shelf. Once again, this reiterates firstly the asocial perception of the ocean as a space that is not incorporated into the sovereign territory of a State, except out to 12 miles, and points secondly to the ocean and definitions of its territorialization as an element in commercialization of ocean resources for the purpose of exclusive exploitation by the State within whose territory it resides.

Social Construction of the Ocean

Steinberg (2001) breaks down three prominent discourses from which the prevailing constructions of the ocean are derived. The development discourse, arising out of the Enlightenment, contends "that both society and space are amenable to development", but that "the sea [is] a space *devoid* of the potential for growth and civilization." Similarly, the geopolitical discourse and the legal discourse insist,

respectively, that "the sea [is] *external* to the territory of political society", and "immune to social control and order" (ibid: 33-5, emphasis added). These discourses originate in social constructions of ocean space, combining to produce and reproduce the construction of the ocean as a spatial other. Steinberg also emphasizes a key point in the spatial othering of the ocean, embodied in a resource management perspective which "implies that the ocean is a space designed and managed *by* land-based societies to *serve* land-based societies" (ibid: 20, original emphasis). This reproduces the perception that the ocean is resistant to social ordering and therefore to social regulations, especially as perceived under the neoliberal ordering which seeks deregulation and privatization.

Despite an international Law of the Sea and extensive environmental regulations set to protect against pollutants, ocean space has continued to experience relatively lax regulatory oversight compared to its landed counterpart. Zalik (2009: 557) states that "the appeal of the petroleum offshore for industry lies in its relative spatial isolation…[in that] the marine zone is external to much social observation and thus community monitoring and state oversight." This is more readily highlighted by the April 20, 2010 explosion of BP's Deepwater Horizon oil rig which has found the Minerals Management Service, which is responsible for both royalty collection and oversight of the United States' offshore oil operations, at fault for not maintaining proper regulatory oversight. Though problems with regulation will be explored further in the following chapters, it is noteworthy to draw attention to deficiencies in offshore regulation as a continuation of the land-ocean dualism which has created an ocean space that is asocial; a space constructed predominately as one with immense commercial utility, but seemingly little social utility. Or rather, under the logic of neoliberalism, whereby citizens are

transformed into rational and predictable consumers and producers (*homo economicus*), social utility is relegated to a position outside of political-economic concern. The perception of ocean as the other, whose utility is only augmented by further commercial exploitation, informs both quests for territorial expansion as well as regulatory policy within ocean space. Due to its remoteness, and more importantly the financial viability of offshore industries, the asocial, offshore space receives limited regulatory attention.

Conclusion

Though ocean space is constructed as the other to terrestrial space, offshore oil drilling offers a perspective from which this land-ocean dichotomy collapses, at least provisionally. It is within the context of the potential for offshore oil drilling that the Truman Proclamation declared national jurisdiction over the continental shelf by claiming that the shelf was simply an extension of the land base as part of a process to secure territory and resources deemed useful for States' and their associated commercial operations. The ocean was, for the first time, seen to have land space amenable to the same type of enclosure policy exercised over traditional, habitable, land space, but was excluded beyond the 12 mile mark from sovereign jurisdiction. Offshore oil drilling, however, does not merely connect land-based societies, to underwater land, but includes all of the vertical space above the surface down to the subsoil wellhead. Drilling operations, and the effects of drilling accidents, impact the entire marine environment from the vertical space of subsoil to surface, to the horizontal space across which pollutants travel and often collide with onshore territories.

The aspect of commercial use becomes significant in the case of Florida that will be discussed in chapter 4. The above analysis shows how the overall national security

interest of the nation relied heavily on the production and acquisition of oil resources for its own perceived success. Similarly, oil has relied on its connectivity to the military for access to foreign oil, and in its momentum to sway policy towards acquiring exclusive economic rights in the outer continental shelf, thereby legalizing offshore oil activity through the extension of land rights on the continental shelf. This interplay between the military and oil becomes quite pronounced, especially when viewing contemporary war efforts that reside in places such as the Middle East. This is where environmental concern over oil pollution in the ocean becomes manifest, and perceives additional threats to environmental security with the expansion of offshore oil drilling.

The rise of environmentalism in the 1970s (to be discussed in more detail in the following chapters) created a new perspective upon which to view ocean space. Emerging from this discourse was a perspective that saw social and biological consequences of activities taking place upon and within oceans. The 1969 Santa Barbara oil spill served as a call to action for those concerned with the multiple uses of the ocean, due to its negative impact on commercial fishing and tourism, as well as those who envisage the ocean as an element in the larger ecosystem, upon which society depends on for its survival. However, environmental concern is often seen to impede the dominate energy security discourse that promotes offshore oil drilling and positions itself as an essential element in national security efforts centered around military needs, thereby relegating it to a secondary position in the broader security schema.

In an age of intense financial authority, it is difficult to put a price on the quality components that impact social space. As we will see in the following chapters, there is an attempt by many concerned with the environmental and social dangers involved with

offshore oil drilling as well as the overall consumption of oil (rising CO^2 emissions), to draw attention to the commercial interests that are harmed by drilling accidents and its day-to-day pollution. Opponents of offshore oil drilling employ a financial discourse in hopes of engaging an audience that views growth and profitability as the paramount objective. This economic argument supplements the environmentalist's perspective, which holds relatively little weight next to profitability and industrial growth. A sustainable environment yields relatively small returns in a world where power and security endeavors are tightly bound to prospective investments in commodities and their ability to generate financial returns to investors. The commodification to securitization argument will become more apparent in the following chapters as I delve deeper into the discourses on energy and environmental security, particularly after the institution of the neoliberal political agenda established under the Reagan administration.

Space, and in this case ocean space, becomes the object of an ideology, specifically the State's ideology, which projects an image and creates a knowledge pertaining to the dominant perceptions of that space's utility. The State defines the utility of ocean space via the optics of a socio-political 'logic', such as accumulation under capitalism. Through visual (i.e. maps where the ocean remains a two dimensional space) and verbal discourse the ocean, becomes a space of an accumulation strategy, a supplier and transporter in "the world of commodities", whose value is constructed using the "power of money" (Lefebvre 2007: 53). As a reaction to this, counter-ideologies envisage ocean space using both the logics of capitalism, as well as a separate logic that recognizes quality components that are irreducible to the emphasis on quantity necessitated by accumulation strategy, and unattractive to the powerful forces of financial investment.

Ocean space, therefore, is the object of an intense ideological dispute, upon which divergent perceptions about its social and economic utility, or its position in relation to society, compete to engage policy and protections to secure their objectives from potential threats.

Chapter 3 - The Discourses of Energy and Environmental Security

In the following analysis of the energy and environmental security discourses pertaining to offshore oil drilling within the United States, I attempt to break down the general assumptions and portrayals of truth contained within each, with the purpose of detaching them from their banal existence, and uncovering the power relations concealed within them. In looking at the history of their development, we find that these two discourses found powerful voices in tandem (in the 1970s), and that, initially, political leaders sought to reconcile them. However, new security threats contained within these discourses were identified, namely that of profit or financial security, necessitating a change in the ideology of one or both discourses and the policy measures necessary to meet those ends. The struggle over offshore oil drilling serves as a prominent battleground upon which these discourses are developed and interact, competing with and reacting to one another in order to influence policy and public sentiment with regard to the overall utility of ocean space.

The term security has been used by public figures, political leaders, activists, and even by the average citizen to encompass any number of measures carried out in the name of 'protection,' however security is not a salient concept in and of itself, but rather embodies sets of values, desires, assumptions and future prospects that vary widely. In particular, security implies an *in*security which is dependent upon the socio-political framework from which it is derived. Dalby (2002: 163-4) sums up the socio-political phenomenon of security as follows:

> Security is about the future or fears about the future. It is about contemporary dangers but also thwarting potential future dangers. It is about *control*, *certainty*, and *predictability* in an uncertain world…It is about maintaining certain collective identities, certain senses of

> who we are, of who we intend to remain, more than who we intend to become. Security provides *narratives* of danger as the stimulus to collective action but is much less useful in proposing desirable futures...Security *discourses* specify the endangered identity…To be effective they need to interpellate existing social identities and articulate them to other discourses in circulation and to commonsense geopolitical reasoning (emphasis added)

Indentifying what is to be secured and how to go about securing it depends entirely upon the definition or perception of danger.

In the case of the energy and environmental security discourses discussed in this chapter, security becomes an object of discursive contention, where not only do two divergent discourses compete to define where insecurity truly exists, but where an increase in the security of one often translates to an decrease in security for the other. For example, when offshore oil drilling is expanded for the purpose of securing a safe, domestic supply of oil resources, offshore oil drilling opponents perceive a threat to the security of the environment, as well as commercial industries that depend on unpolluted ocean space to maintain business. This begs the question of *what* the object of security is, and *who*, in particular, does or will it benefit? Security is not independent of the assumptions and values of the structures within which it is created. As an *object* of discourse, security is rather defined as a result of dangers presented to the integrity of particular institutions, and becomes entrenched with multiple objectives over time.

Discourse as both a product and producer of knowledge was a major focal point for philosopher Michel Foucault in the 1960s, and has since become a significant point of departure for much social theory. The major impact of Foucault's work rests on the emphasis on power as the primary motivator behind the creation of social truth.

> What makes power hold good, what makes it accepted, is simply the fact that it does not weigh on us as a force that says no; it also traverses and produces things, it induces pleasure, forms knowledge, produces discourse (Faubion 2000: 120).

For Foucault, discourse becomes a tool for power, whereby standards of social conduct can be articulated and institutionalized through the implementation of economic and political structures. Discourse is a portrayer of knowledge, where "knowledge is a tool of power" (Foucault 1976; Leiss 1994: 106). In the juxtaposition of the US energy and environmental security discourses, the assumptions, or truths upon which the discourse is built are the sources of a power struggle in which each side believes it correctly portrays reality and an acceptable human response to that reality. The use of the term security, therefore, becomes a discursive tool wherein legitimacy can be harvested, particularly by the State and political leaders who have access to the media, by playing on certain fears about the future. To combine this with Dalby's notion of security as the expression of a desire to insulate from a perceived threat, it can be surmised that security as a discourse, is wielded by the powerful to produce sentiment that would legitimize certain policies and actions that may not necessary be considered necessary by the citizenry. Security, therefore, can be a means through which to gain consent by articulating threats to the objects of security in terms of how their continued insecurity threatens society and the livelihoods of the population; for instance, access to safe and cheap energy resources (energy security) or a clean ocean in which to swim and harvest food (environmental security).

However divergent the energy and environmental security discourses may seem to be they operate under similar assumptions derived from the Enlightenment, promoting scientific rationality as the means through which society's mastery over nature is the means to secure mankind from external threat. The domination of nature through scientific agency and subsequent technological advancement illustrates the initial

instance in which human ingenuity (and rationality) is utilized in order to ensure future well-being and happiness from the uncertainties contained within nature. It indicates a security agenda oriented towards control over the perceived limits of nature by means of scientific knowledge and advancement that would ostensibly benefit all of society.

The concept of securing humanity from the elements by establishing scientific certainty seems straightforward enough, but science contains social biases in its inception, and is not always an objective apparatus used only to garner information and direct technological advancement. Rather, science and the technological solutions it advances arise out of socio-political assumptions regarding human nature and predictable responses within a controlled environment (Harvey 1974). Therefore society is structured so as to facilitate these assumptions, such as an economic structure which relies heavily on the notion that rational actors will make simple cost-benefit analyses with regard to the choices, purchases and products they make, with little room for reflection on decisions that may be made outside of this assumed rationality. Science has been portrayed as the harbinger of this rationality, through its ability to interpolate and later manipulate a natural world that once posed a more serious threat society. Science is typically envisioned as rational and objective, and it is therefore the use of science that manages to lend validity to an agenda. Security discourses, therefore, attempt to reinforce the truths intrinsic to their position by employing scientific knowledge that prescribes the course necessary to ensure security, as well as the 'appropriate' technological tools to achieve this end.

Environmentalism and Energy Independence

The 1950s and 1960s were fraught with political turmoil over the US military operations in Vietnam, a civil rights movement seeking racial equality, uncertainty under the competing ideologies of two global hegemons (the USA and USSR), and new insights into the environmental degradation caused by human activity. Increasing unrest produced social movements that endeavored to alter US policy on the topics of war, intervention, social justice, and, most importantly for this study, the protection and conservation of the environment. In 1962 Rachel Carson published *Silent Spring*, which documented the detrimental effects of the use of pesticides on the environment. Carson's account of the harmful effects of pesticides, which were previously "regarded as miraculous and life saving", provoked a new ecological vision "that the environment is not merely a series of separate and distinct ecosystems with no, or even limited, interaction, but rather a complete system where interactions are complex, numerous and at times unpredictable" (Manheim 2005: 7), and therefore necessitated conscientious social use and management of the environment (Salter and Ford 2001: 48). Manheim (2005: 7) notes that "Carson's assault on chemicals and societal management of chemicals was heightened by the fact that her passionate book emerged during a decade when revolutionary social ideas attacking the status quo were emerging."

Environmental activism opposing offshore oil drilling arose in 1969 following the blowout of a Union Oil Co. pipe in Santa Barbara, California, 3500 ft. below the ocean surface. An estimated 200,000 gallons of oil flowed out of ruptures along the ocean floor over the course of 11 days (Clark and Hemphill 2002). Photographs of the thousands of birds that were killed and the massive slick that spanned 35 miles of California's

coastline were published in national newspapers, allowing people across the country to engage emotionally with the disaster in conjunction with the emerging environmental awareness. On April 22, 1970 the first national observation of Earth Day took place in response to what founder Senator Gaylord Nelson termed "desecration to the landscape" and "degradation of the environment", noting the Santa Barbara oil spill as a major catalyst for action (Nelson 1970, January 19). He called for a moratorium on offshore oil drilling "until criteria are established for its protection", otherwise the continuation of drilling will lead to the destruction of a "sensitive environment" that contains a "major source of food and protein…[for a] world that is searching for resources to feed its exploding population" (ibid). The overarching argument was that the assumption of private enterprise as a social planner, capable of regulating both market and social processes through technological advancement and profit, was no longer sufficient, and that government regulation was necessary to ensure protections of the unquantifiable aspects of social well-being. The aim was to redefine progress into a concept that not only rested on the quantity produced in efficient markets, but to also protect quality of life embodied in a healthy natural and social environment. Nelson argued that "the mindless pursuit of quantity is destroying – not enhancing – the opportunity to achieve quality in our lives" (ibid).

President Nixon spoke in Santa Barbara following an inspection into the damage caused by the spill. He confirmed the sentiments of Nelson in a speech and established new regulations in the arena of offshore oil drilling, that, had they been in place prior to the spill, it would never have occurred. The President also established a Cabinet group for the Environment which would consider "problems like the use of our resources in a way

that will see that we have all the material progress that we need, but that we have that material progress not at the cost of the destruction of all those things of beauty without which all the material progress is meaningless" (Nixon 1969, March 21). Juxtaposing material progress with environmental protection becomes an important point for debate, and possibly the point of divergence for proponents of offshore oil drilling and its opponents. It is here that a difference in how progress is measured and upon which values it relies transforms into a central theme of debate, at least in the initial environmental movement. It suggests that material progress or economic growth may not be the best means of measuring progress overall, and instead suggests that quality, embodied in the notion of environmental security which incorporates human health and beauty, should also be considered when pursuing material progress.

As a result of this expanding environmental sentiment, a number of legislative acts were passed to ensure conscientious human activity with regard to its effect on the environment, and by extension societal well-being. In 1969, Nixon signed the National Environmental Policy Act "which requires the Federal Government to consider the environmental impact of any proposed actions as well as reasonable alternatives to those actions" using Environmental Assessments, Environmental Impact Statements, and Categorical Exclusion Reviews (Energy Information Agency 2005: 9). Legislation directly related to offshore oil drilling included the Clean Air Act (1970), which required oil and gas facilities to provide "detailed emissions data in compliance with the Clean Air Act" regulations; The Coastal Zone Management Act (1972), emphasizing the need to "preserve, protect, develop, and restore or enhance the resources of U.S. coastal zones; The Endangered Species Act (1973), required oil and gas facilities to ensure that their

operations were not negatively impacting endangered marine life; and The Clean Water Act (1977), required oil and gas facilities to obtain a National Pollutant Discharge Elimination System (NPDES) permit before releasing pollutants into the water (ibid: 9-10). In order to better manage, research and enforce necessary environmental protections, Nixon established the Environmental Protection Agency (EPA) and the National Oceanic and Atmospheric Administration (NOAA). The environmental acts and the establishment of Federal agencies began efforts under both the Nixon and Carter administrations to balance the pursuit of a steady supply of energy while simultaneously enforcing the necessary environmental protections. Regulation at the federal level was seen by both Nixon and Carter as a necessary element in protecting the environment from the destruction caused by human activities, and namely that of industry. After the 1969 Santa Barbara oil spill, offshore oil drilling became a focal point for regulation, due to the ever present potential for devastation arising in the processes of production and transportation. Federal regulation was seen as a necessary evil that would create a uniform process for compliance and oversight to ensure environmental protections.

