Negative Briefs

Every good case has its adversaries, and that’s what the Negative Briefs are for. When you hear an affirmative case run by Blue Book — a case similar to it — use the Negative Briefs to build arguments against it.

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NEGATIVE: AQUACULTURE REGULATIONS

OVERVIEW / CRITERION / BURDEN OF PROOF

Not Negative’s burden to disprove all speculation about risks of Aquaculture

AFF burden to prove harms with scientific studies

Dr. Kenneth K. Chew 2002. (PhD on the subject of Pacific Oysters; Professor and Director, Western Regional Aquaculture Center Associate and Director, College of Ocean & Fishery Sciences at Univ of Washington) Aquaculture Panel of Public Hearing of U.S. Commission on Ocean Policy , PERCEPTION AND RECOGNIZED CHANGES AFFECTING AQUACULTURE DEVELOPMENT, June 2002 <http://govinfo.library.unt.edu/oceancommission/meetings/june13_14_02/chew_testimony.pdf>

There is need for a return to a level playing field in deciding the appropriateness of marine aquaculture (mariculture) in surface waters of the United States coastal areas. Aquaculture proponents are frequently confronted with a policy of Reverse Onus in which they are expected to prove that the perceptions held by opponents are incorrect. Long, detailed, and expensive studies are required to address unsupported assertions and as soon as one study is complete, another assertion is made. This process should be stopped by requiring that both private and governmental opponents to projects support their assertions of unacceptable consequences with reasonable, empirically based science. In other words the onus must be shared.

HARMS / SIGNIFICANCE

Aquaculture has lower environmental cost than nearly any other form of food production

Dr. Kenneth K. Chew 2002. (PhD on the subject of Pacific Oysters; Professor and Director, Western Regional Aquaculture Center Associate and Director, College of Ocean & Fishery Sciences at Univ of Washington) Aquaculture Panel of Public Hearing of U.S. Commission on Ocean Policy , PERCEPTION AND RECOGNIZED CHANGES AFFECTING AQUACULTURE DEVELOPMENT, June 2002 <http://govinfo.library.unt.edu/oceancommission/meetings/june13_14_02/chew_testimony.pdf>

Aquaculture can produce more food per unit area at a lower environmental cost than nearly any other form of food production. There are environmental costs associated with aquaculture, just as there are environmental costs associated with a walk on the beach. It is a disservice to future generations to focus only on the potential environmental costs associated with this activity, while ignoring the cost of commercial fishing and/or upland agriculture.

Criticisms are unfair: Aquaculture is relatively benign (not harmful) – no big environmental impacts

Carlos Duarte 2012. (Director, Oceans Institute at Univ. of Western Australia) 13 May 2012 “Is sustainable aquaculture an oxymoron? Aquaculture can be a positive force in the marine environment » <http://theconversation.com/is-sustainable-aquaculture-an-oxymoron-aquaculture-can-be-a-positive-force-in-the-marine-environment-6993>

In fact, I became first involved with aquaculture through research on its environmental impacts in Europe, across the Mediterranean and in SE Asia (The Philippines, Vietnam and Thailand). As I learned more about aquaculture and its impacts I realized that the impacts were relatively small and easily addressed, and that the approach taken to the assessment of the impacts of aquaculture are intrinsically unfair. Provided we agree (and I hope we do!) that we ought to produce food to feed humans, then the relevant question is not only what is the environmental value of a pristine coastal area vs. one supporting aquaculture – the approach typically used in evaluation the impacts of aquaculture – but what is the environmental cost of producing food on land and at sea. I submit that this comparison clearly indicates that aquaculture is a relatively benign form of food production, in terms of its environmental impacts as well as risks to human health, than food production on land.

Most of the aquaculture environmental concerns are about salmon, and those issues have been solved

Neil Anthony Sims 2009. (Co-Founder and CEO, Kona Blue Water Farms, Inc., Kailua-Kona, Hawaii, and President, Ocean Stewards Institute, Kailua-Kona, Hawaii) statement to the oversight hearing before the SUBCOMMITTEE ON INSULAR AFFAIRS, OCEANS AND WILDLIFE of the COMMITTEE ON NATURAL RESOURCES, U.S. HOUSE OF REPRESENTATIVES, 9 Sept 2009 <http://www.gpo.gov/fdsys/pkg/CHRG-111hhrg52311/html/CHRG-111hhrg52311.htm>

We understand and appreciate that there is a lot of emotion that swirls around the issues of fish farming. However, most of the emotion about fish farming--we would contend-- comes from farmed salmon. This is not necessarily the salmon farmers' fault. Certainly, some thirty years ago, when salmon farming was first developing, the science was very poorly understood and the methods were rustic. But there have been tremendous advances in feed science and fish physiology and ocean engineering since then. It took man some 10,000 years to domesticate cattle, and to figure out that the best way--for the environment and for the cow--is to ranch on the open range. In 30 years, we have brought fish farming from fragile pens tucked in the back of Norwegian fjords, to robust net pens that can withstand the furies of the North Sea. We are now ready for the ocean's open range.

Salmon issues aren’t applicable to aquaculture in general

Marine fish species don’t have genetic differentiation, and are quite different from salmon

Neil Anthony Sims 2009. (Co-Founder and CEO, Kona Blue Water Farms, Inc., Kailua-Kona, Hawaii, and President, Ocean Stewards Institute, Kailua-Kona, Hawaii) statement to the oversight hearing before the SUBCOMMITTEE ON INSULAR AFFAIRS, OCEANS AND WILDLIFE of the COMMITTEE ON NATURAL RESOURCES, U.S. HOUSE OF REPRESENTATIVES, 9 Sept 2009 <http://www.gpo.gov/fdsys/pkg/CHRG-111hhrg52311/html/CHRG-111hhrg52311.htm>

So I do not want to focus on salmon farming. It is not just emotionally loaded, but it is not a valid model for what we propose with mariculture in the open ocean. In the open ocean, farming marine fish, we are working with high-value species that are either not commercially targeted, or that have been reduced to scarcity by commercial fishing. Marine fish species are usually broadcast spawners, often with large spawning aggregations, and so they have no discrete genetic differentiation on any fine scale. Marine fish do not have the vulnerable migration patterns through rivers and estuaries, and are not subject to fragile freshwater ecosystem health. Marine fish are a world away from salmon.