After some fluctuations in oil prices and supplies in 1970, Nixon urged congress to take action not only to ensure that the American people had access to a "plentiful supply of energy", but also access to "clean energy [which] is essential if we are to sustain healthy economic growth and improve the quality of our national life" (Nixon 1971, June 4). This marked the first instance in which a US President had ever addressed Congress on the topic of the energy supply. At the time, America's energy needs were seen to be "outsrip[ping] our energy supplies" resulting in possible fuel shortages and increases in fuel prices (Nixon 1973a). As a result of perceived oil shortages in the future,

Nixon called for an acceleration of the leasing of the Outer Continental Shelf for oil and gas exploitation, but emphasized the need to enforce the environmental protection requirements strictly while simultaneously promoting conservation practices that would reduce the per capita consumption averages. It was seen to be necessary to legislate a balance which recognized these competing interests by first, extending, for two years, "the automotive emission standards" contained within the Clean Air Act, which "will provide additional time for the development of emission control technology and permit manufacturers to focus attention on improving automobile fuel economy", and secondly, provide "authority for a limited program to convert power plants and other major fuel-burning installations from the use of petroleum products and natural gas to the use of coal", but this is meant to be only a temporary resolution while alternative fuel sources are developed (Nixon 1974b). For Nixon, the perception of oil shortages in the future constituted an insecurity situation, whereby the expansion of regulated drilling into the Outer Continental Shelf from which more oil could be produced for consumption, was merely a means to offset the future oil shortages while a "clean energy" source was developed. Nixon's discourse on energy was constrained by the limits placed by the devastation caused by the Santa Barbara oil spill and the insecurities produced by offshore oil drilling, recognizing the tension between the two insecurities. Ultimately, the goal was to mitigate the threats to both environmental and energy security in the long term, by temporarily expanding and regulating offshore oil drilling *until* the nation's energy needs can be met by a cleaner fuel.

In October 1973, the Arab members of OPEC placed an embargo on oil exports going to the United States as a consequence of US involvement on the side of Israel

during the Yom Kippur War. As a result, the American energy belts were tightened, with Nixon urging Americans to conserve fuel by "lowering the thermostat by just 4 degrees this winter" in combination with "a program of mandatory allocation for home heating oil and propane…[to] distribute supplies so that…no areas will face crucial shortages and any possible inconveniences will be shared equally by all Americans" (Nixon 1973b). The 1973 Oil Crisis presented the first instance in which American reliance on oil imports created a security threat, necessitating the insulation of national energy supplies. In January 1974, only five years after the Santa Barbara oil spill, Nixon addressed the U.S. Congress on the energy crisis, stating that "self-sufficiency" in energy was a necessary item on the agenda, which required a temporary *relaxation* in environmental regulations until a stable supply is procured. The project for energy independence was intended to promote a "rapid increase [in] energy supplies – maximizing the production of our oil, gas, coal and shale reserves" an urgency for conservation practices that would reduce demand through the elimination of "non-essential energy use and improve the efficiency of energy utilization", and the development of "new technologies through a massive new energy research and development program that will enable us to remain self-sufficient for years to come" (Nixon 1974a). This included accelerated expansion into the Outer Continental Shelf, with an increase in the acreage leased to 10 million acres "more than tripling what had originally been planned" (ibid). Nearing the end of his Presidential career, Nixon signed the Energy Supply and Environmental Coordination Act of 1974, which sought to achieve a "balance in our environmental requirements and our energy requirements" (Nixon 1974b). Again, emphasizing the need to balance the two insecurities through regulation and careful implementation of energy policies, though

the need to expedite the expansion of domestic energy supplies managed to put energy security ahead of environmental security, at least temporarily.

When Jimmy Carter took over the Presidency in 1977, he embarked on implementing policy that aimed to continue the balanced energy and environmental policies implemented under Nixon. He immediately established the US Department of Energy with the signing of the Department of Energy Organization Act, and former Secretary of Defense James Schlesinger as the first Secretary of Energy. Once again it is important that we direct our attention to the intimate connection between the military and oil resources. The security needs centered around this prominent energy resource did not simply require new policy that would protect oil resources, but necessitated the appointed of a tactical military mind to take the charge.

The establishment of the Department of Energy consolidated all federal offices involved in the energy sector, transferring the responsibility of all energy related matters into the hands of the Secretary of Energy (see The Department of Energy Organization Act). In a public speech on 18 April 1977, announcing the establishment of the Department of Energy (DOE), Carter called on Americans to understand that even though "the energy crisis has not yet overwhelmed us… it will if we do not act quickly." President Carter also remarked that in the near future "we will feel mounting pressure to plunder the environment. We will have a crash program to build more nuclear plants, strip-mine and burn more coal, and drill more offshore wells than we will need [unless] we begin to conserve now" (Carter 1977b). Looking back at the discourse of security as a tool for power in order to create consent around a cause by playing on insecurities and fears, the above statements by Carter, seem to do exactly that. By employing the rhetoric

of an imminent threat Carter is able to garner support for immediate action for the purpose of securing energy resources from the threat of foreign oil producers. It is noteworthy to add here that President Carter was the first US president to consistently use the term energy security in his speeches, using the recent oil crisis to denote an *in*security situation that required an immediate state response through an increase in domestic production and expansion into the Outer Continental Shelf, alternative fuels such as coal, and conservation efforts through conscious usage and technological advancement. As a result energy security and energy independence merge, creating State institutions, such as the Department of Energy, in order to facilitate a secure and independent source of energy.

Similar to Nixon who urged energy independence through, ultimately, the creation of alternative fuels, Carter's call to action was one that urged the implementation of conservation practices and new technologies to defend against future crises, breeding a sense of impending economic and environmental disaster if the reliance on oil, especially imported oil, as well as current levels of consumption continued:

> we simply must *balance* our demand for energy with our rapidly shrinking resources…The oil and natural gas we rely on for 75 percent of our energy are running out. In spite of increased effort, domestic production has been dropping steadily at about six percent a year. Imports have doubled in the last five years. Our nation's independence of economic and political action is becoming increasingly constrained. Unless profound changes are made to lower oil consumption, we now believe that early in the 1980s the world will be demanding more oil than it can produce (Carter 1977c).

The important point though, is the ability of the President to create and disseminate knowledge and truth about an issue, which can greatly impact policy. Where Carter says that, "Our nation's independence of economic and political action is becoming constrained" through a heavy dependence on imported oil, the essential nature of energy security as energy independence is unambiguous. Energy security here is tied directly to

national security, sovereignty, and the power embodied in the state. The oil crisis generated the perception that a dependence on imported oil would further constrain the political and economic power of the United States, due to the heavy reliance on oil as an essential part of the economy.

Regardless of evidence of an impending shortage, the notion that resources were "running out" and that imports have been doubled, necessitated both conservation practices through conscientious consumption and a regulatory regime that would allow expanded OCS drilling with increased oversight. Carter (1977c) commented in an address given to the U.S. Congress that

> Americans long thought that nature could take care of itself--or that if it did not, the consequences were someone else's problem. As we know now, that assumption was wrong; none of us is a stranger to environmental problems… I believe environmental protection is consistent with a sound economy… Intelligent stewardship of the environment on behalf of all Americans is a prime responsibility of government

For Carter, the environment was an essential part of economic well-being and what has been referred to as material progress. This mean that society would have to be intelligent stewards of the environment in order to ensure that the environment was able to survive and provide for society. Carter thought, more importantly, that it was the responsibility of the government to protect the environment "on behalf" of its people, instating laws and regulations that would provide for "intelligent stewardship" and reduce the environmental problems that many in the population faced.

In terms of the Outer Continental Shelf and offshore drilling operations, Carter emphasized the need for tighter government regulations over drilling operations to protect against possible environmental disasters such as the 1969 Santa Barbara spill, while simultaneously continuing the Nixon era expansion of the offshore oil industry.

Subsequent OCS regulations under Carter sought to reconcile "the nation's energy needs with the fullest possible protection of the environment" (ibid). In 1978 Carter signed Public Law 95-372 which amended the previous Outer Continental Shelf Lands Act to include greater authority of the Secretary of the Interior to assess the environmental impact of offshore drilling activities, along with the authority to establish and enforce the implementation of safety devices and procedures. Carter outlined the provisions and implications of the bill as thus

> The bill mandates significant changes in existing law to *improve environmental safeguards*, to promote greater cooperation between the Federal Government and States and localities, to reduce barriers to OCS activity on the part of small- and medium-sized energy firms, and to ensure safe working conditions for those employed on the OCS. I am convinced that by reducing the great uncertainty associated with many aspects of the OCS program in recent years and by placing a proper emphasis on environmental protection and other important objectives, this legislation will provide the needed framework for moving forward once again with a *balanced and well-coordinated leasing program to assure that OCS energy resources contribute even more to our Nation's domestic energy supplies* (Carter 1978, emphasis added).

This included a provision for "onsite inspection of safety equipment designed to prevent blowouts, fires, spillages or other accidents" (ibid). Though Carter's efforts to expand the domestic offshore oil production was ultimately geared towards creating alternative energy resources such as coal and solar power, as well as regulating domestic oil production and consumption through the imposition of fuel efficiency standards and environmental protections from potentially harmful production processes, the underlying notion, that oil is not only running out, but more importantly that a reliance on oil imports will, once again constrain political and economic independence, supplied the impetus to create a comprehensive national energy strategy. The solution for energy security being: [1] research into and use of alternative fuels, with the aim to replace petroleum products altogether; [2] a decrease in the per capita energy use by creating more efficient transportation infrastructures and urban centers; [3] regulations to ensure conservation

practices in both production and consumption practices; and [4] the creation of a strong enough, yet heavily regulated, domestic oil industry that can compensate for oil imports, and protect against foreign influence, *until* alternative fuels and the proper infrastructures are developed to replace oil (ibid).

Following this logic Carter signed into law the Crude Oil Windfall Profit Tax Act in 1980, which removed government subsidies on oil, replacing them with a tax that would equate them to their real prices and, hopefully, create the impetus for alternative fuel innovation, since artificially low oil prices discouraged the development of alternative fuels. He suggested that

> the revenues should be used for three basic purposes: one, to assist low-income households in bearing the burden of rapidly increasing energy costs; secondly, to improve the transit systems of our country, including not only rail but also buses and subways, and even the sharing of rides in other rubber-tired vehicles; and third, the development of alternative supplies of energy. We have placed a special emphasis on conservation. We must not lose sight of these three basic goals if we are to overcome inflation and the risks to our national security caused by our overdependence on foreign oil, which is now comprising almost half the total oil that we use. We must mount a massive effort to develop American energy resources and do it now and without delay (Carter 1980b).

The Nixon and Carter administrations, caught up in the whirlwind of an emergent environmental movement and the energy crisis that threatened political and economic independence, sought to balance the often countervailing needs of energy and environmental security, by implementing unprecedented regulations to protect the environment from the mounting threat of negligent material progress and expansion, while allowing enough leniency on the oil industry in a time when political and economic independence depended on a constant, yet safe source of energy resources.

Creating a new and consistent energy regime within the United States remains a difficult task given short Presidential terms and partisan quarrelling. While the Nixon and

Carter Administrations focused on energy conservation, environmental degradation and alternatives that would decrease reliance on volatile foreign oil markets, the incoming Reagan Administration (1981-1989), saw energy in a slightly different light. Though all three administrations were capable of agreeing on an overall decrease in oil imports, coupled with import diversification, and an increase in domestic oil production, their energy goals, and methods to achieve these goals, differed drastically. The Nixon and Carter Administrations implemented new regulations to protect the environment, though it is not clear whether this was simply a means to appease the voters, the environmental acts that they instated along with their associated regulatory mandates, created an environmental regulatory regime that was unprecedented. However, Reagan did not agree with the tenets of conservationism or a heavy-handed, regulatory government within the arena of energy policy, and particularly, the oil industry. The ever shifting connotation of energy security within the United States, therefore, is a direct result of the vested interests and values of the political ideologies in power at that moment. Nixon and Carter, caught up in the fervor of a popular environmental movement and the subsequent oil crises of the 1970s, ultimately sought to replace oil with a viable, and hopefully non-polluting alternative fuel, whereas Reagan was surrounded by the leaders of large oil companies and corporate elites, who intended to promote corporate interests and the long-term vitality and profitability of the oil industry. This shift in policy reflects a subtle structural shift between the Nixon and Carter Administrations, and that of the Reagan Administration. To Nixon and Carter, at least in the rhetoric they use and the policies they enacted, regulation was a necessary evil that would protect the environment from the insecurities caused by unregulated human activities that promoted only economic growth.

In contrast, the Reagan administration saw environmental regulations as an impediment to industrial growth, profit-making and production. Instead deregulation was necessary, since, according to the hegemonic ideology within the Reagan administration, the government did not possess enough information to instate proper and efficient protections, the market, however, which responds to price signals, privatization, and industrial self-regulation – since private owners have a vested interest in maintaining their property – were more efficient means to protect the environment. This is what might be considered a neoliberal modification of the means to ensuring environmental security. As McCarthy and Prudham (2004: 279) posit that neoliberalism's version of environmentalism, as a reaction to Keynesian-era environmental regulation, is one based on free-market concepts such as tradable emissions permits. With environmentalism as one of the most robust remnants of Keynesian-era politics, it has managed to threaten the foundation of the neoliberal agenda. Therefore green-corporatism and environmental sustainability have been incorporated into neoliberalism's central institutions, doing "far more to smooth the roll out' of neoliberalizations than attempts to dismiss or reject environmental concerns outright" (ibid).

The Nixon and Carter administrations still served under the ideology of Keynesian economic theory, where environmental and social protections were seen as the duty of the government, to provide a safety net for its citizens. Where the Nixon and Carter conservationist and regulatory policies were a response to an expressed need protect the environment from the destructive tendencies of industrial activity, as well as the oil supply shortages caused by the oil crises of the 1970s, the Reagan era rhetoric was a reaction to the implementation of these regulatory policies which were seen to hinder

corporate growth, and slow the rate of profit. As Harvey (2005) and Peet (2007) argue, the neoliberal project under the guidance of the Reagan administration was an effort to restore class power to those corporate elites, which was threatened by the implementation of regulatory protections of social welfare and the environment during the Keynesian era (i.e. labor unions and the environmental acts of the 1970s), which diminished the concentration of power and wealth.

To remedy the problems caused by these regulations, the Reagan administration instated free-market mechanisms that would manage and protect the environment through privatization. Reagan's Energy Policy Task Force, headed by Michel Halbouty, former President of the American Association of Petroleum Geologists, and consisting of several oil executives from the likes of Shell Oil, Du Pont and Standard Oil of California (Chevron), published a report on energy claiming that "the Carter energy program was designed to impede production and curtail consumption", recommending that Reagan focus on increasing domestic production, decontrolling oil and gas, opening up public lands for exploration and removing the Federal Government from the task of promoting conservation policies (Connelly 1980; Katz 1984). This meant, according to Reagan, that energy security was better ensured by opening up more of the domestic supply of oil and removing regulatory "barriers" to the efficiencies of the free market. In a message to congress in 1981 regarding the nation's energy plan, Reagan summarized his administration's policy on energy as thus:

> Our national energy plan should not be a rigid set of production and conservation goals dictated by our Government. Our primary objective is simply for citizens to have enough energy and it is up to them to decide how much energy that is, and in what form and manner it will reach them. When the *free market* is permitted to work the way it should, millions of individual choices and judgments will produce the proper balance of supply and demand our economy needs. This Administration's actions to end oil price controls

> and to dismantle the *cumbersome regulatory apparatus* associated with those controls demonstrate the intent stated in my February 18 economic message to minimize Federal intervention in the marketplace. Reforms in leasing policies and the *removal of unnecessary environmental restrictions* upon the production, delivery, and use of energy are part of this same effort to reduce bureaucratic burdens on all Americans… Given our continued vulnerability to energy supply disruptions, certain *emergency* preparations—such as rapid filling of the Strategic Petroleum Reserve—remain principally a Government responsibility. But our basic role is to provide a sound and stable economic and policy environment that will enable our citizens, businesses, and governmental units at all levels to make *rational* decisions on energy use and production—decisions that reflect the true value, in every sense, of all the Nation's resources (Reagan 1981, emphasis added).

The general policy of deregulation and decentralization led to, first, the Economic Recovery Tax Act in 1981, which managed to create a $12 billion dollar oil tax cut, with the aim of promoting increased investment and increased domestic production. Second, was the creation of the Coastal Barrier Resources Act in 1982, followed by the removal of Carter's Crude Oil Windfall Profit Tax, which Reagan claimed, "raised little or no revenue… [and] discouraged long-term investment in new domestic oil production. Moreover, it causes oil producers to engage in purposeless record-keeping", and should therefore be repealed (Reagan 1988). Since the implementation of the Windfall Profits tax under the Carter Administration, "oil interests [had] been working at reducing the tax", ultimately finding a voice within the Reagan Administration's belief in "tax relief incentives" that would induce exploration and resource exploitation in the OCS (Katz 1984: 138).

The Coastal Barrier Resources Act was Reagan's version of resource protection in ocean spaces, which involved property ownership as the key to "enhance[ing] both wise natural resource conservation and fiscal responsibility" (Reagan 1982). The key aspects of the legislation being the removal of

> Federal expenditures and financial assistance on approximately 700 miles of undeveloped coastal barriers on the Atlantic and Gulf coasts of the United States...adopt[ing] the sensible approach that *risk* associated with new private development in these sensitive

> areas should be *born by the private sector*, not underwritten by the American taxpayer (ibid, emphasis added)

Therefore, Reagan portrayed market mechanisms as the best way to ensure environmental quality and protections, removing Federal regulations and enforcement that ate up the taxpayers' dollars and hindered economic development in coastal areas. Reagan championed the freedom of the individual (both human and corporate) as the key to prosperity.