Marine species proposed for US aquaculture are different from salmon – and don’t have the negative risks

Neil Anthony Sims 2009. (Co-Founder and CEO, Kona Blue Water Farms, Inc., Kailua-Kona, Hawaii, and President, Ocean Stewards Institute, Kailua-Kona, Hawaii) statement to the oversight hearing before the SUBCOMMITTEE ON INSULAR AFFAIRS, OCEANS AND WILDLIFE of the COMMITTEE ON NATURAL RESOURCES, U.S. HOUSE OF REPRESENTATIVES, 9 Sept 2009 <http://www.gpo.gov/fdsys/pkg/CHRG-111hhrg52311/html/CHRG-111hhrg52311.htm>

Our Kona Kampachi, for example, known as Seriola rivoliana, is found throughout the warm waters of the world. It is usually located in deep water--in the same depth profile as the valuable deep water snapper fisheries for opakapaka, ehu, onaga and gindai. These stocks have been severely depleted by both recreational and commercial fishing pressure. However, S. rivoliana is considered a trash fish in the wild, as they are subject to internal parasites in the flesh, and they frequently accumulate ciguatoxins from the reef algae Gambierdiscus. In the wild, the fish also only has around a 4% body-fat content. By culturing this species, however, we are able to render it into a safe, sustainable, delicious sushi-grade fish, with no internal parasites, no risk of ciguatera, and over 30% body fat. Because our land-based hatchery is able to rear the fingerlings, then we do not need to catch fish from the wild to stock our net pens. This is very important to us for our claims of sustainability, but it also affords us the highest possible measure of quality assurance--we know what our fish eat, all the way from hatch-to-harvest. Other marine species slated for culture in U.S. waters--cod, cobia, moi (Pacific Threadfin)--usually share such attributes. They are vastly different from salmon in their life histories and commercial fishing stocks. And we are proposing to culture them in a way that is vastly different--in terms of location and potential for environmental impact--from the negative images that emotional activists conjure up from the past.

Aquaculture has positive effects on biodiversity

James S. Diana 2009. (ecologist with the School of Natural Resources and Environment at the University of Michigan in Ann Arbor) Aquaculture Production and Biodiversity Conservation, BIOSCIENCE, Jan 2009 <http://sitemaker.umich.edu/diana.lab/files/diana_2009_bioscience.pdf>

Presenting aquaculture as entirely negative is biased, as some effects of aquaculture on biodiversity may be positive. For example:  
• Production of fish can reduce pressure on wild stocks, which may already be overexploited.  
• Stocking organisms from aquaculture systems may help to enhance depleted stocks with limited reproductive success.  
• Effluents and waste from aquaculture can increase local production, abundance, and diversity of species.  
• Destructive land-use patterns, such as slash-and-burn agriculture, may be replaced by more sustainable patterns, such as aquaculture in ponds, which also may generate income, reduce poverty, and improve human health.

Insignificant Quantity – 2 sub-points:

(1) Only 20% of US aquaculture is marine, the rest is freshwater

NOAA 2010. “Aquaculture in the United States” (ethical disclosure about the date: The article is undated, but references material published in 2010 and nothing more recent. We took this as the oldest possible date when it could have been written, to be completely fair.) <http://www.nmfs.noaa.gov/aquaculture/aquaculture_in_us.html>

However, direct U.S. marine aquaculture production is quite small relative to overall U.S. and world production. Only about 20% of U.S. aquaculture production is marine species. (This excludes hatchery fish raised in captivity and released for commercial and recreational catch.) The $1 billion value of total U.S. aquaculture production (freshwater and marine) pales in comparison to the $100 billion value of world aquaculture production.

(2) Most of the remaining 20% of US aquaculture are mollusks

Analysis: Mollusks aren’t the troubling species identified in the AFF plan that need to be regulated

NOAA 2010. “Aquaculture in the United States” (ethical disclosure about the date: The article is undated, but references material published in 2010 and nothing more recent. We took this as the oldest possible date when it could have been written, to be completely fair.) <http://www.nmfs.noaa.gov/aquaculture/aquaculture_in_us.html>

Marine aquaculture occurs in every coastal state. The preponderance of marine aquaculture production – approximately two-thirds by value – consists of bivalve mollusks such as oysters, clams, and mussels. Salmon and shrimp constitute most of the rest, but advances in technology and management techniques are increasing the availability of other species for the American public.

INHERENCY

Strong environmental and food safety regulations already followed by US aquaculture

NOAA 2012. “Fish Farming: What would you decide?” Fish Watch Lesson Plans <http://www.nmfs.noaa.gov/stories/2012/10/docs/fish_farming_what_would_you_decide.pdf>

Like any human activity, aquaculture can impact the environment, which is why U.S. aquaculture operators adhere to strong environmental and food safety regulations. When practiced responsibly, aquaculture’s impact on wild fish and shellfish populations, marine habitats, and water quality is minimal. In fact, aquaculture can benefit the ecosystem – for example, oyster aquaculture creates habitat and enhances water quality. NOAA continues to work with our partners to develop innovative techniques and management practices that ensure we’re protecting our marine ecosystems as aquaculture production expands around the world.

NOAA already has aquaculture permit regulation process underway. The non-profit consumer rights group “Food & Water Watch,” which opposes expansion of aquaculture, admitted in 2011:

Food & Water Watch 2011. (Washington, D.C.-based non-governmental organization and consumer rights group which focuses on corporate and government accountability relating to food, water, and fishing ) Who Is Benefitting from Factory Fish Farming? <http://documents.foodandwaterwatch.org/doc/factory_fish_farming_lores.pdf>

In 2011, NOAA released its Aquaculture Policy, which will pave the way to permit and manage future factory fish farming projects. The Obama administration’s proposed 2012 budget allocated $8.4 million to NOAA for funding programs relating to factory fish farming.

Aquaculture managers already have incentive to reduce escapes: It costs them money

Disad link: Forcing them to prevent almost all escapes would raise production costs exponentially

Dr. Robin S. Waples, Kjetil Hindar, and Dr. Jeffrey J. Hard 2012. (Waples – PhD; on the staff of NOAA Northwest Fisheries Science Center. Hindar – with the Norwegian Institute for Nature Research. Hard - PhD; NOAA Northwest Fisheries Science Center staff) “Genetic Risks Associated with Marine Aquaculture” NOAA Technical Memorandum NMFS-NWFSC-119 <http://www.nwfsc.noaa.gov/assets/25/8737_10162012_143010_GeneticRisksAquacultureTM119WebFinal~Std.pdf>

In stock enhancement, releasing juveniles (generally in large numbers) into the marine environment is integral to the program, and this creates widespread opportunities for introgression to occur, even when captive-wild interbreeding is not a specific objective. In contrast, aquaculture operations seek closed production systems; any leakage from these systems represents a cost that must be minimized to ensure profitability, and this creates an incentive to reduce events that could lead to interbreeding of captive and wild individuals. In this case, leakage is incidental and unintentional, although it can be nearly impossible to eliminate entirely, particularly in the marine environment. Furthermore, although it might be cost-effective to reduce escapes to a small fraction of production, the marginal costs for reducing escapes to near zero might increase exponentially.