> I believe all individuals should have the right to pursue their livelihoods in their own way, free from excessive government regulation and government-subsidized competition. Greater personal autonomy, not paternalistic 'industrial policy,' is the path to great American competitiveness…Our experience with deregulation over the past 7 years has demonstrated the superiority of industry inspired by private initiative rather than controlled by Federal regulations (Reagan 1982, October 18).

The consequence of this policy is one that ultimately favors Reagan's version of energy security, which promotes domestic industry vitality and profit growth, over environmental concerns which are given limited attention within an institution relying on market mechanisms, unless that is, they can be given quantitative, though misrepresentative, values (Noe and Pring 2004; Barton et. al. 2004). In terms of Outer Continental Shelf offshore drilling development it means a reduction in Federal regulations, and/or the enforcement of regulations, that would otherwise hinder profit growth, by slowing operations – under the notion that time equals money – and implementing procedures and devices that would cost the company money. However, Carter and Nixon also referred to a continuation of industrial growth, but saw restrictions necessary to protect against the unquantifiable, yet crucial, aspects of environmental sustainability.

The reconstitution of energy security from Nixon and Carter to Reagan underlines a crucial divergence in policy that has had a lasting impact on security discourses to this

day. This can also be seen as an ideological split between Keynesian and neoliberal economic theories, which dictate divergent roles for government and its role in social and economic affairs. I argue that this split signifies the beginning of the movement stressing environmental security as a reaction to the *un*environmental policies and emanating from Reagan, and the inability of conservationist minded policy-makers to create and enforce regulation in a political arena that stresses market mechanisms, deregulation, and ruthless profit-seeking. This is where the juxtaposition of energy and environmental security becomes significant, particularly in the context of offshore oil drilling. It is the lack of 'necessary' environmental regulations, stemming from Reagan's neoliberal policies, that creates an *in*security situation to contemporary advocates of environmental sustainability and conservation. As will be detailed further in the following sections, the shift from an emphasis on Federal regulation under Nixon and Carter, to the emphasis on market mechanisms by Reagan, removes regulations that were not only necessary to protect the environment, but also were in place, as argued in chapter 2, to maintain the multiple uses of ocean space. With an emphasis in security, under the logics of neoliberalism (i.e. profits and market mechanisms), certain commercial interests took precedence over others, such as oil over aquaculture and fishing, with the direct implication that offshore activity, oil drilling in particular, was the site of limited regulation necessary to ensure the economic efficiencies of industrial growth. As a result ocean space came to be conceptualized more as a space for oil extraction, and less as a space for other economic or social activities activities. Energy security emanating from the neoliberal project under Reagan was one that emphasized domestic oil production, as a component in securing the United States from volatile foreign oil markets, and deemphasized alternative fuels and

environmental protections, creating an increase in the insecurities perceived by environmental activists and alternative ocean space commercial activities such as fishing and tourism.

The Discourse of Energy Security in the United States

The term energy security has become an engrained and seemingly unquestioned term within the contemporary political arena since earlier articulation under President Carter. The definition of the term seems to change according to shifting agendas and the socio-political *zeitgeist*, as evidenced in the previous historical narrative. In the United States energy security has encompassed a plethora of meanings that are the result of divergent understandings of the functioning of political and economic structures, as well as the social or 'national' significance of key energy resources, such as oil (Barton et al. 2004). From the consumer standpoint, oil (or in its refined form as gasoline), particularly *cheap oil*, is not simply the fuel for transportation and production, but also a signifier of the "American Way of Life", a symbol of American exceptionalism and status within the global community (Huber 2009; Moran and Russell 2009). Traditionally, security has been conceptualized in terms of border protection, as well as the protection and promotion of ideologies and values both domestically and abroad. In reference to Foucault, Dalby alleges that there is a "political impulse to secure" through the invocation of "effective discourses of danger… contained within widely shared geopolitical imaginaries", which serve to unify identities and justify State action (Dalby 2002: 146). Here it is a national identity contained within the discourse of energy security, and the popular rhetoric of "drill, baby, drill" that manages to thwart

environmental sustainability efforts, thereby increasing incentives to expand domestic drilling sites.

> Resources have, historically, been at the heart of many quarrels, whereby
>
> > certain types of natural resources available only in specific areas, become essential ingredients for the productive process. An adequate supply of these resources must be assured, and so the commercial tentacles of the productive unit must expand, until in some instances it draws upon supplies extracted from every corner of the planet. Inasmuch as every productive unit becomes dependent upon its sources of raw materials, every actual or potential denial of access to them represents a threat to the maintenance of that unit and to the well-being of its beneficiaries (Leiss 1994:156-157).

Therefore, state security begins to encompass the productive process to ensure access to those resources which have become embedded within the daily functioning of the State's commercial, social and political activities. The State security apparatus, therefore, must step in to protect and ensure sufficient access to oil as a means of ensuring its own survival and economic wellbeing (Barton et al. 2004; Muller-Kraener 2008; Ciuta 2010). The term security, therefore, "does not refer to an external, objective reality, but establishes a security situation by itself. It is the enunciation of the signifier which constitutes an (in)security condition…organiz[ing] social relations into security relations" for the purpose of protecting State interests (Dalby 2002: 12). The discourse of US energy security operates under the pretense of national security interests to ensure the protection and sufficient flow of key resources. Now whether an actually supply problem or political motives dictate the decision to create another offshore well is often difficult to determine. However, after the terrorist attacks of 9/11 the nationalistic, "Buy American" political sentiment increased drastically, with some gas stations claiming to sell only domestic, or "terrorist-free", oil, thus creating an incentive to increase domestic

production in one of the few remaining spaces for extraction and production: the outer continental shelf (Huber 2009).

In a senatorial hearing for the US Committee on Foreign Relations conducted in May 2009, Senator John Kerry concluded that the current US energy schema, which is heavily dependent upon oil, is unsustainable. The main complications include [1] the 'transfer of American wealth to oil-exporting nations', as a result of limited domestic supply; [2] a vulnerability to oil price shocks; [3] increased federal expenses created by an obligation of 'our military to defend our energy supply in volatile regions around the world'; [4] the recent implications of 'global terror, funded directly by our expenditures on oil; and [5] global climate change which is perpetuated by the burning of fossil fuels (Kerry 2009, May 12). Energy independence, accordingly, is supposed to secure the US from the aforementioned threats by creating a domestic energy supply capable of maintaining the infrastructure dependent upon a constant and cheap supply of energy resources. In addition the perceived threats under Carter's initial articulation of energy security, Kerry adds the threats of oil-funded terrorism – as a reaction to the terrorist attacks on 9/11, where the known terrorists were citizens of Saudi Arabia, the largest oil producer in the world – and the environmental threat of global climate change. The addition of terrorist free oil to the energy security agenda brings energy security discourse into the present, by identifying a new and tangible threat. Since there had not been a significant energy crisis since the 1970s there seemed to be less urgency surrounding an energy security discourse that promoted energy independence. The establishment of the International Energy Agency by the Organization for Economic Cooperation and Development (OECD), managed to insulate member countries from

such a crisis by way of stockpiling oil resources to be used in an emergency and establishing procedures to follow in case there was a shortage in the oil supply. Due to a decrease in the threat posed by a major oil crisis such as that experienced in the 1970s, the position that oil imports constrained and threatened political and economic independence appears to have lost a bit of weight. Following the events of 9/11, however, the impetus to once again protect the nation from the threats posed by imported oil, which now include oil-funded terrorism, was on the table, and energy independence, which includes an expansion of offshore oil drilling, had a new reference point to play on fear and gain consent.

Where during the oil crisis of the 1970s, prior to the threat of oil-funded terrorism, the energy security used by Nixon and Carter the expansion of domestic oil production into the offshore arena is, supposedly, a temporary measure in the move towards energy independence until an alternative fuel can replace it. The environmental regulations on offshore oil drilling and the Crude Oil Windfall Profit Tax in 1977 were a means to create the impetus for long-term alternative fuel investments through the creation of "realistic pricing based on the true value of oil" (Carter 1980, January 23). Energy security in this instance necessitated a sufficient supply of domestic oil, through an accelerated OCS leasing program, incentives for conservation, and the use of alternative fuels such as coal where applicable, *until* cleaner and environmentally friendly fuels and consumption technologies were ready for use. The role of government within this discourse is one that is responsible for protecting the unquantifiable aspects of the social and natural environments from a market driven by constant growth, in order to maintain or create a better quality of life. Noe and Pring (2004: 431-432) argue that this balancing act

between energy and environmental needs is embodied in the concept of "sustainable energy development", which examines energy security "in the larger context of human and environmental rights and needs." It recognizes that both energy security and environmental security are worthy goals, but the current condition of oil as a single-fuel source, protected by subsidies, an artificial pricing system that does not account for social and environmental costs, and industrial advocates endowed with the industry's wealth, trump the ability of policymakers to effectively balance the two needs (ibid; Müller-Kraener 2008).

The "sustainable energy development" supporters encouraged, created and enforced policy that would simultaneously accelerate\ or expand leasing and drilling in the OCS in order to meet domestic energy needs, and protect against international market volatilities, while creating Federal regulatory policies that would ensure the implementation of devices and procedures deemed necessary to protect the environment from industry-inflicted injuries such as spills, blowouts, and other environmental damages caused by human activities that are to this day being identified through scientific research.

However, the emergent discourse on energy security in favor of energy independence following the 9/11 attacks, were brought about under the economic and political approaches contained in neoliberalism. This meant deregulation and privatization policies promoted and legislated by the Reagan Administration and upheld through the successive neoliberal policies of subsequent presidential administrations, which maintains that the free market is the most efficient means to simultaneously balance supply and demand, as well as account for environmental protection by placing

risk in the hands of the landowner instead of the Federal government. This meant that the expansion of offshore oil drilling, as necessitated by the desire to protect ourselves from oil-funded terrorism, would move forward under the notion that the free-market, privatization and deregulation were the best methods to ensure that the energy supply was secure. However, this promoted single-industry lease sales over certain tracts of land in the Outer Continental Shelf, meaning that oil companies, as private owners, could buy the land and determine the extent of its use (single resource or multiple) with limited government interference. The divergence between the Carter and Nixon Administrations and the Reagan Administration represents not only an ideological divergence but also a structural one. For the offshore oil drilling industry this is the difference between a heavy-handed regulatory regime in which compliance costs both time and money, and a regime based on deregulation, small government, and regulation though privatization. For energy security this entails energy independence and expanded domestic production, but due to regulations and an overall emphasis on alternative fuel creation by the Nixon and Carter Administrations this could signify slower development due to mandatory compliance with Environmental Assessments and an insecurity for oil industry actors whose companies and jobs could become obsolete within 30 years if an alternative fuel were to replace oil. On the other hand, if deregulation, privatization and market mechanisms were emphasized then the impediments to industrial production (i.e. environmental regulations and "costly" compliance) would be reduced, ostensibly allowing production to move faster, thereby producing more fuel for domestic consumption. The structural ideologies embodied in the Nixon, Carter and Reagan Administrations set the terms for the debate over energy security and environmental

security that persist today, wherein the prevalence of one ideology over the other often dictates the amount of credence given to either balancing energy security with environmental security, or promoting an energy security that seeks to maintain oil as a single resource until the market dictates investment in alternatives, while environmental regulations are underemphasized as a result of deregulation.

In March 2010 United States President, Barack Obama, along with US Department of the Interior (DOI) Secretary, Ken Salazar, outlined a new plan for offshore oil exploration and drilling along the Atlantic coast (See Figure 3.1). This plan, called the Outer Continental Shelf Oil and Gas Strategy 2012-2017, came during a continuing debate regarding national energy security which sought to reduce domestic vulnerability to foreign producers as well as the price fluctuations seen to be largely under the control of OPEC member states. In a press conference concerning the recent offshore policy, US Secretary of the Interior, Ken Salazar, was quoted as follows

> By responsibly expanding conventional energy development and exploration here at home we can strengthen our *energy security*, create jobs, and help rebuild our economy. Our strategy calls for developing new areas offshore, exploring frontier areas, and protecting places that are too special to drill. By providing *order and certainty to offshore exploration and development* and ensuring we are drilling in the right ways and the right places, we are opening a new chapter for balanced and responsible oil and gas development here at home (DOI Press Release 31 March 2010, emphasis added)

Once again there is an emphasis on balancing energy security with environmental security, by developing "responsible" oil and gas practices, while simultaneously expanding the offshore areas open to production. Here there seems to be a return to Carter's version of energy security, which attempts to reconcile energy security and material progress with the protection of the environment through government regulation. However, it is not purely the energy security of Carter, but rather a synthesis of free-market mechanisms, with an attempt to address, once again the vitality of environmental

security, which is often neglected in light of a purely materialistic focus. First, it is necessary to understand from where the reemergence of environmental protection/security as a prominent discourse emanates. In 1993 President Clinton was the first President to use the term environmental security, though never describes what he means by it in his speeches. However, when looking at other speeches he gave, he, at least in his public statements, recognizes a tension between energy security and environmental quality.

> Politically, economically, and environmentally, our world is changing, and so are our energy choices. Our Nation has been blessed with a wide variety of energy resources. America's diverse climate, geography, and natural resources give us a flexibility unmatched in the world. It is our duty to use our energy resources wisely by increasing energy efficiency, commercializing renewable resources, and developing innovative, clean technologies (Clinton 1993)

This marked the beginning of the green movement, which is still popular within the United States to this day, whereby notions of conservation and energy efficiency reemerge, with similar connotations as those under the Nixon and Carter administrations. It is here where the "green standards" for buildings, waste disposal, transportation efficiencies, clean energy and more enter the socio-political scene. In 2000, President Clinton created Executive Order 13148, titled "Greening the Government Through Leadership in Environmental Management", which integrated "environmental accountability into agency day-to-day decision-making and long-term planning processes, across all agency missions, activities, and functions" (Clinton 2000b). The order mandated that government agencies have transportation vehicles with higher fuel standards, reduce the use and release of toxic chemicals, comply with established environmental acts, and implement "environmentally sound landscaping", all of which was to be overseen by the Environmental Protection Agency (ibid). Clinton promoted

"energy efficiency and renewable sources of energy for the U.S. economy, and new tax incentives for domestic oil producers to reduce U.S. reliance on oil imports" (Clinton 2000a). Though Clinton still supported energy security through a reduction on oil imports, he emphasized alternative fuels and conservation efforts as a means to achieve sustainable energy independence while reinforcing environmental protection standards. Through the creation of tax incentives that would increase the domestic supply and decrease the need for oil imports, along with an emphasis on energy efficiency and renewable, Clinton combined energy security policies that promoted energy independence, maintained the ideal of free-market mechanisms through the use of tax incentives, but simultaneously recognized a need for energy efficiency and renewables.

Once again government regulations were emphasized as a necessary means to secure both energy and environmental needs, through a short-term increase in domestic oil production and financial incentives to promote clean alternative fuels for the long-run. As green economics became an increasingly significant topic, especially with scientific evidence pointing to a link between human activities and climate change – namely from CO^2 emissions, deforestation and other industrial pollutants – policy since then has attempted to negotiate a balance between national energy needs and environmental protections, while still adhering to the free market ideology. This meant the creation of a quantifiable system that would protect the environment, such as credits for CO^2 emissions. This need to commodify everything so that it is quantifiable, easily measurable, and therefore can be calculated in order to turn a profit has tended to reinforce what Dalby (2002: 74) calls "carboniferous capitalism", or sustaining a fuel economy based on oil to maintain the oil industry so that it may continue to reap financial

benefits. This system of quantifiable protectionism and green environmentalism has been maintained and supported by those who benefit from a system where progress is measured namely by quantity and quality aspects are reduced to reflect numerical values. The financial might of the oil industry and their lobbyists have managed to keep significant environmental regulations from passing, and finances going to alternative fuels. Therefore, aspirations towards environmental security seem, at the moment, to be trapped by the logics contained within capitalism, which promotes industrial viability and financial gains, in an environment whose complexities and impacts on the social sphere are inadequately understood, irreducible to measurable quantities, and whose resistance to commodification deters financial investment (though not a complete resistance as we will see in the case of offshore oil drilling in Florida).