Best management practices are being promoted by the North Atlantic Salmon Conservation Organization

National Oceanic & Atmospheric Administration Fisheries Service 2009. (ethical disclosure about the date: Article is undated but contains internal references to events in 2009 and none later.) AQUACULTURE in the Northeast Region; FACT SHEET Sustainable Fisheries Division (SFD) <http://www.nero.noaa.gov/StateFedOff/aquaculture/AQUACULTURE.NER2.pdf>

The NER RA serves as the U.S. Commissioner to the North Atlantic Salmon Conservation Organization (NASCO), a body charged with the conservation, restoration, enhancement, and rational management of Atlantic salmon stocks in the North Atlantic Ocean through international cooperation. The PRD serves as staff to the U.S. Commissioners to NASCO. In 1992, NASCO published protocols for the introduction and transfer of salmonids. These protocols established guidelines in use today relating to the review and approval of state and federal permits relating to Atlantic salmon rearing for restoration, and commercial aquaculture operations. In 2006, NASCO adopted a Resolution to Minimize Impacts from Aquaculture, Introductions and Transfers and Transgenics on Wild Atlantic Salmon Stocks (The Williamsburg Resolution). In addition, NASCO has created a Liaison Group to provide an international forum between the salmon farming industry and NASCO. The Group has developed Guiding Principles for its work and Guidelines on Containment of Farmed Salmon. In 2009, an international Technical Task Force was formed to develop guidance on best management practices to address impacts of sea lice and escaped farmed salmon on wild salmon stocks.

Magnuson-Stevens Act has aquaculture management framework

National Oceanic & Atmospheric Administration Fisheries Service 2009. (ethical disclosure about the date: Article is undated but contains internal references to events in 2009 and none later.) AQUACULTURE in the Northeast Region; FACT SHEET Sustainable Fisheries Division (SFD) <http://www.nero.noaa.gov/StateFedOff/aquaculture/AQUACULTURE.NER2.pdf>

Several Fishery Management Plans (FMPs) administered under the Magnuson-Stevens Act have framework provisions to accommodate aquaculture development in the EEZ. These include: Atlantic salmon (50 CFR 648.41); Atlantic sea scallop (50 CFR 648.55); Northeast multispecies (50 CFR 648.206); Atlantic herring (50 CFR 648.206); and spiny dogfish (50 CFR 648.237). The framework provisions provide flexibility through which the New England Fishery Management Council, in conjunction with the NMFS Northeast Regional Office, can initiate action to add or adjust management measures, consistent with FMP goals and objectives, to facilitate aquaculture development in the EEZ.

SOLVENCY

States have jurisdiction over most US aquaculture

Cross-apply under significance: Most of the aquaculture is occurring outside the scope of the AFF plan, so there’s very little benefit left for them to achieve

Cross-apply under inherency: States can regulate, don’t need federal plan

Michael Sutton 2009 (Vice President of the Monterey Bay Aquarium in California; member of the California state Fish and Game Commission) statement to the oversight hearing before the SUBCOMMITTEE ON INSULAR AFFAIRS, OCEANS AND WILDLIFE of the COMMITTEE ON NATURAL RESOURCES, U.S. HOUSE OF REPRESENTATIVES, 9 Sept 2009 <http://www.gpo.gov/fdsys/pkg/CHRG-111hhrg52311/html/CHRG-111hhrg52311.htm>

Here in the United States we import more than 80 percent of our seafood from overseas, much of which is farmed. For many years, the United States has been a relatively minor player in aquaculture, except species like catfish in the southern states. Most U.S. aquaculture is either conducted inland (in freshwater) or in the coastal environment and is therefore regulated by the states.

Virtually all US aquaculture is under State jurisdiction. California Fish & Game Commission member Michael Sutton, who advocates federal aquaculture regulation, admitted in 2009:

Michael Sutton 2009 (Vice President of the Monterey Bay Aquarium in California; member of the California state Fish and Game Commission) statement to the oversight hearing before the SUBCOMMITTEE ON INSULAR AFFAIRS, OCEANS AND WILDLIFE of the COMMITTEE ON NATURAL RESOURCES, U.S. HOUSE OF REPRESENTATIVES, 9 Sept 2009 <http://www.gpo.gov/fdsys/pkg/CHRG-111hhrg52311/html/CHRG-111hhrg52311.htm>

In 2007, Governor Schwarzenegger appointed me to the California Fish and Game Commission. The Commission sets policy and regulates all wildlife and fisheries in the state, including marine fisheries, and establishes marine reserves and other protected areas in state waters. We also regulate aquaculture operations on land and in state coastal waters out to three miles offshore. In fact it is worth noting that virtually all fish farms in the United States today are regulated by the states. That is because they are located on land or in coastal waters under state jurisdiction. So the states have a lot of relevant experience to share that can inform the development of Federal law.

More research needed – critical scientific uncertainties must be addressed to make policy/regulatory decisions

Dr. Robin S. Waples, Kjetil Hindar, and Dr. Jeffrey J. Hard 2012. (Waples – PhD; on the staff of NOAA Northwest Fisheries Science Center. Hindar – with the Norwegian Institute for Nature Research. Hard - PhD; NOAA Northwest Fisheries Science Center staff) “Genetic Risks Associated with Marine Aquaculture” NOAA Technical Memorandum NMFS-NWFSC-119 <http://www.nwfsc.noaa.gov/assets/25/8737_10162012_143010_GeneticRisksAquacultureTM119WebFinal~Std.pdf>

The National Marine Fisheries Service (NMFS) Office of Aquaculture and scientists at NMFS fisheries science centers are leading the agency’s efforts to increase scientific knowledge in support of its regulatory and management missions pertaining to marine aquaculture. Critical scientific uncertainties need to be addressed to guide research, provide and communicate knowledge, and inform policy and regulatory decisions. There is a range of genetic issues in marine aquaculture, including genetic stock improvement for commercial culture, genetic risks to natural populations, management strategies for mitigating genetic risks, and development of tools to assess relative and acceptable risk.

Not much economic benefit: US aquaculture not likely to be globally competitive

MARK VINSEL 2009. (EXECUTIVE DIRECTOR, UNITED FISHERMEN OF ALASKA) statement to the oversight hearing before the SUBCOMMITTEE ON INSULAR AFFAIRS, OCEANS AND WILDLIFE of the COMMITTEE ON NATURAL RESOURCES, U.S. HOUSE OF REPRESENTATIVES, 9 Sept 2009 <http://www.gpo.gov/fdsys/pkg/CHRG-111hhrg52311/html/CHRG-111hhrg52311.htm>

Congress should ask, along with recognition of the very serious risks to ocean environments and communities, what are the benefits of bringing industrial scale aquaculture to the United States? Because these are unlikely to be small business ventures. We question whether development of an offshore fish farm industry is really likely to improve the nation's seafood balance of trade. Seafood is a global market, and labor, energy, and real estate for processing in U.S. coastal areas may not prove competitive with foreign countries.