Regulation and the BP Oil Spill

Recently the offshore oil industry has found itself the object of much contempt, with the regulatory bureaucracy of the Minerals Management Service partly to blame for the lack of sufficient regulatory enforcement. It can be argued that the lack of offshore regulation is simultaneously political and spatial, embodied in the deregulation discourse and policy of neoliberalism, as well as its spatial remoteness, which makes industrial practice in marine zones "external to much social observation and thus community monitoring" (Zalik 2009: 55). On April 20, 2010, three weeks after President Obama and Secretary Salazar's announcement to further expand the OCS land available for oil leases, the Deepwater Horizon oil rig, owned by Transocean and leased by BP, exploded killing 11 workers and dumping an estimated 5 million barrels (172 million gallons) of oil into the Gulf of Mexico over the course of 86 days. Obama created a presidential

commission to investigate the causes of the spill and suggest ways to prevent similar tragedies in the future. Co-chaired by Senator Bob Graham (former Senator from Florida), and William Reilly, a former administrator for the Environmental Protection Agency (EPA), the commission found that the blowout at the Macondo well (which the Deepwater Horizon rig was extracting oil from) could have been prevented if the proper regulations had been in place and maintained by both government agencies and the oil and gas industry. The commission, however, also pinpointed "a failure of management by BP, Halliburton and Transocean" as the "single overarching failure" (Graham and Reilly 2011: 4). The key human errors identified included

> a flawed design for the cement slurry used to seal the bottom of the well…A 'negative pressure test,' conducted to evaluate the cement seal at the bottom of the well, identified a cementing failure but was incorrectly judged a success because of insufficiently rigorous test procedures and inadequate training of key personnel; flawed procedures for securing the well that called for unnecessarily removing drilling mud from the wellbore. If left in place, that drilling mud would have helped prevent hydrocarbons from entering the well and causing the blowout; apparent inattention to key initial signals of the impending blowout; and an ineffective response to the blowout once it began, including but not limited to a failure of the rig's blowout preventer to close off the well. (ibid: 4-5)

Overall the spill was concluded to have resulted from inefficiencies of both government regulations and industrial management and proper implementation of protective devices. The commission also found, though they add "whether purposeful or not", that many of the decisions made were meant to save the industry both money and time (ibid). Federal regulations meant to facilitate environmental sustainability arose as a response to both the 'tragedy of the commons', and the inability of privatization to ensure multiuse in a space whose medium for transference (water) is uncontainable. Under the auspices of neoliberalism deregulation and privatization have attempted to remove Federal regulations that purportedly hinder growth. Over the years, however, market mechanisms and price signals have been shown to be insufficient regulators, with particular regard to

both the environment and social justice issues. The weaknesses associated with a pure quantity analysis, embodied in the now pervasive cost-benefit analysis, include an inability to fully integrate a satisfactory environmental valuation based on "effects that are not scientifically fully understood", to make estimates capable of accounting for the occurrence of environmental impacts and their extent, or understand the long-term environmental, social and technological impacts of pursuing short-term revenue gains as opposed to long-term, multi-use sustainability (Salter and Ford 2001: 49; Salameh 2003: 137; Yang 2008). This reiterates the profit motive for neoliberalism's version of growth; one that does not heed to regulations set to protect the environment, as they cost more time and money. More importantly, the government entity, the Minerals Management Service (MMS), in charge of overseeing the offshore oil drilling industry's compliance with Federal safety regulations, was simultaneously the same entity that collected revenues from lease sales, creating what the report, and many environmental advocates, saw as a "conflict of interest" (ibid: 6).

> Over the course of many years, political pressure generated by demand for lease revenues and the industry pressure to expand access and expedite permit approvals and other regulatory processes often combined to push MMS to elevate revenue and permitting goals over safety and environmental goals (ibid: 7)

It is particularly the lack of sufficient regulation harbored within the discourse of market mechanisms that creates a crisis for environmental security. Though attempts to rectify this have been made by successive administrations, the structural integrity of neoliberalism, supported by strong financial interests who are keen on maintaining it, manages to obstruct many efforts towards environmental security that are seen to impede the efficiencies of the free-market (Peet 2007). Within both the political and social spheres the discourse of environmental security has been evoked to create a sense of

urgency around environmental matters, attempting to elevate it to the same level of importance as other forms of security (i.e. energy and homeland). The next section analyzes the environmental security discourse in relation to offshore oil drilling, in order to provide a platform from which the case study on Florida can be viewed.

Environmental Security

Environmental security is not nearly as familiar a term as energy security in the US political arena, but environmental discourses emphasizing the need for a secured environment are increasingly influential. Dalby (2002) asserts that the logic of security has changed in lieu of the conclusion of the Cold War, where the disappearance of the prominent external threat engendered an existential crisis of security. Though the urgency embodied within environmental security can, arguably, be thought to emanate from this existential crisis, it does not explain the historical and structural reasons as to why the environment is seen to be the source of insecurity. He argues that "environmental themes are now part of the calculus of international politics…as part of a broad human security agenda" (ibid: xix). Though I agree with the notion that environmental security is an increasingly significant topic of international debate, the notion that environmental security is the result of a security crisis following the Cold War does not seem to take into account the long history of environmentalism that has sought security for the environment. Rather, environmental security is a discourse stemming from a larger political debate over the objectives of human progress, whose *in*security arises out of changes in structural ideologies which are deeply rooted in history. As I argued in the previous section, the divergence in policies surrounding energy security and environmental security as exemplified by the Nixon, Carter and Reagan administrations,

represented a divergence in ideologies as discourses and the place of the government in regulation and economic affairs. Though the term environmental security did not emerge until the 1990s, the sense that the environment was an object of security, or under threat, has been a prominent component of political discourse in the United States since the 1970s.

Even within an environmental security which sees the environment, and in this case the marine environment (ocean spaces), as something to be secured from threats, there are different valuations as to the environment's use for society, what it is that should be protected, and for what reasons. The primary discourse of environmental security perceives the environment as something that needs to be protected – secured from the alleged threats of pollution, climate change, ecosystem disruptions, and destruction at the hands of human society – in order to sustain its multiple uses, as well as human life on the planet (Katz 1998). For the most part this relates to the broader sense of ecological sustainability, which engages a big picture perspective on the biological and social relations between society and the environment, considering their fates to be intimately connected. Some environmentalist concerns have "invoked various arguments about the sanctity of nature and life, falling back on the naturalistic language of the culture-nature divide to construct arguments" (Dalby 2002: 174). Notions of a pristine environment are often invoked, not to be constitutive in and of themselves, but to create a representation of a space that can serve the agenda of the associated environmental interests (i.e. eco-tourism). As will be seen in the case of offshore oil drilling in Florida, the 'pristine' is a tool used by offshore oil drilling opponents to commodify nature as a

means of protecting the tourist and fishing industries that rely on uncontaminated ocean spaces to remain in business.

In terms of the environmental security concerns surrounding the offshore oil drilling debate, the initial impetus for action came after the 1969 Santa Barbara oil spill which not only posed a threat to the 'pristine' ocean and beach environment, but also to the short and long-term health of marine and terrestrial life. Particularly this threat was felt economically in other activities that depended on marine space, such as aquaculture, fishing and tourism. The emerging discourse on environmental security in the 1960s was an ecological one, which perceived not just a symbiotic relationship between society and nature, but embodied an "ethic of understanding and respect for the bonds that unite the species of man with the natural systems of the planet" (Nelson, 1970). It attempted to reinstate society as an element within the natural, ecological narrative, as opposed to previous narratives which had separated "man", or society, as the civilized controller, from the wild element of the natural (Leiss 1994, Soper 1998). What ultimately seems to have happened is a reconfiguration or rescripting of nature, driven by the goals of growth and accumulation, whereby environmental security has come to represent a combination of ecological and capitalistic principles, in its framing as "an 'investment' in the future" (Katz 1998: 48). Under the neoliberal structure this means creating security through commodification and privatization of nature at all scales (ibid). It is therefore argued that the only way in which to gain support for its security is by using the logic of the structure within which it is operating at the time, regardless of its underlying structural ideologies. In the case of energy security this means finding commodifiable aspects of the environment, even if ecological sustainability is the ultimate objective. Commodities

related to an ecologically sustainable ocean environment include tourism (eco-tourism), fishing, and aquaculture. Arguments about the commercial viability of these activities comes to present a powerful framework, which opponents of offshore oil drilling, especially in the states of Florida and California, use to secure the environment from the perceived devastation caused by offshore oil activities.

Concern over the sustained multi-use of ocean space in light of increased pollution and two major oil spills (Santa Barbara in 1969, and Ixtoc I in 1979), served as catalysts for international ocean regulation, thought to be carried out best by establishing State property rights (to be distinguished from private property rights in the state's role as a public servant). The 1982 United Nations Law of the Seas set in motion provisions that acknowledged "the seabed and ocean floor beyond the limits of national jurisdiction (the Area) as well as the resources of the Area are the common heritage of mankind", and stipulated that States would adopt "standards for prevention and pollution and other hazards to the marine environment" (Juda 1996: 191). The 'Area' here refers to the high seas beyond State territory. Following arguments laid out in the previous chapter on the construction of ocean spaces, State acquisition of ocean space, under the guidance of an international agreement, was thought to serve namely the interests of sustained multi-use of ocean spaces. Under the auspices of capitalism, this meant protecting the multiple commercial uses of ocean space which include aquaculture, fishing, tourism, and underwater mineral mining (such as offshore oil drilling), from the harmful, and unsightly, effects of offshore oil activity. Offshore oil drilling was and is seen as the most likely to pose a threat to other commercial uses. The discourse of environmental security surrounding offshore oil drilling, is then used to protect the other commercial interests

that are threatened by spills, which are the result of unregulated oil drilling operations' extraction, production and transportation, such as those witnessed in Santa Barbara (1969), Ixtoc I (1979) and Deepwater Horizon (2010). Following the Deepwater Horizon spill in 2010, Environment America (2010) released a plea to United State Senators to place a moratorium on further offshore oil drilling. The statement had this to say:

> Oil can persist in the environment long after a spill. This prolonged exposure to oil could result in major impacts on the *coastal economies* of the Gulf region. Gulf of Mexico fisheries are among the most productive in the world. In 2008, according to the National Marine Fisheries Service, the *commercial fish* and shellfish harvest from the five U.S. Gulf states was estimated to be 1.3 billion pounds valued at $661 million. The Gulf also contains four of the top seven fishing ports in the nation by landed weight. The Gulf of Mexico has eight of the top 20 fishing ports in the nation by *dollar value* of landings. Accidents happen, and they will continue to happen in the future. Any expanded offshore exploration and drilling should be off the table. Instead, legislation should focus on emphasizing *development of carbon-free energy technologies*, including offshore and land-based wind power and solar power, consistent with the *protection* of wildlife and ecosystems, and the development of a meaningful national renewable electricity standard.

This statement emphasizes the commodification element used by environmental security discourse which will be elaborated on in chapter 4, where defense of the environment is construed in terms of one commercial value threatened by another. It shows how environmental security harnesses the logics of capitalism by commodifying the environment so as to secure it from the threats posed by offshore oil drilling.

Conclusion

The discourses of energy and environmental security represent a continuation of a conflict that recognizes a tension between energy security on the one hand, as energy independence, which, at least in the short-term, condones oil consumption and production, and environmental security on the other, which attempts to create policy around the sustainability of the environment, and therefore multiple commercial uses for

ocean spaces, which are threatened by destructive offshore oil drilling practices and accidents.

In terms of the debate over offshore oil drilling, discursive frameworks and ocean space representation serves to inform, the means by which policy can be made to promote security agendas. The policy pendulum swings between a perceived need for Federal regulation to secure the environment from harmful human activities, and the notion that market mechanisms, privatization and deregulation are necessary not only for economic efficiency, but also to properly manage both energy and environmental security concerns by responding to market mechanisms. However, the pursuit of energy security through the removal or relaxation of Federal regulations leads to not only a continuation of oil as a single-resource fuel due to an inability to properly account for social and environmental costs, but also threatens the tenets of environmental security needs (commercial and the ecological) due to the removal of the State, through decentralization and deregulation, as a protective entity.

Under the policy prescriptions of 'sustainable energy development', the need to ensure both energy and environmental security is recognized, with the ultimate aim being policy that manages both simultaneously. It also recognizes that the security needs of one may, at times, need to be relaxed in order to deal with the more immediate concerns of the other. In the case of the energy crisis of the 1970s environmental regulations were temporarily relaxed in order to give way to increased domestic oil and coal production to meet the supply shortages. Though this version of environmental and energy security promotes business as usual under a capitalist logic of accumulation, it manages to provide the best case scenario under that logic to make a compromise under the often contentious

desires to secure both energy and the environment, though possibly at a direct cost to the economic efficiencies of time and money.

Disasters, such as the 2010 Deepwater Horizon spill, highlight the inability of industry to properly instate the necessary regulations for environmental protection, thereby emphasizing the need under the discourse of environmental security for policies and Federal regulatory oversight to secure ocean space from the threats posed by offshore oil drilling. Despite evidence to the contrary, privatization, under the doctrine of "wise use", operates "as if wisdom and use were entirely separable from questions of history, geography, or power, while claiming nature for some social and economic interests over others" (Katz 1998: 58). As Thomas Paine said in 1776

> society in every state is a blessing, but Government, even in its best state, is but a necessary evil. Government, like dress, is the badge of lost innocence; the palaces of kings are built upon the ruins of the bowers of paradise. For were the impulses of conscience clear, uniform and irresistibly obeyed, man would need no other lawgiver; but that not being the case, he finds it necessary to surrender up a part of his property to furnish means for the protection of the rest.

Unlike the narrative of economic efficiency, and the increased incentives to self-regulate harbored in privatization, it becomes increasingly apparent that deregulation, privatization and the free market is insufficient in addressing environmental concerns, thereby threatening the environment and those who depend on an uncontaminated ocean space for their commercial activities.

Chapter 4 - The Debate Over Offshore Oil Drilling in Florida

The state of Florida has managed to construct a particularly unique role for itself within the larger offshore oil drilling debate. The construction of offshore spaces in Florida has resulted in a tug-of-war between proponents of offshore oil drilling, operating on an energy security discourse that leans on the nationalistic notions of energy independence, and drilling's opponents who utilize images of a pristine environment as well as a discourse anchored in what Dalby (2002) terms environmental security to support eco-tourism activities and long-term environmental sustainability. Since 1990 offshore oil drilling has been banned in Florida's coastal waters, which extend from the coast to 3 miles on the Atlantic coast and up to 10.3 miles on the Gulf Coast. In addition to the state ban on drilling in the coastal waters, the United States government has mandated that no drilling can take place within 100 miles of the Florida coast, due to the sensitivity of Florida's coastal environment. The debate to lift the bans in both Floridian coastal waters, as well as in the Federal owned offshore land beyond the 10.3 mile marker constantly moves in and out of both state and Federal legislatures, and is the site of intense rhetoric on the parts of energy and environmental security advocates.

The debate, which relies on the definition of a national security issue as well as its priority within a hierarchical national security schema, has proponents and opponents of offshore oil drilling acting upon and protecting particular interests that are threatened by advancements in the interests of the other. For proponents of offshore oil drilling, who see volatile foreign producers, oil-funded terrorism, and high oil prices as the major threats to national security, energy security, as achieved through energy independence, requires opening new spaces to offshore oil drilling. As a reaction to a perceived need to

expand oil drilling into new offshore spaces, opponents have found themselves conjuring up an image not only of pristine beaches for eco-tourism, which is the largest revenue generator in the state of Florida, but one that also includes the long-term sustainability of the interconnected marine and terrestrial ecosystems, which are a vital part of human life (both biologically and commercially). This perceived need to secure the environment and industries that depend on a clean and sustainable environment, falls into the category of environmental security which promotes long-term environmental sustainability against human activity, such as offshore oil drilling, that is seen as destructive, short-sighted, and hyper-materialistic (Dalby 2002). Also embedded within the opposition is a sense that an expansion of offshore territory available to drilling will only increase the American reliance on 'cheap', limited fuels which will not only mitigate efforts to find viable alternative fuels, but will also "cause ocean levels [to] rise because of climate change driven by the burning of oil and other fossil fuels" (Wagner 2010). The following study on offshore oil drilling in Florida aims to show the historical evolution of the debate over offshore space, while demonstrating how both proponents and opponents of offshore oil drilling have framed their arguments, moving their cases through the Florida state legislature as well as the federal congress where both sides seek legislation to support their particular security agenda. After this, I will look at statements, actions and legislation made in the wake of the BP oil spill in April 2010, in order to see how this might have affected the content of discourse of the debate. This case study of the offshore oil debate in Florida emphasizes the ideology of green capitalism, where the objects of security are commodified in order to protect them from perceived threats. However, we find that this commodification does not manage to address core concerns embodied

within the security discourses, such as long-term ecological concerns in the case of a large oil spill, as well as human health interests which have often been tabled in the interests of material progress.

Legislation Concerning Offshore Drilling in Florida

In 1953 President Eisenhower signed the Submerged Lands Act (S.J. Res. 13) which gave states the title to submerged lands 3 miles from the coast. In the case of both Texas and Florida, the historical land rights in the Gulf of Mexico extended up to a maximum of 10.5 miles from the coast into the gulf. After signing the bill Eisenhower stated that he was

> pleased to sign this measure into law recognizing the ancient rights of the states in the submerged lands within their historic boundaries. As I have said many times I deplore and I will always resist Federal encroachment upon rights and affairs of the states…This measure also recognizes the interests of the Federal Government in the submerged lands outside of the historic boundaries of the states. Such lands should be administered by the Federal Government and income therein should go to the Federal Treasury (Leviero 1953).

Whereas the law had previously made the Federal government the landowner of offshore areas for the sake of leasing and collecting royalties through rent, the above bill changed this, granting rights to coastal states. This meant that states now held the power to make decisions regarding the use of their coastal territories. Pertinent to this discussion is whether or not oil exploration and drilling was permitted within these a state's coastal territory.

At this time 9,000,000 acres had been leased in Florida's newly acquired offshore property, but this had only generated $700,000 from the leases in the previous seven years indicating that offshore oil drilling, at the time, was not producing enough oil or revenue to be considered commercially viable (Porter 1953). After the signing of the

Submerged Lands Act 1,000,000 new acres off the coasts of Florida were expected to be opened with income from the leases anticipated to double (ibid). According to Herbert and Lampl (2001: 26)

> Gulf Oil Company drilled four exploratory wells offshore in the Florida Keys between 1947 and 1959. Coastal Petroleum partnered with California Company (later Chevron) and Mobil Oil Company to drill 13 wells in the offshore area between Apalachicola and Naples between 1947 and 1968. Getty Oil Company drilled the last exploratory well in Florida waters in 1983 on state lease 2338 in the Pensacola estuary system near the center of East Bay in Santa Rosa County. To date, none of the offshore wells in Florida-owned waters has produced commercial quantities of oil or natural gas.