No economic benefit: Aquaculture = Economic harm in Alaska and layoffs in Chile

MARK VINSEL 2009. (EXECUTIVE DIRECTOR, UNITED FISHERMEN OF ALASKA) statement to the oversight hearing before the SUBCOMMITTEE ON INSULAR AFFAIRS, OCEANS AND WILDLIFE of the COMMITTEE ON NATURAL RESOURCES, U.S. HOUSE OF REPRESENTATIVES, 9 Sept 2009 <http://www.gpo.gov/fdsys/pkg/CHRG-111hhrg52311/html/CHRG-111hhrg52311.htm>

Major shifts in markets in recent memory have hurt Alaska fishing communities, as expansion of industrial scale fish farms raised production to the extent that prices, even for their own farmed fish, decreased by roughly half. We cannot forget that an overproduction of farmed salmon in excess of market demand caused much hardship and dislocation from multi-generational fishing businesses, and severely harmed the social and economic well-being of Alaska. Now just a few years later, we have a lot to learn from the example in Chile where fish farm growth was most pronounced. Layoffs in the tens of thousands, the widespread disease of infectious salmon anemia, and the use of pesticides that are not allowed in the U.S. and many other markets will continue to plague Chile as evidence that the environmental effects and social and economic well-being were not adequately considered.

No jobs benefit: Alaska aquaculture wrecked salmon fishing communities

MARK VINSEL 2009. (EXECUTIVE DIRECTOR, UNITED FISHERMEN OF ALASKA) statement to the oversight hearing before the SUBCOMMITTEE ON INSULAR AFFAIRS, OCEANS AND WILDLIFE of the COMMITTEE ON NATURAL RESOURCES, U.S. HOUSE OF REPRESENTATIVES, 9 Sept 2009 <http://www.gpo.gov/fdsys/pkg/CHRG-111hhrg52311/html/CHRG-111hhrg52311.htm>

By looking at economic effects in retrospect, it is easy to envision what could lie ahead for commercial fishermen in the face of large scale fish farming. When salmon farms expanded faster than market capacity in the 1990s, salmon prices for both farmed and wild caught fish fell precipitously. This was followed by economic hardship and consolidation in fish farming communities as well as salmon fishing communities. The average price for all species of Alaska salmon dropped to 30 cents per pound, far more for some fisheries, and processing facilities in many communities closed. Many Alaskan fishermen were left with no market and many communities were left with little or no economic activity.

DISADVANTAGES

1. Small Business Regulatory Burden.

Link: Affirmative increases business regulations – it’s in their Plan.

Link: US aquaculture is dominated by small businesses

Michigan Aquaculture Association 2012. “Know your farmer, know your food compass 2.0” 25 Sept 2012 <http://michiganaquaculture.org/category/uncategorized/>

US aquaculture is dominated by small businesses and many family-operated enterprises. Some may do direct retail marketing in local communities. The following initiative and online resources may be of interest to with local market interests. In July, the Office of the Secretary launched Know Your Farmer, Know Your Food Compass 2.0, which kicked off a series of events held for National Farmer’s Market Week. The Office of the Secretary will periodically add new data to the KYF Compass, along with case studies of people in the field successfully using USDA resources to build local and regional food systems.

Historical example: Regulations stifle aquaculture in Canada – they should use the US as a model for reform

Dr. Robin F. Neill & Brian Rogers 2002 . (Neill - B.A. and an M.A. in Political Economy from Univ of Toronto;Ph.D. in Economics from Duke. Rogers - a graduate Marine Biologist from the Univ of Guelph, Ontario; graduate of the Executive Development Program, Ivey School of Business, Univ of Western Ontario) CANADIAN AQUACULTURE: DROWNING IN REGULATION, June 2002 <http://www.aims.ca/site/media/aims/aquaculture.pdf> (brackets added)

Reports from BC [British Columbia], PEI [Prince Edward Island], and New Brunswick confirmed that serious regulatory dysfunction exists nationwide in site allocation and tenure of aquaculture licences, and in access to stock. Furthermore, administrative inefficiency is pervasive. If any conclusion can be drawn from the conference presentations, it must be that fundamental institutional change is required in the regulatory environment of Canadian aquaculture. We can look partly to other jurisdictions – such as the United States, Australia, and Norway – where aquaculture is considered an industry to be developed, not controlled, and where aquaculture-specific legislature exists.

Link: Regulations kill small businesses – drives them overseas to less regulated countries

Prof. Nicole V. Crain and W. Mark Crain 2010. ( Nicole - economics professor; Mark – prof. of political economy; both at Lafayette College, Easton, Penn. ) “The Impact of Regulatory Costs on Small Firms” <http://www.sba.gov/sites/default/files/The%20Impact%20of%20Regulatory%20Costs%20on%20Small%20Firms%20(Full).pdf>

Underlying the significance of this assessment for the U.S. economy is the fact that 89 percent of all firms in the United States employ fewer than 20 workers. By comparison, large firms (defined as those with 500 or more employees) account for only 0.3 percent of all U.S. firms.If federal regulations place a differentially large cost on small business, this potentially causes inefficiencies in the structure of American enterprises, and the relocation of production facilities to less regulated countries, and adversely affects the international competitiveness of domestically produced American products and services. All of these effects, of course, would have negative consequences for the U.S. labor market and national income.

Link: Over-regulation will kill the aquaculture industry

Brink: Today is like the airplane industry in 1919 – it can develop or be choked out

Neil Anthony Sims 2009. (Co-Founder and CEO, Kona Blue Water Farms, Inc., Kailua-Kona, Hawaii, and President, Ocean Stewards Institute, Kailua-Kona, Hawaii) statement to the oversight hearing before the SUBCOMMITTEE ON INSULAR AFFAIRS, OCEANS AND WILDLIFE of the COMMITTEE ON NATURAL RESOURCES, U.S. HOUSE OF REPRESENTATIVES, 9 Sept 2009 <http://www.gpo.gov/fdsys/pkg/CHRG-111hhrg52311/html/CHRG-111hhrg52311.htm>

The situation is perhaps analogous to the U.S. aviation industry in around 1919. One wonders where our economy, our airlines and our travel industries would be now if, in 1919, Congress had said ``OK, you can build an airline industry, but only if every aircraft is 100% safe, and there are no negative environmental impacts, and you cannot use any farmland for airports, and you cannot unfairly compete with the railroad industry.'' All of the innovation and investment would have left the U.S. for overseas, and you would have to catch a train to Canada or Mexico to connect to a flight, and we would have no input into international air traffic safety standards or passengers' Bill of Rights, because Congress would have effectively said ``We do not want it here'', even as they wrote so-called enabling legislation. If we then want a responsible open ocean mariculture industry to develop in the US, we will need to create legislation that not only permits it to operate, but that encourages innovation and investment, and that creates an environment where this industry can grow, and succeed, and fulfill its potential. We must ensure that we are not overly prescriptive in legislation or regulations, to the point that we limit innovation and creativity. Let us define our goals, clarify where there are concerns, and then allow American entrepreneurship to find the solutions.