After years of exploration with the new land granted to the state of Florida, and a general increase in offshore oil drilling endeavors after the acquisition of the continental shelf under the Truman Proclamation of 1945, Florida drilling efforts were having a difficult time finding wells and producing quantities of oil that would cover their costs. Lacking commercial success, the offshore oil industry in Florida was proving to be costly and fruitless endeavor. Not only that, but growing concern over the potential for damages caused by large oil spills, posed a threat to environmentally sensitive environments such as the Everglades in southwest Florida as well as the beaches which were a growing commodity for the tourism industry.

Following the first offshore lease sales in Florida in 1946 a debate developed amongst environmental activists who opposed offshore oil drilling Florida and proponents who claimed that expansion was necessary to offset the oil crises of the 1970s. In December 1973, just two months after the oil embargo from Arab OPEC countries, the United States' Interior Department opened bids for offshore leases to the oil and gas industry off the Gulf coasts of Florida, Alabama and Mississippi. Several environmental groups, including the Sierra Club, whose opposition to offshore oil drilling developed as a reaction to the 1969 Santa Barbara oil spill, gathered in Tampa, Florida

attempting to halt the lease sales with claims that "offshore oil drilling would threaten Florida's "beautiful beaches and plentiful fish'" (New York Times 1973). The Bureau of Land Management countered the environmentalists' claims saying that "'long-term productivity of the Gulf environment, we believe, is not being reduced by oil and gas activities on the Outer Continental Shelf'…estimat[ing] that the new area will eventually produce more than 270,000 barrels of oil and more than 340 million cubic feet of gas a day" (ibid). The Bureau's impact statement on offshore oil and gas production in the Gulf of Mexico noted that spills, mostly by tankers, were the most serious threat to the marine ecosystem. However, the Bureau of Sports Fisheries and Wildlife claims that "a major oil spill could cause considerable damage to the plant and animal life of the estuaries and marshes" and that "if oil should reach an estuary where larval and juvenile forms of commercially and ecologically important fish are found the impact would be severe because larval stages are 10 to 100 times more sensitive to oil contamination that their adult counterparts" (ibid). This meant that an oil spill, from either a blowout or tanker accident, has the potential to devastate at least a generation of fish marine life, which is not only important for the marine ecosystem, but for fishermen who rely on the ocean's fish stock for their survival.

Similarly, the long-term pollution from day-to-day oil operations can also impact the marine ecosystem, and coastal environments, where the tourism industry – considered to be the backbone of the Florida economy – depends on an uncontaminated, "pristine" ocean environment to attract tourists and support eco-tourism activities such as scuba diving, snorkeling, sailing, etc. In 1982 a study produced by the National Academy of Sciences found that the Gulf of Mexico was one of the "most seriously polluted major

bodies of water in the world" and "that the greatest single source of petroleum pollution in open ocean regions is the discharge of tank flushings and ballast from crude oil tankers" (New York Times 1982). As a result, then Governor Bob Graham, an avid environmentalist and offshore drilling opponent, filed a judicial review in accordance with the Outer Continental Shelf Lands Act in order to challenge the 1982-1987 5-year leasing program which had proposed leasing of environmentally sensitive areas in southwest Florida (namely the Everglades) (Herbert and Lampl 2001). This led to a 1983 decision to impose a one-year moratorium on drilling south of the 26° North (from Naples, FL southward) in order to protect environmentally sensitive areas, including Big Bend and the Florida Middle Ground Reef Area (Reef Relief 2010). Environmental and economic concerns collated to oppose offshore oil drilling in Florida due to the threats it posed to the environment as part of a broader ecological concern, and industry dependent on an unsp*oil*ed environment.

In 1987 a disabled freighter leaked roughly 100,000 to 250,000 gallons of 'heavy fuel oil' oil off the northeast coast of Florida (from Mayport to St. Augustine) reinforcing the need to protect Florida's coasts from the damages that were seen as intrinsic to oil production and transportation. In response, tourists were livid, with one claiming that "it smells like you have your head in a gas tank", and then Governor Bob Martinez declaring a state of emergency, claiming that "there is no more urgent matter than the protection of our environmentally sensitive areas from the discharge of pollutants" (Associated Press 1987). This spill along with several smaller spills along Florida's coasts reinvigorated the anti-drilling and environmental movement, leading ultimately to a total ban on drilling within all of Florida's coastal waters. In 1989, immediately following the Exxon Valdez

spill, the Florida legislature officially banned "oil and gas permits on state-owned lands along the coast" (Herbert and Lampl 2001: 28-29). Soon after Florida's state ban on oil drilling, the U.S. Congress extended the moratorium on offshore oil drilling north of the 26° North line, blocking all lease sales in the Federal offshore lands in the Eastern Gulf of Mexico just beyond Florida's offshore territory. This came at the behest of President George H. W. Bush, who following mounting pressure from Florida's political leaders to instate a federal ban on offshore oil drilling within 100 miles of the Florida coast, cancelled lease sales and excluded the federally owned ocean space off of Florida from lease sales until 2000. Since then, Florida governors and the legislative body have opposed offshore oil drilling within 100 miles off the coast of Florida, including the Atlantic coast (ibid: 34). The 100 mile distance is seen by offshore oil drilling opponents as a buffer from spills that would be transported horizontally across ocean space, ultimately finding their way to land. Though pollution from offshore oil operations along the coasts of the other Gulf States occasionally manages to make its way to the Florida coast, the buffer mitigates the amount of pollution that ultimately washes ashore. This legislation represented a victory for offshore oil drilling opponents, who finally saw their security concerns addressed, protecting the Florida coasts from the perceived threat of offshore oil drilling.

Ever since, oil lobbyists have battled with both state and Federal legislatures to lift the ban on drilling along both Florida's northeast coast, as well as within the eastern Gulf of Mexico. Several times the Florida state legislature has found itself nearly lifting the ban on oil drilling in the state's territory in the Gulf of Mexico, but opposition from environmentalists and the tourist industry remains high, consistently blocking this

measure. Most recently, in 2009, the Florida House of Representatives voted to reverse the 19-year-old ban on offshore oil drilling in state waters claiming that the "excise taxes from drilling would produce a financial windfall" and that expanded drilling was necessary to protect against "hostile foreign interests that supply America's energy needs" (Hafenbrack and Alanez 2009). This echoes general sentiments regarding energy independence following the terrorist attacks on 9/11. As articulated by Senator John Kerry (see chapter 3), the connection between terrorist activities that threaten national security are, ostensibly, directly linked to oil imports, especially those from Saudi Arabia, from where many of the 9/11 terrorists originate. I find it difficult, however, to determine whether or not this was playing on fears about terrorism in order to justify an energy security agenda that reduces oil imports while increasing domestic production and expansion of leasing areas for offshore oil and gas production, or whether this sentiment is earnestly regarded as fact by its orator. Regardless of the logic behind using terrorism as justification for a reduction in energy imports and an expansion of domestic production, it is its very articulation that manages to inform public sentiment and policy regarding offshore oil drilling.

The following sections detail the discourses of used by proponents and opponents of offshore oil drilling in the state and Federal waters off the coast of Florida. I will draw upon statements and press releases made by both public servants in the Florida state government, as well as Florida senators serving in the US congress. Informing these public servants are oil lobbyists, environmental organizations, the media, and commercial interest groups who create a body of knowledge around how the ocean space around Florida should be utilized to further particular agendas. The discursive battle is centered

on securing Florida's commercial interests, but the division lies in what commercial interests take priority: energy or the environment?

The Drilling Debate

Since the closure of Floridian state waters as well as Federal waters extending out 100 miles from Florida's coast, the oil lobby in Florida has been virulent in its efforts to change the law. The major proponents of offshore oil drilling in Florida include lobbyists who, hired by unnamed oil industry affiliates, attempt to quell fears about the environmental and economic harms of offshore oil drilling that, according to David Mica of the Florida Petroleum Council, would entail "millions of dollars flowing to Florida for buying" land (Pittman 2006). The primary impetus to open offshore oil drilling is harbored in the sense of energy security that promotes energy independence from "hostile foreign interests that supply America's energy needs" (Hafenbrack and Alanez 2009). When the Florida House of Representatives voted to overturn the 19-year-old ban on oil drilling in Florida in 2009, Representative Dean Cannon of Winter Park was quoted saying "Our national enemies, who have sworn to destroy the United States and everything we stand for, use our reliance on foreign oil as a tool to arm themselves and to disarm us and to cripple us" (ibid). It is noteworthy to add here, as discussed briefly in the previous chapter on energy security that the post 9/11 hype surrounding oil has led many politicians and American citizens to attempt import boycotts, with some gas stations claiming to sell only American or 'terrorist-free' oil (Huber 2009). This further invigorates the nationalistic sentiment in favor of energy independence which seeks to insulate or secure the country from external threats (including the threat of expensive oil),

while simultaneously attempting to bolster domestic industry and rent-seeking on the part of the government through the expansion of Federal and state waters open to drilling.

However, opening offshore space to drilling has generated an intense resistance from ecologists and environmentalists who claim that oil drilling harms delicate marine ecosystems via daily operations and larger spills from blown-out wellheads and tankers, as well as Florida's tourist industry, which relies on the imagination of a pristine beach and ocean landscape to attract and maintain tourism. In the eyes of the drilling opponents, offshore oil drilling is a dirty process that is insufficiently or improperly regulated, and the long-term damages far outweigh any monetary or material benefit from opening new oceans spaces to offshore oil drilling. Similarly, there has been backlash from the US military, which uses areas in the northwest of Florida to conduct 'critical' military training and testing, which oil operations in the area would jeopardize. Though I will embellish these notion in detail later, my primary argument here is that ocean space off Florida's coasts remains heavily contested where proponents attempt to lift bans by playing on fears about the perceived implications of oil imports and the revenue additional leasing areas would generate for both the state of Florida and the Federal government, and opponents endeavor to keep the bans in place, emphasizing the potential threats to the environment and commercial activities who depend on its security.

Offshore Oil Drilling Proponents

Along with securing our nation from the external threat of oil-funded terrorism, supporters argue that "multi-billion" dollar windfalls could be accumulated by the state and Federal governments for leasing and taxing offshore oil drilling (Hafenbrack and

Alanez 2009). David Mica, claims that offshore oil development in Florida could potentially generate "429 billion in federal, state and local revenues", which would not only create windfalls for restoration, but help the state of Florida, which is suffering from high unemployment (at a rate of 11% at the time of this statement), create new jobs (Mica 2009). Klas (2009) cites Orlando economist Hank Fishkind, who was hired by the Florida Energy Associates, as saying that "the state could earn an estimated $2.3 billion in oil and gas revenues a year from oil leases and taxes." Additionally, Doug Daniels, the attorney for the Florida Energy Associates, claims that "if the prediction of 16 billion barrels is accurate, that would create 231,000 new jobs in Florida" ranging from construction to rig crew members (Pittman 2009). With the economy in recession, homes being foreclosed, and many Americans losing their jobs, the rhetoric of job creation and revenue generation are enticing ideas used to sell offshore oil drilling as an economically sound scheme for Florida. However, opponents argue that many others will eventually lose their jobs if offshore oil drilling is permitted off the coast of Florida. Though it is hard to know what these figures might actually be, the potential for a spill would devastate the image of Florida as a tourist destination full of pristine coastal environments free of oil-sullied waters. A spill would heavily impact Florida's tourist industry which creates and maintains many more jobs than the 231,000 promised by opening up Florida's ocean territory to drilling.

Furthermore the collection of revenues presents another problem represented in the royalty scandal of the Minerals Management Service in 2006. The Interior Department's inspector general said that "the agency's data are often inaccurate, that its officials rely too heavily on statements by oil companies rather than actual records and

that only 9 percent of all oil and gas leases are being reviewed" (Andrews 2006). The government was found to be losing an estimated $10 billion a year, even with soaring energy prices (ibid). Furthermore, the "cozy" relationship the MMS has had with the oil industry has resulted in a lack of oversight of safety devices and the installation of backup systems, such as the blowout preventers, which are used to "cut off oil from a well in an emergency" that were known to be missing in the 1990s (Lipton and Broder 2010). The Interior Department found that the MMS "never took steps to address the issue comprehensively, relying instead on industry assurances that it was on top of the problem" (Lipton and Broder 2010). In response to findings of lax oversight, Sen. Nelson exclaimed that "everything that's done by the oil industry is done for profit. Throw in the fact that regulators have taken a lax attitude toward overseeing their operations, and you have a recipe for catastrophe" (ibid). The Deepwater Horizon oil spill in April 2010, discussed in detail in the following section, rendered the question of oversight a strong point of contention for those opposed to offshore oil drilling in Florida.

Analyses of the effect on oil markets of opening offshore restricted areas to exploration, and ultimately, production, is complicated by the uncertainties inherent in existing reserve estimates. These estimates are merely speculative, and the impacts of additional wells may not be felt for several years in the future. Humphries et al (2010: 12-13) argue that "since no exploration, or assessment of reserves, has taken place using modern technology, the available estimates are likely to be speculative" therefore it is impossible to calculate the ultimate effect that offshore oil drilling in the waters off of Florida would have on overall oil supply and price. This begs the question, is the speculation of large reserves and revenues really worth the negative and often unknown

effects on the environment, which are seen to be costly to the tourism dependent economy of Florida?

The Florida Energy Associates, "which identifies itself only by saying it is financed by a group of independent oil producers", has contributed roughly $55,000 to political parties in the Florida legislature, including Senator Mike Haridopolos and Representative Dean Cannon (Klas 2009). The only known oilman behind the Florida Energy Associates is M. Lance Phillips, who has been vocal in his efforts to open Florida's shores to drilling. He claims that the oil "is all in close…The heart of what we're looking at is in state waters"; Philips went on to exaggerate Florida's potential: "we really want to do for Florida what oil and gas has done for Texas" (ibid). Rep. Cannon went further to portray offshore oil drilling as beneficial to environmental protection: it's a "smart economic policy, and it's the way to fund environmental protection and preservation" in Florida (ibid). The argument here is that windfalls from lease sales and taxes from the oil industry could be used for "grants to local communities for beach restoration" (Hafenbrack and Alanez 2009). This implies generating revenues from offshore oil drilling to fund environmental preservation and restoration to beaches and offshore areas which might be damaged by offshore oil drilling. Despite many efforts by the proponents of offshore oil drilling to calm fears about pollution, such as David Mica who asserts, against all evidence, that "offshore energy development is safe and clean" and that "the industry goes about its business finding, developing and delivering oil and natural gas while leaving the Earth nearly untouched" (Mica 2009), it seems that there is an acknowledgement amongst proponents that drilling does come with some hefty negative impacts. With the claim that revenues can go towards restoration purposes,

proponents contradict their arguments for clean and safe oil production that leaves the Earth "nearly untouched". It would seem then, that the revenues going to the state in this case would primarily be used to clean up industry messes that will, at some unknown point in the future, contaminate the beaches, harm the marine environment and undercut Florida's tourist industry. So instead of receiving large revenues that could be used to bolster the state economy by funding other activities, such as education and public transit, a large portion of the money would be put on reserve to clean up accidents, when they occurred, as well as the daily pollution of offshore oil activity that, according to environmentalists, who cite long-term negative environmental conditions in the coastal regions of Louisiana and Texas, would inevitably begin to accumulate along the shore.

Another impediment to offshore oil drilling in Florida comes from the United States military. In 2005, Secretary of Defense Donald Rumsfeld spoke out against offshore oil drilling along the northwest coast of Florida. In a letter to Senator John Warner of Virginia dated 30 November 2005, Rumsfeld stated that drilling in the Gulf of Mexico west of Florida was "incompatible with military [testing and training] activities" whose training area extend roughly 234 miles west of Tampa Bay (Nelson 2005). Senator Bill Nelson of Florida had previously conversed with Rumsfeld on the issue, stating that "attempts to expand offshore drilling could threaten our nation's military readiness by disrupting military weapons testing and training" which would allow oil interests to "undermine our long-term national defense interests" (ibid). In statement released by David Mica of the Florida Petroleum Council in 2009, Mica expressed that the interests of the military does not conflict with expanded offshore oil drilling, further justifying this claim by stating that the military uses roughly 14,280,000 gallons of gas every day and

that our "national interest" depends on "secure, domestic supplies of oil" (Florida Petroleum Council 2009). Mica's use of the term "national security", while pointing out not just the United States' dependence on oil, but the military's dependence on oil is a scarcely veiled attempt to tie expanded offshore oil drilling to a national security agenda, by insinuating that production off the coasts of Florida would benefit the military without any costs due to a precedence of the two operating in the same spaces. Mica employs popular rhetorical devices such as "national security" to advance the interests of the oil lobby and create favorable discourse around offshore oil drilling along Florida's coasts maintains the oil industry's relevance.

Additionally, groups such as the American Petroleum Institute, the Florida Petroleum Council and the Florida Energy Associates have hired polling companies, including Mason-Dixon Research and the Terrance Group, to conduct public opinion surveys in Florida in 2009, finding between the two surveys that between 59 and 65 percent of Floridians are in favor of drilling off the state beaches, with only 29 to 35 percent opposed (Klas 2009; Ricketts 2010). These numbers, however, are up for debate as the polls were conducted under a financial agreement between drilling proponents and the polling groups, which undermines statistical objectivity. However, the production of these statistics serves a purpose for proponents, which is to inform, through the creation of knowledge, both congressional members and constituents in the hopes of changing laws in favor of offshore oil drilling in the state and Federal waters around Florida.