Brink: Aquaculture investment & production growth are slow, and China has 10 times more than we do

Nicola Kerslake 2012. (Chartered Financial Analyst and a Chartered Alternative Investment Analyst) 5 Mar 2012 “In on the Ocean Floor, Aquaculture VC Firm Sees Opportunity for Sustainable Returns” (brackets and parentheses in original) <http://seedstock.com/2012/03/05/in-on-the-ocean-floor-aquaculture-vc-firm-sees-opportunity-for-sustainable-returns/>

Aquaculture isn’t an obvious venture capital target. Though it’s a large industry – US revenues alone were $2 billion last year[1] – it suffers from slow growth and high capital intensity. Global production growth is pretty tame by venture capital (VC) standards as venture capitalists would typically look for at least 30% annual growth in a target market. Many VCs still look for investments that they can visit in a day trip. They also look for large markets, and the US is not the largest aquaculture market. In fact, it’s only about a tenth of the size of China’s[2] market.

Impacts: Less aquaculture means lost job opportunities and ocean resource depletion

Dr. Kenneth K. Chew 2002. (PhD on the subject of Pacific Oysters; Professor and Director, Western Regional Aquaculture Center Associate and Director, College of Ocean & Fishery Sciences at Univ of Washington) Aquaculture Panel of Public Hearing of U.S. Commission on Ocean Policy , PERCEPTION AND RECOGNIZED CHANGES AFFECTING AQUACULTURE DEVELOPMENT, June 2002 <http://govinfo.library.unt.edu/oceancommission/meetings/june13_14_02/chew_testimony.pdf>

Aquaculture has the potential to increase employment opportunities, diversify local economies, and to increase the availability of fresh fish and shellfish. Perhaps even more importantly, aquaculture can help to take some of the pressure off wild stocks of fish by supplying a large proportion of society’s seafood needs. Aquaculture should not be viewed as a competitor with capture fisheries for consumer dollars. The two should be viewed together as necessary tools for supplying aquatic protein to our burgeoning human population. Without aquaculture, we either stop eating seafood or we completely deplete the ocean’s resources.

2. Biodiversity loss

Link: AFF increases aquaculture regulations

Link & Brink: Aquaculture is heavily regulated to the point that its survival is threatened

Dr. Kenneth K. Chew 2002. (PhD on the subject of Pacific Oysters; Professor and Director, Western Regional Aquaculture Center Associate and Director, College of Ocean & Fishery Sciences at Univ of Washington) Aquaculture Panel of Public Hearing of U.S. Commission on Ocean Policy , PERCEPTION AND RECOGNIZED CHANGES AFFECTING AQUACULTURE DEVELOPMENT, June 2002 <http://govinfo.library.unt.edu/oceancommission/meetings/june13_14_02/chew_testimony.pdf>

Aquaculture has received increased questioning from special interest groups and is subject to an increasingly complex and unpredictable regulatory environment that threatens its long-term economic survival. Regulations on effluents from aquaculture facilities are critical issues, which are hopefully being addressed by a special Aquaculture Effluents Study Task Force formed by the JSA in September 1999. This Task Force was developed to assist the Environmental Protection Agency (EPA) in developing regulations on aquaculture effluents. The task force was renamed the Aquaculture Effluents Task Force subsequent to EPA’s decision, announced January 21, 2000, to promulgate national effluent standards for aquaculture operations.

Link: Aquaculture has already begun to show promise at preserving depleted fish species

Dr. Kenneth K. Chew 2002. (PhD on the subject of Pacific Oysters; Professor and Director, Western Regional Aquaculture Center Associate and Director, College of Ocean & Fishery Sciences at Univ of Washington) Aquaculture Panel of Public Hearing of U.S. Commission on Ocean Policy , PERCEPTION AND RECOGNIZED CHANGES AFFECTING AQUACULTURE DEVELOPMENT, June 2002 <http://govinfo.library.unt.edu/oceancommission/meetings/june13_14_02/chew_testimony.pdf>

There is a failure with some people in the scientific field to recognize the potential for aquaculture as a tool for replenishing depleted wild stocks of fish. In addition to producing enormous amounts of food per unit area, aquaculture is a tool that could be used to enhance depleted resources. There appears to be a significant contingent of scientists, environmentalists and regulators who look for flaws in past hatchery practices and ignore this potential. Given proper research funding, those faults can easily be corrected. Aquaculture holds the promise of helping to restore the numerous species of fish and shellfish whose populations have been depleted by poor recreational and commercial management along the way. A policy to support enhancement activities for marine species should be encouraged. Some of this work is taking place at the NMFS/Manchester facilities in Puget Sound, but more emphasis for this type of research needs to be pointed out and supported. A good example of enhancement is saving a population of sockeye salmon which travels a long distance up the Columbia River with several major dams in the way to the Snake River and into Red Lake in Idaho state to spawn. Only a handful of sockeye salmon (3 males and 1 female) returned in 1991. The eggs of the one female were taken by federal and Idaho biologists and divided for hatching and growing at several hatcheries to insure safe-keeping of progeny of the last female trapped. NMFS in Seattle was part of this enhancement effort and the eventual productions of smolt fingerlings were returned to the Red Lake/Snake River system for release as a means to save this wild strain of fish. Thus, the enhancement efforts were accomplished and field monitoring of returning adult fish showed promise.

Brink: Fisheries are collapsing, we’re heading toward the “end game”

CNN 2013. (journalist Tom Levitt) March 2013 Overfished and under-protected: Oceans on the brink of catastrophic collapse <http://www.cnn.com/2013/03/22/world/oceans-overfishing-climate-change>

Tens of thousands of bluefin tuna were caught every year in the North Sea in the 1930s and 1940s. Today, they have disappeared across the seas of Northern Europe. Halibut has suffered a similar fate, largely vanishing from the North Atlantic in the 19th century. In some cases, the collapse has spread to entire fisheries. The remaining fishing trawlers in the Irish Sea, for example, bring back nothing more than prawns and scallops, says marine biologist Callum Roberts, from the UK's York University. "Is a smear of protein the sort of marine environment we want or need? No, we need one with a variety of species, that is going to be more resistant to the conditions we can expect from climate change," Roberts said. The situation is even worse in Southeast Asia. In Indonesia, people are now fishing for juvenile fish and protein that they can grind into fishmeal and use as feed for coastal prawn farms. "It's heading towards an end game," laments Roberts.

Impact: Biodiversity provides countless benefits to mankind

Pavan Sukhde 2008. (Study Leader, European Commission, Ninth Conference of the Parties to the Convention on Biological Diversity) May 2008, The Economics of Ecosystems and Biodiversity – Interim Report, <http://ec.europa.eu/environment/nature/biodiversity/economics/pdf/teeb_report.pdf>

There seems to be little appreciation of the many dimensions of biodiversity loss, or the connections between biodiversity loss, climate change and economic development. Species loss and ecosystem degradation are inextricably linked to human well-being, and unless we take urgent remedial action, “normal service” – in the sense of being able to enjoy the benefits that our environment affords us – may never be resumed. Humanity receives countless benefits from the natural environment in the form of goods and services (generally grouped under the collective title of ecosystem services) such as food, wood, clean water, energy, protection from floods and soil erosion (see Box 1.1). Natural ecosystems are also the source of many life-saving drugs as well as providing sinks for our wastes, including carbon. Human development has also been shaped by the environment, and this interlinkage has strong social, cultural and aesthetic importance. The well-being of every human population in the world is fundamentally and directly dependent on ecosystem services.