Opponents of Offshore Oil Drilling in Florida

The ideal Florida vacation is envisaged through images of a pristine white beach which smoothly descends into the clear blue ocean waters. The scene is dotted with a few beachgoers enjoying the tranquility of the experience, away from their busy routines back at home. Though this image is socially produced through advertisements seen on TV, websites and in travel brochures sent to prospective tourists, Floridians who depend on this stream of tourists, as well as the seasonal snow birds who escape the cold winters up north for a warm climate, are intent on maintaining images of a pristine natural environment, unfettered by offshore oil rigs and the oil industry's dirty activities. Here, offshore oil drilling is opposed by those who claim that the oil industry, through daily pollution and 'unsightly' offshore rigs and platforms, as well as the lingering risk of a large oil spill would disrupt the state's tourism dependent economy. In a letter written to the U.S. Congress by Representative Ken Gottleib and co-signed by 79 congressional members, Florida's 'coastline' is championed as the "backbone of our $57-billion tourism industry as well as our most precious environmental resource" (Pittman 2006). This economic argument is one that attempts to situate the conversation in a language that appeals to those whose primary concern is growth and profitability. The pristine, in this context meaning clean, environment is commodified as the input for the tourist industry. The commodity sold is the experience of the pristine beach, the clean, a sanctuary away from the hustle and bustle of city life. As Adam Rivera, of Environment Florida put it

> Here in Florida, clean, sustainably enjoyed beaches are worth much more than a coastline dirtied and industrialized by drilling. Florida must slow down the rush to drill and consider what's at stake, before beaches close and tourists leave…Florida's East Coast and the Florida Keys beaches bring in nearly $20 billion annually…[which] is worth more than three times what dirty and outdated drilling would yield (Rivera 2009).

These statistics emanate from a report that compares U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration and National Ocean Economics Program data to the MMS "estimates of unleased, economically recoverable oil and gas reserves off our coastline" (ibid). Following the announcement of Obama's OCS Strategy in 2010, Rivera released a statement claiming that "no matter how closely oil companies encroach upon Florida's water, we will depend no less on foreign nations for energy, spend no less at the pump, and fear no less for security" (Rivera 2010). In an Environment America Report (Gravitz 2010) there are an estimated 759,711 jobs in leisure and hospitality, recreational fishing, and commercial fishing, which depend upon clean, oil-free Florida coasts for their income. For opponents of offshore oil drilling, the focal point for the debate is one that relies on the commodification of nature to generate revenues and jobs, which would be jeopardized by expanded offshore oil drilling.

At the core of this discourse are ecologists and environmental activists (environmentalists), who argue that the pollution created by drilling activities harms the ecosystem, and that the long-term sustainability of the environment, which humans depend on for their own survival, needs to be prioritized over short-term profits for industry and rent-seeking by state and Federal governments (Dryzek 2005). The environmental destruction along the beaches of Louisiana and Texas has been used to portray an image of what Florida's beaches would become if drilling were to be permitted within 100 miles off of the coast. Pittman (2001) follows Amos, a researcher for the University of Texas, who has catalogued pollutants and dead animal life washing ashore. Amos has found "chemical drums labeled Halliburton" along with empty Freon cylinders, hard hats, and more along the coast of Port Aransas, Texas. Due to the filth

washing ashore “communities like Port Aransas have to spend millions on beach cleanup or risk losing tourists”, who vow not to return as a result of the “clumps of tar and trash everywhere” (ibid). Though the previous argument for commodifying nature to reap material and financial benefit appears to be distinctive from the ecological argument, they are often used in tandem within the discourse of offshore oil drilling’s opponents. First, within a discourse, in this case environmental security, there exist internal tension amongst members, who recognize a common object of security and a common threat to that security. For both ecologists and industrial advocates opposed to offshore oil drilling, the environment is the object for security measures and offshore oil drilling represents a threat. Second, many environmentalists have found commercial interests harnessed in Florida’s tourism industry to be a particularly salient framework to promote environmental security as it caters to the logics of accumulation and attracts not only policy, but financial investments.

Additionally, opponents have indicated that a dependence on oil is what ultimately threatens national security. In 2008 Senator Bill Nelson (D-FL) observed that “the greatest single threat to American security may well be our dependence on oil” citing the 2008 Republican campaign slogan “Drill, baby, drill” as “misguided rhetoric” that only increases what is ultimately a hazardous addiction to oil (Nelson 2008). It has been forty years since President Nixon first made a commitment to start weaning America off its heavy oil dependence and focusing efforts on alternative fuels. Expansion of offshore oil drilling operations, at the time, was seen as a temporary solution until an alternative fuel could be created. However, the oil lobby gained ground under the Reagan administration, and due to its financial sway, has managed to win legislation that removes

regulatory barriers to operations and new land for leasing. After the U.S. House of Representatives passed the Deep Ocean Energy Resources Act in 2006 (though not signed into law), Mark Ferrulo, director of Florida Public Interest Research Group (Florida PIRG) and Environment Florida, claimed that the passage of the bill "shows the degree to which the people's House of Representatives has been hijacked by the oil industry" and that "it is clear from today's debate that Congress only answer to higher energy prices is more drilling while measures to improve efficiency standards for automobiles, buildings and appliances get lip service" (Environment Florida 2006a). Ferrulo goes so far as to claim that until the United States moves away from its dependence on oil, "Florida's coasts will always be under assault" (Environment Florida 2006b). Vasquez (2010), quotes Jorge Pinon, an oil industry veteran who used to manage BP Europe's western Mediterranean operations, as saying

> the public's resistances to fuel-saving measures like carpooling – coupled with its fondness for water bottles and plastic children's toys that are also made using oil – are at the heart of the environmental crisis affecting the Gulf…Every time I see a new subdivision being built west of the Turnpike, that's good news for oil…Every time I go by a Toys R Us store, and I see a full parking lot, that is good news for oil.

Once again conservation and alternative fuels are promoted as the means to end oil dependence and gain energy independence in the long-run. Oil is seen not just as detrimental in its extraction processes which could damage the environment and harm industries dependent on the commodification of the "pristine" or an unpolluted environment, but also through its refinement and consumption, where oil and gas emissions are linked to climate change. Nelson, along with other drilling opponents such as the Progress Florida, Environment Florida, the Surfriders Foundation, Reef Relief, the Florida Audobon Society, Gulf Coast Environmental Defense, believe that the best policy to create energy independence, as well as bolster the economy through the creation of

jobs and long-term lower energy costs is one that stresses short-term conservation (which would decrease demand and decrease prices) while emphasizing alternative and renewable energy resources such as solar, wind, thermal and safer nuclear power for long-term energy generation. Under these terms, opening new areas to offshore oil drilling is the result of a short-sighted policy that focuses too heavily on the immediate gains, and not enough about the long-term costs of such activity. These costs do not just include the cost of spills and pollution to local communities that would tentatively harm Florida's tourist industry, but also the air pollution created by the burning of fossil fuels that is linked to global climate change and ozone depletion. The environmentalist's vision is one that attempts to create an ecological argument at the global scale, often citing our lack of information on the exact impacts of the extraction, production and consumption of petroleum products in terms of larger biophysical processes.

At the Federal level, where regulatory policy over the offshore oil industry and its enforcement emanate from, there has existed a dispute between the Environmental Protection Agency (EPA) and the Minerals Management Service (MMS) about the cumulative, long-term effects of offshore oil drilling and which regulations are necessary to secure the environment. The MMS, which was in charge of leasing land to, regulation of, and collecting royalties from the oil industry, claims that "because of all the precautions to prevent pollution and oil spills, nothing is destroyed by the oil and gas industry" (Pittman 2001). However, the EPA, which is in charge of protecting the environment from what are defined as destructive human practices, argues that "routine chemical discharges would 'introduce significant quantities of contaminants to these relatively pristine waters'" which would "harm essential fish habitat and damage the

fragile sea" (ibid). In this case it is "produced water" which "consists of the brine and chemicals produced during the extraction process" and afterwards released into the Gulf of Mexico (ibid). In the 2010 OCS strategy released by the Obama administration, the area in the eastern Gulf of Mexico open to new drilling, known as area 181, is "expected to discharge 12,500 barrels a day" where the "sheer size of the gulf is [then] expected to dissipate their effects" (ibid). However, there is still limited knowledge about the biological processes in the Gulf that are expected to break down these toxins, as well as if there is a threshold to the amount of pollution it can absorb. A similar point of debate exists around the impact of oil drilling on the seabed. The EPA claims that the procedure used by the MMS to "take certain steps to protect sensitive bottom areas" is "deficient, pointing out that it carries no enforceable requirement that the rigs avoid any impact on the sea life at the bottom" which is "vital to the survival of larger species" (ibid). The major problem, once again, is the limited amount of information known about the impacts of on demolishing seabed habitats for pipelines and rig structures that are expected to be out of service after only two to three decades of operation. This emphasizes the contrast between the concern over the long-term sustainability of the marine ecosystem, versus the short-term gains garnered from additional offshore oil facilities.

Opposition to offshore oil drilling relies primarily on an environmental argument that portrays drilling practices as destructive, potentially obliterating essential marine life and dirtying the beaches that are necessary to maintain Florida's tourist-driven economy. Eco-tourism in Florida promotes the image of pristine beaches and ocean views which would be threatened by unsightly oil rigs, platforms and tankers, deregulation of the

industry, and daily pollution generated by the oil industry barring any large spills. Opponents also create a long-term vision, whereby oil consumption is reduced and eventually eliminated through conscious efforts to conserve, as well as through the promotion of alternative energy resources and fuels outside of oil, which damages the environment in both upstream and downstream production and consumption. However, it is noteworthy to add here that offshore drilling opponents do not necessarily disagree with the rhetoric of energy security through independence, but rather rely on a different set of solutions to create an energy security policy that is simultaneously self-sufficient and environmentally conscientious. As energy security stands today, under the perceived need to expand the domestic oil industry, there remains a tension between proponents of the accepted energy security discourse which promotes an expanded offshore oil industry and proponents of an environmental security agenda who oppose offshore oil drilling. Any movement to expand offshore oil drilling into the coasts of Florida, as well as the Outer Continental Shelf under the authority of the Federal government, presents a threat to long-term environmental sustainability and Florida's coastal tourist industry.

After the BP Oil Spill

On April 20, 2010 the Deepwater Horizon oil rig, owned by Transocean and operated by BP, blew out its well-head, killing 11 people and spilling an estimated 5 million barrels (172 million gallons) of oil into the Gulf of Mexico over the course of 86 days. The primary cause of the spill was a failed blowout preventer which is "used to cut off the flow of oil from a well in an emergency" (Lipton and Broder 2010). The Minerals Management Service, which is the Federal agency in charge of offshore oil industry

oversight, has been criticized due to its lack of regulatory oversight, and overreliance on industry assurances of compliance with regulatory policies, instead of conducting their own audits. The MMS "reduced the frequency of inspection of blowout preventers to once every 14 days from once a week, citing the disruptions that these tests caused to oil drilling and extraction efforts" (ibid). Part of the regulation problem is attributed to the conflict of interest created by its authority in issuing leases, collecting royalties and industry oversight, as well as the revolving door that existed between the oil industry and the agency (DeParle 2010; Urbina 2010b). As DeParle (2010) describes it, "Washington got oil and royalty fees; Louisiana got jobs; and the agency got frequent reminders to keep them both happy." In terms of the environmental assessments that are required by the National Environmental Policy Act, the MMS "routinely overruled its staff biologists and engineers who raised concerns about the safety and the environmental impact of certain drilling proposals in the gulf", and agency records indicate that permission was granted for projects without having received the permits required under Federal law (Urbina 2010a). The scientists working for the MMS also claimed that they "were regularly pressured by agency officials to change the findings of their internal studies if they predicted that an accident was likely to occur or if wildlife might be harmed" (ibid). As a result of these findings, President Obama abolished the MMS replacing it with the Bureau of Ocean Management, Regulation and Enforcement, separating the three tasks into different departments in order to avoid the conflicts of interest that had led to past inefficiencies. Insufficient regulation of the offshore oil industry has led to environmental disasters that may have otherwise been prevented through a more rigid regulatory regime.

Offshore drilling opponents, though disturbed by the spill's impact on marine life and coastal states, are basking in an "I-told-you-so" moment. In December 2010, Obama removed the eastern Gulf of Mexico from his OCS 2010 Strategy, refocusing efforts to expand drilling in "areas already leased for drilling, including 43 million acres in the western and central gulf" (Clark 2010). In a statement regarding the decision, Secretary of the Interior Ken Salazar said that "as a result of the Deepwater Horizon oil spill we learned a number of lessons, most importantly that we need to *proceed with caution* and focus on creating a more stringent regulatory regime" (ibid, emphasis added). In light of the Deepwater Horizon oil spill, expanded offshore oil drilling was tabled, at least temporarily, and political leaders at both the state and Federal levels were urging caution when proceeding with new lease sales, making sure that they complied with established environmental regulations.

Shortly after the spill, Florida Governor Charlie Crist attempted to put a ban on oil drilling up to the voters in the upcoming election, which would put an amendment in the state's constitution banning offshore oil drilling within state waters. Though offshore oil drilling in Florida's coasts is already banned by state law, amending it to the constitution would take the decision away from legislators, who are seen to be more easily influenced by industry advocates (Bousquet 2010). In response to Crist's bid, House Speaker Larry Cretul (R-Ocala) who has "life-or-death control over legislation", due to his position as House Speaker, stated in a memo to legislators, that, "You can expect your stay to be very short next week", insinuating he would not let the proposal reach the floor for a vote (ibid). Cretul claimed that he did not want to rush to a hasty decision "at the last possible moment because of an accident hundreds of miles from

[Florida's] jurisdiction" (ibid). Ultimately Crist's bid was blocked by a vote of 67-44 in the House and 18-16 in the Senate. The BP oil spill therefore, did not generate the kind of furor that many offshore opponents expected, and highlights the fundamental split in the debate which manages to keep offshore oil drilling on the state legislature's table and out of the hands of voters. The decision to leave the debate in the legislature in this case might signify a lack of confidence amongst drilling proponents within the Florida Congress, who fear that Florida's voters would ultimately vote to add a drilling ban to the state's constitution.

Environmental concern after the April 20th explosion was not merely centered on the massive amounts of oil leaking into the gulf, but also the methods by which BP attempted to clean up the oil in the water. One of the most controversial issues involved in the cleanup efforts centered on the use of chemical dispersants, namely Corexit, which changes the chemical composition of the oil so that it will sink into the water column, but not break it down (Marine Conservation Biology Institute 2010). In November 2010, marine biologists sent a submersible robot to the seabed to investigate the impacts of the spill on coral communities. Rudolf (2010) interviewed biologists who had spent a decade or more charting the deepwater coral reefs in the Gulf. Marine biologist Charles Fisher, from Penn State, claimed that he "had expected to see some subtle effects from the oil. Instead, he found an ecosystem in collapse" (ibid). Though further testing was necessary to determine the exact cause of the coral die-off, the location of the coral site to the blown-out well, as well as the "clear evidence of recent impact", indicate that it was more than likely the result of "either oil, dispersant, extremely depleted oxygen, or some combination of these of other water-borne effects resulting from the spill" (ibid).

Samantha Joye, a University of Georgia professor who led a study aimed at examining the magnitude of hydrocarbon gases released by the spill, showed pictures of "oil-choked" and oxygen deprived bottom-dwelling creatures (Borenstein 2011). Joye's study indicates that

> methane and other gases likely will remain deep in the water column and be consumed by microbes in a process known as oxidation, which en masse can lead to low-oxygen waters…the microbial oxidation of the methane and other alkanes will remove oxygen from the system for quite a while because the time-scale for the replenishment of oxygen at that depth is many decades" (Fahmy 2011).

Furthermore, the effects of the spill may not be seen for several years. Though the overall effects of the spill are not yet fully understood, there are indications that offshore oil drilling activity damages essential marine life in both its daily operations, as well as in the event of a large spill. This means that threats to the environment may not become manifest for years to come, presenting an uncertainty about the future of the Florida's tourist industry, the fishing industry, and broader ecological sustainability. Stemming from the lack of knowledge around the effects of offshore oil drilling in both the short and long terms the argument, as articulated by Senator Bill Nelson, is that oil creates a threat to "national security" as local economies could be destroyed, essential life forms wiped out, and the wider ecosystem, which is intimately connected to human life, could be wounded. This is essentially a doomsday argument that plays on fears about the unknown, which is a powerful tool in winning support for a cause.

Another investigation conducted by the Subra Company, found that residents in Louisiana contained high levels of benzene (11.9 to 35.8 times higher than the national average), ethylbenzene, Hexane, m,p-Xylene, 2-Methylpentane, 3-Methypentane and Isooctane (Subra 2011). The blood samples were taken from cleanup workers on Orange Beach, Alabama, crabbers in Biloxi, Mississippi, and individuals living on Perudo Key,

Alabama. Jamail (2011) follows the story of one diver who has found "critically high levels of chemicals" in his body following a swim after which he emerged covered in "orange slick." The diver, Steven Aguinaga of Hazlehurst, Mississippi, has been experiencing rapidly declining health, and his diving partner, who was also a volunteer for the BP cleanup effort, died only a few weeks after he had started volunteering (ibid). These studies urge caution in further offshore oil drilling activities, and emphasize the need for more scientific inquiries to determine the full impact of offshore oil drilling on the larger ecosystem.

On June 4, 2010, the first tar balls reached the northwest coast of Florida, at which point Florida's tourism industry braced for impact. Despite the spill "an estimated 20.8 million people visited the state between April and June 2010, a 3.4 percent increase from the same time period" in 2009 (Sampson 2010). This increase came after a massive campaign launched by Visit Florida and Florida tourism bureaus across the state using $32 million in funding from BP.

The environmental, and, thereby, economic impact on Florida's coasts was minimized by the distance of the spill from the coasts as well as the Loop Current which moves water south of the spill site as opposed to east. In a phone interview with David Rauschkalb, the founder of Hands Across the Sand (one of the activist groups opposing offshore oil drilling) I was informed that his restaurant business lost half a million dollars in sales after the oil spill. In support of the political ideology embodied in green capitalism, the negative impacts that oil has on the environment is once again reduced to the quantification of commercial interests. However, the full impact of the spill is not yet fully understood or calculated, due to relatively limited information and the offsetting

what would have been a decline in tourism rates through heavily financed campaign efforts conducted by Florida's tourism industry.

Conclusion

The state of Florida presents a unique optic through which to view the offshore oil drilling debate. The Gulf of Mexico is littered with offshore oil drilling activity, spanning from the Texas-Mexico border and continuing through Louisiana, – hosting the most offshore oil drilling sites in the gulf – Mississippi, and Alabama, where offshore oil drilling activity suddenly disappears giving way to the "pristine" coasts and beaches of Florida. Through the commodification of the environment as the backbone of the tourist and fishing industries, Florida has managed, at least for now, to secure the environment from the perceived threat of nearby offshore oil drilling. However, it is not just the ability to commodify the environment that secures it from the threat of offshore oil drilling, but the economic viability of the industry(s) that require a sustainable, uncontaminated, and oil-rig free ocean space to stay in business. In this case the tourist industry supports a multi-billion dollar economy – roughly $57 billion annually according to offshore oil drilling opponents – whereas the potential revenue generated from offshore oil drilling would only manage to generate an approximated $2.3 billion annually. As a result, permitting offshore oil drilling in Florida presents a clear and present danger to Florida's economy. The revenue generated from offshore oil drilling would be unable to offset the damages – from the creation of unsightly oil rigs dotting the shore, the potential for a large spill, or simply the cumulative pollution occurring with day-to-day operations – inflicted upon the environment and subsequently, the Florida economy.

Even after the environmental and economic devastation caused by the BP oil spill in 2010, it seems that the larger debate remains one in which energy security obtained through independence and the expansion of the offshore oil industry survives to pose a threat to the environment. Though efforts to open offshore oil drilling within Florida have been silenced in the wake of the BP oil spill, the oil lobbyists and offshore proponents remain resolute in their push to expand the industry, ostensibly to protect America from the combined threats of volatile oil imports, oil-funded terrorism and high energy prices. Likewise, emboldened by the detrimental effects of the BP oil spill on the environment, and the economy, opponents continue to quash efforts to open Florida's coastal waters and Federal waters 100 miles off the Floridian coast to offshore oil drilling, maintaining a discourse that is based on the interconnectivity between the environment and the vitality of humanity, where the commodification of the environment appeals to the logics advanced within the structural ideology of accumulation and growth via financeable, revenue generating commercial activity. It is here where the debate lingers and where many opponents of offshore oil drilling, namely those who are concerned with larger ecological implications of a social ordering that promotes material progress and quantity above notions of long-term quality.

Appendix

Figure 2.1: Maritime Zones Pursuant to the United Nations Convention on the Law of the Sea. (Source: http://www.bgr.bund.de/nn_336756/EN/Themen/TZ/TechnZusammenarb/Bilder/unclos__abb1__maritime__souvrechte__g__en.html) (Accessed 20 April 2011).

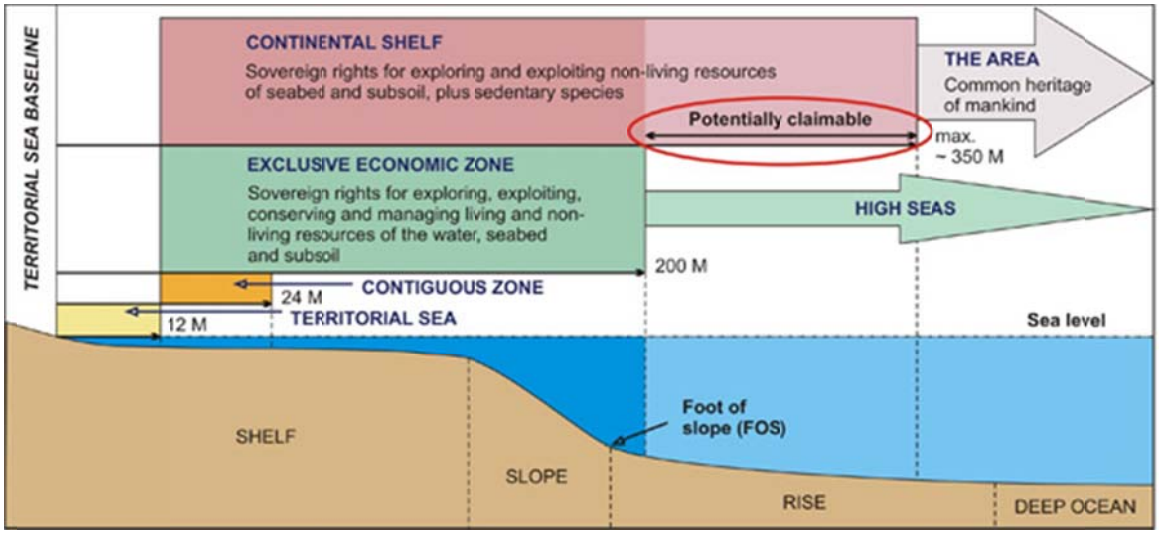
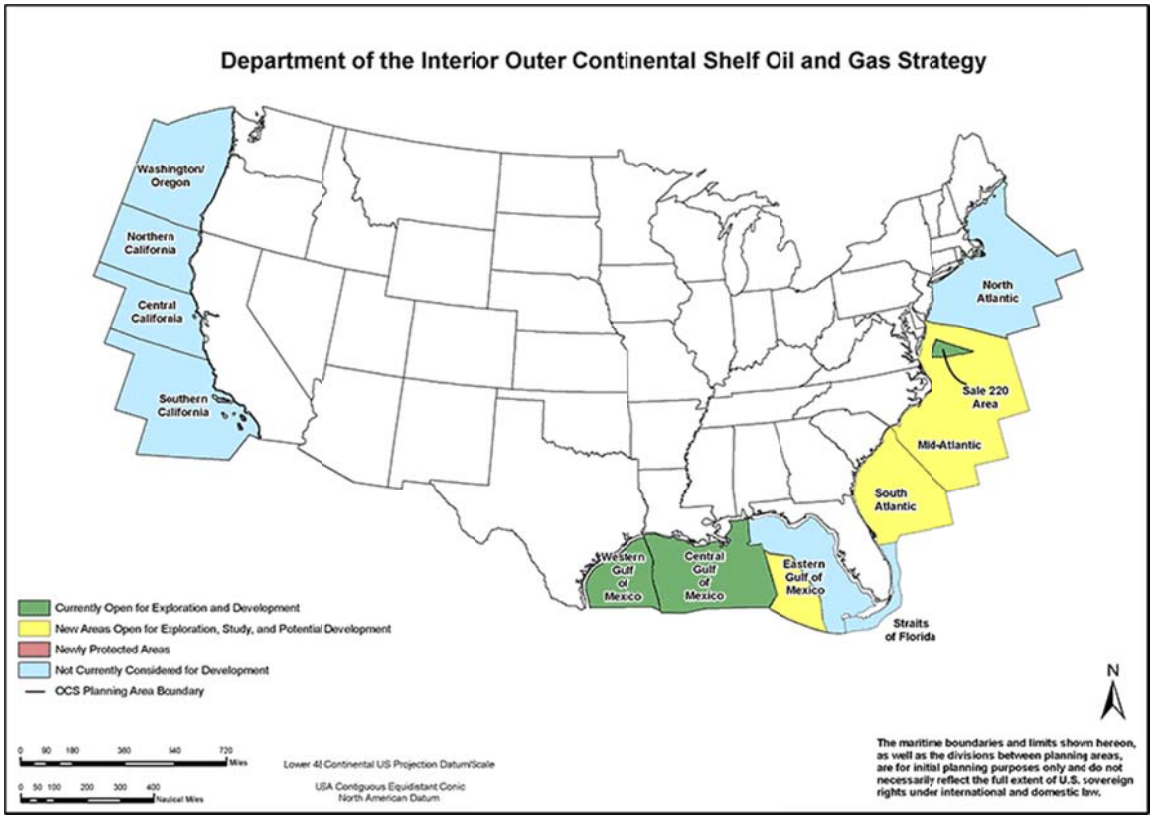


Figure 3.1: The official map produced by the US Department of Interior regarding the 2010 OCS strategy (Source: http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&PageID=78990) (Accessed 01 June 2010).



Bibliography

Andrews, Edmund L. 2006, December 07. Report Says Oil Royalties Go Unpaid. *The New York Times*. [New York, NY]. Online. http://www.nytimes.com/2006/12/07/washington/07royalty.html?_r=1&ref=minerals_management_service (Accessed 01 March 2011).

Associated Press. 1987, March 01. Crews Work to Clean Oil Off Florida Beaches. Found in *The New York Times*. [New York]. http://www.nytimes.com/1987/03/01/us/crews-work-to-clean-oil-off-florida-beaches.html?emc=eta1 (Accessed 01 March 2011).

Associated Press. 1988, March 27. Oil Leasing Plan Off Florida Keys Is Blocked. Found in *The New York Times*. [New York]. Online. http://www.nytimes.com/1988/03/27/us/oil-leasing-plan-off-florida-keys-is-blocked.html?emc=eta1 (Accessed 01 March 2011).

Barton, Barry, Redgwell, Catherine, Anita, Ronne, and Zillman, Donald N., eds. 2004. *Energy Security: Managing Risk in a Dynamic Legal and Regulatory Environment*. Oxford: Oxford University Press.

Borenstein, Seth. 2011, February 19. Scientist Finds Gulf Bottom Still Oily, Dead. *Associated Press*. Online. http://news.yahoo.com/s/ap/us_sci_oil_spill_lingers (Accessed 01 March 2011).

Bousquet, Steve. 2010, July 16. House and Senate Leaders Poised to Clamp Lid on Special Session on Oil Drilling. *St. Petersburg Times*. [St. Petersburg, FL]. Online. http://www.tampabay.com/news/politics/legislature/house-and-senate-leaders-poised-to-clamp-a-lid-on-special-session-on-oil/1109189 (Accessed 01 March 2011).

Bousquet, Steve, Klas, Mary Ellen, Logan, Lee and Frank, John. 2010, July 21. Florida Legislature Rejects Oil Drilling Ban Vote, Adjourns. *The Miami Herald*. [Miami, FL]. Online. http://www.miamiherald.com/2010/07/20/1739673/florida-legislature-rejects-oil.html (Accessed 01 March 2011).

Broadus, James M. and Vartanov, Raphael V, eds. 1994. *The Oceans and Environmental Security*. Washington, DC: Island Press.

The Buzz. 2009, November 09. Atwater's Oil Drilling Memo. *St. Petersburg Times*. [St. Petersburg, FL]. Press Release. http://www.tampabay.com/blogs/the-buzz-florida-politics/content/atwaters-oil-drilling-memo (Accessed 01 March 2011).

Carson, Rachel. 1962. *Silent Spring*. Boston, MA: Houghton Mifflin.

Carter, Jimmy. 1977a, March 17. Oil Pollution of the Oceans Message to Congress. Washington D.C. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=7190 (Accessed 16 February 2011).

Carter, Jimmy. 1977b, April 18. The President's Proposed Energy Policy. Public Broadcasting System. http://www.pbs.org/wgbh/americanexperience/features/primary-resources/carter-energy/ (Accessed 28 January 2011).

Carter, Jimmy. 1977c, May 23. The Environment Message to the Congress. Washington D.C. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=7561 (Accessed 16 February 2011).

Carter, Jimmy. 1978, September 18. Outer Continental Shelf Lands Act Amendments of 1978 Statement on Signing S. 9 Into Law. Washington D.C. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=29792 (Accessed 16 February 2011).

Carter, Jimmy. 1980a, January 23. The State of the Union Address Delivered Before a Joint Session of the Congress. Washington D.C. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=33079&st=&st1= (Accessed 17 February 2011).

Carter, Jimmy. 1980b, April 2. Crude Oil Windfall Profit Tax Act of 1980 Remarks on Signing H.R. 3919 Into Law. Washington D.C. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=33214&st=windfall+profit+tax&st1= (Accessed 17 February 2011).

Ciuta, Felix. 2010. Conceptual Notes on Energy Security: Total or Banal Security? *Security Dialogue* vol. 41:2, pp. 123-144.

Clarke, K. C. and Jeffrey J. Hemphill. 2002. The Santa Barbabra Oil Spill, A Retrospective. *Yearbook of the Association of Pacific Coast Geographers* vol. 64, pp. 157-162. Darrick Danta, ed. University of Hawai'i Press.

Clinton, William. 1993, September 22 . Proclamation 6597 - Energy Awareness Month, 1993. Washington D.C. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=62491&st=environmental+protection&st1=energy#axzz1I1FTczmh (Accessed 26 March 2011)

Clinton, William. 2000a, March 22. Statement of Administration Policy: H.R. 3822 - Oil Price Reduction Act of 2000. Washington D.C. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=74791&st=energy+security&st1=#axzz1I1FTczmh (Accessed 26 March 2011)

Clinton, William. 2000b, April 21. Executive Order 13148 - Greening the Government Through Leadership in Environmental Management. Washington D.C. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=61641&st=green&st1=standard#axzz1I1FTczmh (Accessed 26 March, 2011)

Cuyvers, Luc. 1984. *Ocean Uses and Their Regulation*. New York: John Wiley & Sons, Inc.

Dalby, Simon. 2002. *Environmental Security*. Minneapolis: University of Minnesota Press.

Dalby, Simon. 2009. *Security and Environmental Change*. Malden, MA and London: PolityPress.

DeParle, Jason. 2010, August 07. Minerals Service Had a Mandate to Produce Results. *The New York Times*. [New York, NY]. Online. http://www.nytimes.com/2010/08/08/us/08mms.html (Accessed 01 March 2011).

Department of Energy Organization Act. H.R.4466. 3 March 1977. The Library of Congress. http://thomas.loc.gov/cgi-bin/bdquery/z?d095:HR04466:@@@L&summ2=m& (Accessed 10 October 2010).

Department of the Interior. 2010, March 31. Press Release. Secretary Salazar Announces Comprehensive Strategy for Offshore Oil and Gas Development and Exploration: New Development in Gulf of Mexico; Exploration in Arctic and Atlantic; Protection for Alaska's Bristol Bay. Andrews Airfoce Base, Maryland. http://www.doi.gov/news/pressreleases/2010_03_31_release.cfm (Accessed 01 April 2010)

Dryzek, John. 2005. The Politics of the Earth: Environmental Discourses. London: Oxford.

Ehrlich, Paul R. 1968. *The Population Bomb*. New York: Ballantine Books.

Energy Information Agency. 2005, September. *Overview of U.S. Legislation and Regulations Affecting Offshore Natural Gas and Oil Activity*. Office of Oil and Gas. http://www.eia.doe.gov/pub/oil_gas/natural_gas/feature_articles/2005/offshore/offshore.pdf (Accessed 17 February 2011).

Environment America. 2010, May 3. Letter to Senators. No Drilling Group. http://www.environmentamerica.org/uploads/1e/b4/1eb442d3ec31a2e20738a591ab7178fa/May-3-2010-No-Drilling-Group.PDF (Access 17 February 2010)

Environment Florida. 2006a, June 29. U.S. House Shreds Florida Drilling Protections. https://www.environmentflorida.org/newsroom/shores/save-our-shores-news/u_s_-house-shreds-florida-drilling-protections#idiD4sDyT1GGP_Al_uZXwBUA (Accessed 01 March 2011).

Environment Florida. 2006b, December 08. House Votes to Open Florida's Waters to Oil Drilling. https://www.environmentflorida.org/newsroom/shores/save-our-shores-news/house-votes-to-open-floridas-waters-to-oil-drilling#idJk_GvDi8DJ-qEwK-PCqvbg (Accessed 01 March 2011).

Foucault, Henri. 1976. Interview published in Faubion, James D. ed. 2000. *Michel Foucault: Power*. Essential works of Foucault 1954-1984: volume three. New York: The New Press.

Freudenburg, William R., and Gramling, Robert. 1994. *Oil in Troubled Waters: Perceptions, Politics, and the Battle Over Offshore Drilling*. Albany, NY: State University of New York Press.

Graham, Sen. Bob and Reilly, William. 2011, January 26. Testimony of Senator Bob Graham and the Honorable William Reilly Before the Committee on Energy and Natural Resources, United States Senate. http://energy.senate.gov/public/_files/JointTestimony1262011.pdf (Accessed 17 February 2011).

Hafenbrack, Josh and Alanez, Tonya. 2009, April 28. Florida House Approves Offshore Drilling: Fate in senate unclear, but republican controlled house gives overwhelming approval to opening Florida's coastline to oil and natural gas exploitation. *Sun Sentinel* [Tallahassee, FL]. Online. http://www.sun-sentinel.com/news/local/florida/sfl-florida-oil-drilling-042709,0,2926325,print.story (Accessed 01 March 2011).

Harvey, David. 1974. Population, Resources, and the Ideology of Science. *Economic Geography* vol. 50: 3, pp. 256-277.