NEGATIVE: ARCTIC OFFSHORE OIL BAN

NEGATIVE PHILOSOPHY

Stopping offshore drilling is an irrational over-reaction to risk

Nicolas Loris 2012. (master's degree in economics from George Mason University ) Oil Rig Explosion Shouldn’t Lead to More Drilling Bans 19 Nov 2012 <http://blog.heritage.org/2012/11/19/oil-rig-explosion-shouldnt-lead-to-more-drilling-bans-2/>

The incentive to reduce risk already exists. What is not needed are sweeping regulations and bans on drilling that adversely affect the entire industry and, consequently, many employees—as well as all American energy consumers. Tens of thousands of people die in traffic fatalities each year, but no one calls for legislation that mandates a national speed limit of 10 miles per hour. Even shortly after the Deepwater Horizon spill in 2010, seven experts from the National Academy of Engineering said that a blanket moratorium was not the answer, it would not significantly reduce the risks of offshore drilling, and it would punish the innocent.

INHERENCY

Shell Oil added numerous Arctic safety provisions

NEW YORK TIMES 2012. (journalists John Broder and Clifford Krauss) New and Frozen Frontier Awaits Offshore Oil Drilling 23 May 2012 <http://www.nytimes.com/2012/05/24/science/earth/shell-arctic-ocean-drilling-stands-to-open-new-oil-frontier.html?pagewanted=all&_r=0>

At the urging of regulators, Shell strengthened spill prevention and response plans. It built a containment system for the Arctic modeled on the one that successfully capped the BP well and added ships and equipment to the armada to be in place to capture any spilled oil. The company agreed reluctantly to shorten its Chukchi Sea drilling season by 38 days, to less than three months, to ensure that the area would be ice-free in case of a blowout. The government strengthened its Arctic research programs to better understand the impact of increased industrial activity in the northern ocean. Those and other concessions seemed to placate officials at the permitting agencies, who were navigating between their regulatory duties and the president’s obvious desire to drill.

US Arctic oil development blocked by federal regulations and lack of icebreakers: Exxon went to Russia instead

Dr. Ariel Cohen and Anton Altman 2011. (Cohen- PhD from Fletcher School of Law and Diplomacy at Tufts University; has served as a consultant to both the executive branch and the private sector on policy toward Russia, Eastern and Central Europe, the Caucasus, and Central Asia. Altman – research assistant at Heritage Foundation ) 7 Sept 2011 “Exxon Storming the Arctic » <http://blog.heritage.org/2011/09/07/exxon-storming-the-arctic/>

There is also a domestic explanation to this deal. Since the U.S. government has virtually closed off all access to the enormous resources of the Arctic, partnering with the Russians may be an easy way for American companies to reach the energy riches of the High North. The irony is: Exxon will invest tens of billions of dollars in the Russian Arctic while the Arctic waters off the U.S. coast remain inaccessible due to environmental and bureaucratic obstacles. Environmental legislation is impeding economic expansion in the U.S. Arctic shelf. The American oil company Sunoco tried for five years to attain access to one of the sites in the National Petroleum Reserve, but in the end was refused by the U.S. Corps of Engineers. Exxon ran into the same problems when it sought permission to work on Alaska’s North Slope. The U.S. also lacks icebreakers to map and develop the frozen expanses.

MINOR REPAIR

Recommendation of the National Commission on the BP oil spill: Enhanced regulations and more Coast Guard resources for the Arctic

Analysis: This is a high-level panel that investigated the issues raised in the AFF case and this is what they recommended.

Bob Graham and William Reilly 2011. (Graham – former US Senator. Reilly – former administrator of the EPA. They are the authors of the report of the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling and were testifying on behalf of that Commission) TESTIMONY BEFORE THE COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE, JANUARY 26, 2011 <http://www.oilspillcommission.gov/sites/default/files/documents/Testimony%20of%20Commission%20Co-Chairs%20Graham%20and%20Reilly%20before%20the%20Senate%20Committee%20on%20Energy%20and%20Natural%20Resources.pdf>

The major interest in offshore Alaska reflects the likelihood of finding significant new sources of oil there. The Chukchi and Beaufort Sea off Alaska’s north coast rank behind only the Gulf of Mexico in estimated domestic resources. But finding and producing those potentially important supplies of oil offshore Arctic Alaska requires the utmost care, given the special challenges for oil spill response and containment, and heightened risks associated with this frontier, especially its extreme cold, extended seasons of darkness, hurricane-strength storms, and pervasive fog—all affecting access and working conditions—and the extraordinary richness of its ecosystems and the subsistence native communities dependent upon their protection. To deal with these serious concerns about Arctic oil spill response, containment and the heightened environmental stakes the Commission recommends three approaches before the Department of the Interior makes a determination that drilling in a particular area is appropriate. First, the Department should ensure that the containment and response plans proposed by industry are adequate for each stage of development and that the underlying financial and technical capabilities have been satisfactorily demonstrated in the Arctic. Second, the Coast Guard and the oil companies operating in the Arctic should carefully delineate their respective responsibilities in the event of an accident— including search and rescue—and then must build and deploy the necessary capabilities. Third, Congress should provide the resources to establish Coast Guard capabilities in the Arctic, based on the Guard’s review of gaps in its capacity.

COUNTERPLAN

We need international coordination on oil drilling safety in the Arctic

Analysis: Since any country could allow drilling in the Arctic, even if the US stops drilling, others could do it and hurt our environment when the oil drifts to our shores. We need to recognize that drilling is inevitable and work out international safety standards to make it as safe as possible, instead of banning US drilling and thinking we’ve solved the problem.

Bob Graham and William Reilly 2011. (Graham – former US Senator. Reilly – former administrator of the EPA. They are the authors of the report of the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling and were testifying on behalf of that Commission) TESTIMONY BEFORE THE COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE, JANUARY 26, 2011 <http://www.oilspillcommission.gov/sites/default/files/documents/Testimony%20of%20Commission%20Co-Chairs%20Graham%20and%20Reilly%20before%20the%20Senate%20Committee%20on%20Energy%20and%20Natural%20Resources.pdf>

The Arctic is shared by multiple countries, many of which are considering or conducting oil and gas exploration and development. The extreme weather conditions and infrastructure difficulties are not unique to the U.S. Arctic. Damages caused by an oil spill in one part of the Arctic may not be limited to the waters of the country where it occurred. As a result, the Commission recommends that strong international standards related to Arctic oil and gas activities be established among all the countries of the Arctic. Such standards would require cooperation and coordination of policies and resources.