Harvey, David. 2005. *A Brief History of Neoliberalism*. New York and London: Oxford University Press.

Herbert, Thomas A and Lampl, Linda. 2001, May. Oil and Gas Energy Issues in Florida's Future. James Madison Institute Policy Report #33. http://www.mlwebdesign.com/lampl_herbert2/_Upload/publication/doc/12.pdf (Accessed 20 February 2011)

Hoagland, Peter and Farrow, Scott. 1996. Planning versus Reality: Political and Scientific Determinants of Outer Continental Shelf Lease Sales. In *The Political Economy of Environmental Protection: Analysis and Evidence*. Roger D. Congleton, ed. Ann Arbor: The University of Michigan Press.

Huber, Matthew T. 2009. The Use of Gasoline: Value, Oil, and the "American way of life." *Antipode* 41 (3): pp. 465-486.

Humphries, Marc, Pirog, Robert, and Whitney, Gene. 2010. U.S. Offshore Oil and Gas Resources: Prospects and Processes. *Congressional Research Service*. Washington, D.C. http://fpc.state.gov/documents/organization/142736.pdf (Accessed 01 March 2011).

Jamail, Dahr. 2011, March 09. Gulf Spill Sickness Wrecking Lives: Nearly a year after the oil disaster began, gulf coast residents are sick, and dying from BP's toxic chemicals. *Al-Jazeera*. [Doha, Qatar]. Online. http://english.aljazeera.net/indepth/features/2011/03/201138152955897442.html (Accessed 01 March 2011).

Johnston, Douglas M. 1988. *The Theory and History of Ocean Boundary-Making*. Montreal: McGill-Queen's University Press.

Juda, Lawrence. 1996. *International Law and Ocean Use Management: The Evolution of Ocean Governance*. London: Routledge.

Katz, James Everett. 1984, June. US Energy Policy: Impact of the Reagan Administration. *Energy Policy* vol. 12: 2, pp. 135-145.

Katz, Cindi. 1998. Whose Nature, Whose Culture? Private Productions of Space and the "Preservation" of Nature. In *Remaking Reality: nature at the millennium*. Bruce Braun and Noel Castree, eds. London and New York: Rutledge.

Kennedy, John. 2010, January 07. Oil Lobby to Cut Staff in Tally. *St. Petersburg Times*. [St. Petersburg, FL]. Online. http://www.tampabay.com/blogs/the-buzz-florida-politics/content/oil-lobby-cut-staff-tally (Accessed 01 March 2011).

Kerry, Sen. John. 2009, May 12. In *Energy Security: Historical Perspectives and Modern Challenges*. Hearing Before the Committee on Foreign Relations: United States Senate. Washington, D.C.: U.S. Government Printing Office. http://www.access.gpo.gov/congress/senate

Klas, Mary Ellen. 2009, August 30. Push for drilling off Florida's coast is well-oiled. *The Miami Herald* and *St. Petersburg Times*. [Miami and St. Petersburg, FL] Online. http://www.tampabay.com/news/politics/stateroundup/push-for-drilling-off-floridas-coast-is-well-oiled/1032235 (Accessed 01 March 2011).

Kloner, Dean. 2001. The Commodity Futures Modernization Act of 2000. *Commodity Futures* vol. 29 (281): 286-297.

Labban, Mazen. 2009. The Struggle for the Heartland: Hybrid Geopolitics in the Transcaspian. *Geopolitics* vol. 14, pp. 1-25.

Leiss, William. 1994. *The Domination of Nature*. Montreal & Kingston: McGill-Queen's University Press.

Lefebvre, Henri. 2007; 1991. *The Production of Space*. Donald Nicholson-Smith, trans. Oxford: Blackwell.

Leviero, Anthony. 1953, May 23. Eisenhower Signs Offshore Oil Bill: Campaign pledge to give title to states redeemed as 40 congressmen watch. *The New York Times*. [New York]. Print.

Liptin, Eric and Broder, John M. 2010, May 07. Regulator Deferred to Oil Industry on Rig Safety. *The New York Times*. [New York, NY]. Online. http://www.nytimes.com/2010/05/08/us/08agency.html?ref=minerals_management_service (Accessed 01 March 2011).

Mackinder, Halford J. 1904. The Geographical Pivot of History. *The Geographical Journal* vol. 23: 4, pp. 421-437. London: The Royal Geographical Society.

Manheim, Frank T. 2004, December. U.S. Offshore Oil Industry: New Perspectives on an Old Conflict. *Geotimes*. http://www.agiweb.org/geotimes/dec04/feature_Norway.html (Accessed 21 January 2011).

Manheim, Frank T. 2005. The Stalemate Between Environmentalists and Industry in the United States – Viewed in the Light of Norwegian Offshore Oil Policies. (a.k.a. Origin and evolution of the environmentalist-industry conflict in the United States). Paper presented at The Midwest Political Science Association National Conference, April 9, 2005.

Mansfield, Becky. 2004. Neoliberalism in the Oceans: "Renationalization," Property Rights. and the Commons Question. *Geoforum* vol. 35, pp. 313-326.

Marine Conservation Biology Institute. 2010, June 13. Review of Potential Consequences of the British Petroleum Deepwater Horizon Well Blow Out Spill, April 2010. Online. http://www.mcbi.org/publications/pub_pdfs/OilSpill.pdf (Accessed 01 March 2011).

McCarthy, James and Prudham, Scott. 2004. Neoliberal Nature and the Nature of Neoliberalism. *Geoforum* vol. 35, pp. 275-283.

Mica, Dave (aka David). 2009, October 21. Drilling Holds Benefits. *St. Petersburg Times*. [St. Petersburg, FL] Online. http://tampabay.com/opinion/columns/drilling-holds-big-benefits/1045499 (Accessed 01 March 2011).

Müller-Kraener, Sascha. 2008. *Energy Security: Re-Measuring the World*. London: Earthscan.

Nelson, Bill. 2005, December 1. Rumsfeld: Oil, Gas Drilling off Florida "Incompatible" with Military. Senator Bill Nelson (online). http://billnelson.senate.gov/news/details.cfm?id=249434 (Accessed 01 March 2011).

Nelson, Bill. 2008, September 8. Nelson on Offshore Oil Drilling. Statement. http://billnelson.senate.gov/news/details.cfm?id=302665& (Accessed 01 March 2011).

Nelson, Bill. 2010, January 19. Nelson: Oil Drilling is Incompatible with Military Training. *St. Petersburg Times*. [St. Petersburg, FL]. Online. http://www.tampabay.com/blogs/the-buzz-florida-politics/content/nelson-oil-drilling-incompatible-military-training (Accessed 01 March 2011).

Nelson, Gaylord. 1970, January 19. Senate Joint Resolution 169 – Introduction of a Joint Resolution Relating to an Environmental Agenda for the 1970's. *Congressional Record: Proceedings and Debates of the 91st Congress, Second Session*. Washington D.C.

New York Times. 1973, December 21. U.S. Action Adds 3 States for Offshore Fuel Drilling: Interior Department Offers 147 Tracts in Florida, Alabama and Mississippi After Environmentalists Lose Plea. [New York]

New York Times. 1982, August 15. Gulf of Mexico Found to have 'Extremely Heavy' Oil Pollution. [New York] http://www.nytimes.com/1982/08/15/us/gulf-of-mexico-found-to-have-extremely-heavy-oil-pollution.html?emc=eta1 (Accessed 01 March 2011).

Nixon, Richard. 1969, March 21. Remarks Following Inspection of Oil Damage at Santa Barbara Beach. Santa Barbara, CA. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=1967&st=offshore&st1=oil (Accessed 17 February 2011).

Nixon, Richard. 1971, June 4. Special Message to the Congress on Energy Resources. Washington D.C. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=3038&st=environment&st1=energy (Accessed 17 February 2011).

Nixon, Richard. 1973a, April 18. Special Message to Congress on Energy Policy. Washington D.C. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=3817&st=environment&st1=energy (Accessed 17 February 2011).

Nixon, Richard. 1973b, October 9. Statement Following a Meeting With Energy and Environmental Advisors on Energy Conservation. Washington D.C. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=3993&st=environment&st1=energy (Accessed 17 February 2011).

Nixon, Richard. 1974a, January 23. Special Message to Congress on the Energy Crisis. Washington D.C. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=4241&st=environment&st1=energy (Accessed 17 February 2011).

Nixon, Richard. 1974b, June 26. Statement About Signing the Energy Supply and Environmental Coordination Act of 1974. Washington D.C. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=4276&st=environment&st1=energy (Accessed 17 February 2011)

Noe, Susan Y. and Pring, George (Rock). 2004. The 'Fear Factor': Why We Should Not Allow Energy Security Rhetoric to Trump Sustainable Development. In *Energy Security: Managing Risk in a Dynamic Legal and Regulatory Environment*. Barry Barton, Catherine Redgwell, Anita Ronne, and Donald Zillman. Oxford: Oxford University Press.

Outer Continental Shelf Lands Act. 2000, December 29. The Act of August 7, 1953, Chapter 345, As Amended. P.L. 106-580. http://epw.senate.gov/ocsla.pdf (Accessed 14 October 2010).

Paine, Thomas. 1776. *Common Sense*. 1993 print. Charlottesville: University of Virginia Press.

Peet, Richard. 2007. *Geography of Power: The Making of Global Political Economy*. London: Zed Books.

Pittman, Craig. 2001, August 12. Is This in Florida's Future? As Drilling Moves into the Eastern Gulf of Mexico, the Chance of a Massive Spill is Slight, but the Day-to-Day Operations of Oil and Gas Rigs could Affect Florida's Environment. *St. Petersburg Times.* [St. Petersburg, FL]. Online. http://www.sptimes.com/News/081201/State/Is_this_in_Florida_s_.shtml (Accessed 01 March 2011).

Pittman, Craig. 2006, April 7. Gulf Oil Drilling Debated in a City Far from Shore: More than 100 people argue the pros and cons in Tallahassee, on a workday, at the only Florida meeting planned. *The New York Times*. [New York]. http://www.sptimes.com/2006/04/07/news_pf/State/Gulf_oil_drilling_deb.shtml (Accessed 01 March 2011).

Pittman, Craig. 2009, September 17. Oil Drilling off Florida's coast means jobs and money, proponents say; questions remain. *St. Petersburg Times.* [St. Petersburg, FL]. Online. http://www.tampabay.com/news/environment/water/oil-drilling-off-floridas-coast-means-jobs-and-money-proponents-say/1037087 (Accessed 01 March 2011).

Porter, Russel. 1953, June 8. States Preparing to Push Frontier Opened by Oil Law: Outer shelf may be nest for exploitation—drilling to state soon for minerals. *The New York Times*. [New York]. print.

Pratt, Joseph A., Priest, Tyler, and Castaneda, Christopher J. 1997. *Offshore Pioneers: Brown & Root and the history of offshore oil and gas*. Houston: Brown & Root Inc.

Reagan, Ronald. 1981, July 17. Message to Congress Transmitting the National Energy Policy Plan. Washington D.C. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=44096&st=environment&st1 (Accessed 17 February 2011).

Reagan, Ronald. 1982, October 18. Statement on Signing the Coastal Barrier Resources Act. S. 1018. Washington D.C. *American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/?pid=41879 (Accessed 22 February 2011).

Reagan, Ronald. 1988, January 25. Legislative and Administrative Message: A Union of Individuals. Washington D.C. *The American Presidency Project* [online]. John T. Wooley and Gerhard Peters, eds. http://www.presidency.ucsb.edu/ws/index.php?pid=34237&st=windfall+profit+tax&st1= (Accessed 17 February 2011).

Redgwell, Catherine. 2004. International Energy Security. In *Energy Security: Managing Risk in a Dynamic Legal and Regulatory Framework*. Barry Barton, Catherine Redgwell, Anita Ronne, and Donald N. Zillman, eds. Oxford: Oxford University Press.

Reef Relief. 2010. A History and Timeline of Offshore Oil Drilling in Florida. http://reefrelief.org/2010/04/a-history-and-timeline-of-oil-drilling-in-florida/ (Accessed 01 March 2011).

Ricketts, Dusty. 2010, March 03. American Petroleum Institute says Conflicts with the Military Can be Worked Out. *Northwest Florida Daily News*. [Ft. Walton Beach, FL]. Online. http://www.nwfdailynews.com/articles/drilling-26690-dougher-military.html (Accessed 01 March 2011).

Rivera, Adam. 2009, December 02. Statement of Environment Florida's Adam Rivera on Clean Beaches Report Release. *Environment Florida*. Online. https://www.environmentflorida.org/newsroom/shores/save-our-shores-news/statement-of-environment-floridas-adam-rivera-on-clean-beaches-report-release#idN39ry_yeVSRsMytEQDRNfA (Accessed 01 March 2011).

Rivera, Adam. 2010. March 31. Environment Florida Statement on President Obama's Offshore Drilling Announcement. *Environment Florida*. Online. https://www.environmentflorida.org/newsroom/shores/save-our-shores-news/environment-florida-statement-on-president-obamas-offshore-drilling-announcement#iddlSuTkQd4e0YMCggfm8gUg (Accessed 01 March 2011).

Rudolf, John Collins. 2010, November 06. Coral Die-Off Took Scientist by Surprise. *The New York Times: Green, A Blog About Energy and the Environment*. [New York, NY]. Online. http://green.blogs.nytimes.com/2010/11/06/coral-cataclysm-took-scientist-by-surprise/ (Accessed 01 March 2011).

Salameh, Mamdouh G. 2003. The New Frontiers for the United States Energy Security in the 21st Century. *Applied Energy* vol. 76, pp. 135-144.

Salter, Edward and Ford, John. 2001. Holistic Environmental Assessment and Offshore Oil Field Exploration and Production. *Marine Pollution Bulletin* vol. 42:1, pp. 45-58.

Sampson, Hannah. 2010, August 24. Despite Gulf Oil spill, Tourism is Up. *The Miami Herald*. [Miami, FL]. Online. http://www.miamiherald.com/2010/08/24/1788793/despite-oil-spill-florida-tourism.html (Accessed 01 March 2011)

Shabecoff, Philip. 1990, April 24. Policy Shift Urged to End Deadlock Over Offshore Oil. *The New York Times*. [New York]. http://www.nytimes.com/1990/04/24/us/policy-shift-urged-to-end-deadlock-over-offshore-oil.html?pagewanted=print&src=pm (Accessed 01 March 2011).

Skladany, Michael, Clausen, Rebecca, and Belton, Ben. 2007. Offshore Aquaculture: The Frontier of Redefining Ocean Property. *Society and Natural Resources* vol. 20, pp. 169-176.

Smith, Neil. 2007. Nature as Accumulation Strategy. In *Socialist Register: Coming to Terms with Nature*. Leo Panitch and Colin Leys, eds. London: Merlin Press.

Soper, Kate. 1998. *What is Nature? Culture, politics and the non-human*. Oxford: Blackwell.

Steinberg, Philip E. 2001. *The Social Construction of the Ocean*. Cambridge: Cambridge University Press.

Steinberg, Philip E. 2010. The Deepwater Horizon, the *MaviMarmara*, and the Dynamic Zonation of Ocean Space. *The Geographic Journal* vol. 177: 1, pp. 12-16.

Strumpf, Dan. 2011, March 8. Oil Climbs as Market Braces for Long Libya Fight. *The Wall Street Journal*. [New York] Online. http://online.wsj.com/article/SB10001424052748703386704576186092835524406.html (Accessed 01 March 2011)

Subra, Wilma. Evaluation of the Results of Whole Blood Volatile Solvents Testing 3. *Louisiana Environmental Action Network* and *Subra Company*. Louisiana. Online. http://www.lmrk.org/issues/bp-s-deep-water-drilling-disaster/evaluation-of-the-results-of-whole-blood-volatile-solvents-testing-3.html (Accessed 01 March 2011).

Urbina, Ian. 2010a, May 14. U.S. Said to Allow Drilling Without Needed Permits. *The New York Times*. [New York, NY]. Online. http://query.nytimes.com/gst/fullpage.html?res=9C03E7DE153DF937A25756C0A9669D8B63&ref=minerals_management_service (Accessed 01 March 2010).

Urbina, Ian. 2010b, May 20. Conflict of Interest Worries Raised in Spill Tests. *The New York Times*. [New York, NY]. Online. http://www.nytimes.com/2010/05/21/science/earth/21conflict.html (Accessed 01 March 2011).

Vasquez, Michael. 2010, June 17. U.S. Oil Dependence Criticized. *The Miami Herald*. [Miami, FL]. Online. http://www.miamiherald.com/2010/06/16/1684911/us-oil-dependence-criticized.html (Accessed 01 March 2011).

Wagner, Brian. 2010, March 31. New Offshore Oil Drilling Policy Causes Mixed Reaction in US. *Voice of America*. [Miami, FL]. Online. http://www.voanews.com/english/news/usa/New-Offshore-Oil-Drilling-Policy-Causes-Mixed-Reaction-in-US--89644262.html (Accessed 01 March 2011).

Wolford, Wendy. 2010. *This Land is Ours Now: Social Mobilization and the Meanings of Land in Brazil*. Durham and London: Duke University Press.

Yang, Zili. 2006. How Does ANWR Exploration Affect OPEC Behavior? – A Simulation Study of an Open-loop Cournot-Nash Game. *Energy Economics* vol. 330, pp. 321-332.

Zalik, Anna. 2009. Zones of Exclusion: Offshore Extraction, the Contestation of Space and Physical Displacement in the Nigerian Delta and the Mexican Gulf. *Antipode* 41: 3. pp. 557-582.