Other Arctic countries are moving forward with offshore oil drilling

Dept of the Interior 2013. REVIEW OF SHELL’S 2012 ALASKA OFFSHORE OIL AND GAS EXPLORATION PROGRAM, MARCH 8, 2013 <http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&pageid=348469>

Other Arctic countries are moving forward with offshore oil and gas exploration in the Arctic Ocean, including Russia, Norway, Canada, Denmark (including Greenland and the Faroe Islands), and Iceland. Proven offshore oil and gas fields have been found along Russia’s vast Arctic shelf in the Barents, Pechora and Kara Seas, although there has been no significant offshore oil and gas production in the Russian Arctic to date. Chevron operates two exploration licenses in the Canadian Beaufort Sea, and in 2012 Chevron undertook an exploratory seismic program there. The Norwegian Arctic is seen as a possible source to replace declining output from mature fields in the North Sea. For example, Norway recently announced that the Norwegian portion of a formerly disputed area with Russia in the Barents Sea could hold an estimated 1.9 billion barrels of oil equivalent, an increase of 15 percent from previous estimates. In 2010, Greenland drew significant attention by awarding seven oil and gas exploration licenses in Baffin Bay, and additional licenses are expected to be awarded off eastern Greenland in 2013.

ADVANTAGE: US could lead the way and model standards of safety for other Arctic nations

UNIQUENESS: …but we couldn’t if we ban drilling, because we then would not be “establishing an operating model.” This makes the Counterplan exclusive to the AFF plan.

Dept of the Interior 2013. REVIEW OF SHELL’S 2012 ALASKA OFFSHORE OIL AND GAS EXPLORATION PROGRAM, MARCH 8, 2013 <http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&pageid=348469>

Government and industry should continue to evaluate the potential development of additional Arctic-specific standards in the areas of drilling and maritime safety and emergency response equipment and systems. The United States has a leading role among Arctic nations in establishing appropriately high standards for safety, environmental protection and emergency response governing offshore oil and gas exploration in the Arctic Ocean. It is incumbent, therefore, on the United States to lead the way in establishing an operating model and standards tailored specifically to the extreme, unpredictable and rapidly changing conditions that exist in the Arctic even during the open water season.

HARMS

Arctic offshore drilling is safer than the Gulf of Mexico

Prof. Tyler Priest 2013. (associate professor of history and geography at the University of Iowa) April 2013 “Should the U.S. Expand Offshore Oil Drilling?” WALL STREET JOURNAL <http://online.wsj.com/article/SB10001424127887324020504578398610851042612.html>

We should take seriously the environmental challenges of drilling in the Arctic, but the risks there aren't the same as in the Gulf. The Arctic water is shallower (150 feet, versus 5,000 to 10,000 feet), and gas pressures are lower. Major oil companies have been operating in the Arctic for decades, and techniques for working in ice and detecting spilled oil beneath it have improved steadily. Scientific understanding of Arctic ecosystems is more advanced than opponents acknowledge.

Industry and US government are moving cautiously with lots of safeguards

Native Eskimo community favors Arctic drilling

Prof. Tyler Priest 2013. (associate professor of history and geography at the University of Iowa) April 2013 “Should the U.S. Expand Offshore Oil Drilling?” WALL STREET JOURNAL <http://online.wsj.com/article/SB10001424127887324020504578398610851042612.html>

Both the oil industry and the U.S. government have been moving forward very cautiously, in consultation with stakeholders and with unprecedented preparations for drilling and oil-spill response. Leaders from the state of Alaska and the North Slope Inupiat community advocate proceeding with Arctic drilling. They badly need the jobs and revenue, as well as the oil volumes to keep the Trans-Alaska Pipeline in operation. Although some people cheer the suspension of oil exploration in Arctic waters, this is a major setback for U.S. energy development.

Response to “Shell’s “failure” in the Arctic”: They did test drilling safely and without spills, responded effectively to sea ice conditions, and coordinated well with Alaska Native communities

Dept of the Interior 2013. REVIEW OF SHELL’S 2012 ALASKA OFFSHORE OIL AND GAS EXPLORATION PROGRAM, MARCH 8, 2013 <http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&pageid=348469>

Although Shell’s difficulties prevented the company from fully executing its drilling plans last summer, the company successfully completed some important elements of its drilling program. In particular, Shell succeeded in drilling “top hole” sections of two wells in the Arctic Ocean, and it did so safely without any significant injuries to workers or spills. Shell employed weather forecasting and ice management systems that enabled it to respond effectively to changing sea ice conditions, including the encroachment of a major ice floe on Shell’s Burger A well site in the Chukchi Sea. Shell also coordinated well with Alaska Native communities and subsistence hunters, even under circumstances that delayed its drilling program in the Beaufort Sea.

Response to “Shell’s failure in the Arctic”: Shell generally performed safely in the Arctic

Dept of the Interior 2013. REVIEW OF SHELL’S 2012 ALASKA OFFSHORE OIL AND GAS EXPLORATION PROGRAM, MARCH 8, 2013 <http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&pageid=348469>

When conducting operations within its core competencies during the open-water drilling season, and while subject to daily oversight, Shell generally performed safely. Shell was able to drill top hole sections in both the Chukchi and Beaufort Sea theaters with no spills, no significant injuries to workers and virtually no reported impacts on subsistence activities. With the significant exception of air permit violations, one minor safety-related incident of noncompliance on the *Noble Discoverer* that was promptly addressed, and other relatively minor issues discussed below, Shell’s operations in the Beaufort and Chukchi Seas generally complied with applicable regulations and the conditions of its plans and permits.

DISADVANTAGES

1. More dangerous drilling

Link: Oil consumed in the US, if it doesn’t come from our drilling in the Arctic, will be imported from other countries with weaker environmental protections

Prof. Tyler Priest 2013. (associate professor of history and geography at the University of Iowa) April 2013 “Should the U.S. Expand Offshore Oil Drilling?” WALL STREET JOURNAL <http://online.wsj.com/article/SB10001424127887324020504578398610851042612.html>

Americans must find ways to reduce oil consumption. But we will still require lots of oil for a long time. If that oil doesn't come from the Arctic or other parts of the outer shelf, it will very likely come from places with weaker environmental and labor protections than we have in the U.S. Given these realities, we should not abandon the quest to determine the extent of our offshore oil resources and how much can be recovered in a responsible manner.

Example: Russia is expanding Arctic offshore drilling

NEW YORK TIMES 2012. (Clifford Krauss, journalist) 16 Apr 2012 “Exxon and Russia’s Oil Company in Deal for Joint Projects” <http://www.nytimes.com/2012/04/17/business/energy-environment/exxon-and-russian-oil-company-agree-to-joint-projects.html?_r=0>

“Today Rosneft and Exxon Mobil enter offshore projects of unprecedented scale,” said Eduard Y. Khudainatov, Rosneft’s president. “In so doing, we lay the foundation for a long-term growth of the Russian oil and gas industry.” The deal has been in the making for months, but Exxon Mobil, which is based in Irving, Tex., had warned that it could not complete major investments in Russia’s Arctic without first receiving assurances of a fair, long-term taxation regime. Mr. Putin appeared to try to put that concern to rest last week when he announced the canceling of high taxes on exports from new offshore fields for five to 15 years, depending on the scale of the project. By creating what he called “globally competitive conditions,” Mr. Putin was looking to attract investment in Russian oil and gas projects from Exxon Mobil, Total of France and Statoil of Norway to ensure the continued production of roughly 10 million barrels of oil a day as domestic consumption climbed. High oil prices have been a boon to the Russian economy.

Link: Russia has poor environmental standards and lots of oil pollution

Dr. David Lewis Feldman, Ivan Blokov 2012. (Feldman – PhD in political science; Professor and Chair, Department of Planning, Policy and Design, School of Social Ecology, University of California, Irvine. Blokov – campaign director of Greenpeace Russia) “The Politics of Environmental Policy in Russia” <http://books.google.com/books?id=nvOoP2gkguQC&pg=PA33&lpg=PA33&dq=Russia+environmental+standards+oil&source=bl&ots=XFVNt6zKE8&sig=r6fyCwig9wDm7jcjBsjwxjo-iI0&hl=en&sa=X&ei=JdvBUdjiO5Te8wTziYDIBw&ved=0CGsQ6AEwBw#v=onepage&q=Russia%20environmental%20standards%20oil&f=false>

The oil and gas extraction industries – by far Russia’s largest and most important industrial sector – not only contribute to air pollution problems, but are also significant sources of toxic pollution of water and soils. Environmental standards are weak, enforcement is notoriously poor, and small-scale accidents, pipeline leakage and tanker spills have contaminated many areas of Russia.

Impact: Turn Affirmative’s harms – risk of oil spills goes up when drilling is shifted to countries with fewer environmental safeguards than the US has.

2. Oil tanker risks

Link: No offshore drilling means more oil imported in tankers, which have their own risks

Nicolas Loris 2012. (master's degree in economics from George Mason University ) Oil Rig Explosion Shouldn’t Lead to More Drilling Bans 19 Nov 2012 <http://blog.heritage.org/2012/11/19/oil-rig-explosion-shouldnt-lead-to-more-drilling-bans-2/>

Any activity—whether it’s crossing the street, flying in a plane, or driving a car—has risk. In fact, in this past national election, a voter was statistically much more at risk of getting in a car crash on the way to the polling place than actually affecting the outcome of the election. With regard to energy, my colleague David Kreutzer calculated in 2010 that wind energy actually had higher workplace mortality than oil or coal on a per-megawatt-hour basis. Furthermore, if the U.S. stopped drilling offshore, even more oil would need to be imported, which would require more tankers coming to the U.S. from overseas, which in turn involves its own risks and costs.

Link: Tankers risk oil spills

Peter O'Neil 2013. (journalist) FINANCIAL POST, “Oil spills are rare and getting rarer – but any risk is too much for some” 29 May 2013 <http://business.financialpost.com/2013/05/29/oil-spills-are-rare-and-getting-rarer-but-any-risk-is-too-much-for-some/?__lsa=9505-e806> (“Enbridge” is a Canadian oil company)

Det Norske Veritas, a Norwegian company hired by Enbridge to assess risk, concluded there is an 18-per-cent likelihood of a tanker spill incident – minor or major — over a 50-year span. For a spill greater than 31,000 barrels, the odds slide to 8.7 per cent — the equivalent of playing Russian roulette once every 50 years, with a single bullet in a 12-chamber revolver. For an Exxon Valdez-grade spill of 250,000 or more barrels, the odds tumble to just 0.3 per cent over 50 years.

Impact: Turn AFF oil spill harms. The risk shifts to tankers instead of offshore drilling platforms

3. Federal deficits

Link: Offshore drilling could generate hundreds of billions of dollars in federal revenues

Hans A. von Spakovsky and Nicolas Loris 2012. (Spakovsky - senior legal fellow in The Heritage Foundation’s Center for Legal and Judicial Studies; former counsel to the Assistant Attorney General for civil rights at US Justice Dept. Loris - master's degree in economics from George Mason University ) Offshore Drilling: Increase Access, Reduce the Risk, and Stop Hurting American Companies, 13 Aug 2012 <http://www.heritage.org/research/reports/2012/08/offshore-drilling-increase-access-reduce-the-risk-and-stop-hurting-american-companies>

The Minerals Management Service estimates that 101 billion barrels of oil and 480 trillion cubic feet of natural gas of proven reserves and undiscovered resources are awaiting exploration in the Outer Continental Shelf (OCS). Opening these areas would generate hundreds of thousands of new jobs, generate hundreds of billions of dollars in government revenue, and bring more oil to the world market, thereby lowering gas prices.

Impact: Higher deficits hurt the economy

Dr William Gale and Benjamin Harris 2011. (Gale - PhD in economics, Stanford Univ.; senior fellow at the Brookings Institution and co-director of the Urban-Brookings Tax Policy Center; former assistant professor in the Department of Economics at UCLA, and a senior economist for the Council of Economic Advisers under President George H.W. Bush; Harris - master’s degree in economics from Cornell University and a master’s degree in quantitative methods from Columbia University; senior research associate with the Economics Studies Program at the Brookings Institution) “A VAT for the United States: Part of the Solution” <http://www.taxanalysts.com/www/freefiles.nsf/Files/GALE-HARRIS-5.pdf/$file/GALE-HARRIS-5.pdf>

But even in the absence of a crisis, sustained deficits have deleterious effects, as they translate into lower national savings, higher interest rates, and increased indebtedness to foreign investors, all of which serve to reduce future national income. Gale and Orszag (2004a) estimate that a 1 percent of GDP increase in the deficit will raise interest rates by 25 to 35 basis points and reduce national saving by 0.5 to 0.8 percentage points of GDP.

Brink and Impact: The higher the debt, the greater the risk of a crisis. If we don’t act soon, risk of crisis will increase

THE NATIONAL COMMISSION ON FISCAL RESPONSIBILITY AND REFORM 2010. (bipartisan panel appointed by Pres. Obama in 2010 to write a report on ways to solve the imbalance in the federal budget; chaired by Sen. Alan Simpson, Former Republican Senator from Wyoming and Erskine Bowles, Chief of Staff to President Clinton) Dec 2010, “THE MOMENT OF TRUTH - REPORT OF THE NATIONAL COMMISSION ON FISCAL RESPONSIBILITY AND REFORM” (brackets added) [www.fiscalcommission.gov/sites/fiscalcommission.gov/files/documents/TheMomentofTruth12\_1\_2010.pdf](http://www.fiscalcommission.gov/sites/fiscalcommission.gov/files/documents/TheMomentofTruth12_1_2010.pdf)

Predicting the precise level of public debt that would trigger such a crisis is difficult, but a key factor may be whether the debt has been stabilized as a share of the economy or if it continues to rise. Investors, reluctant to risk throwing good money after bad, are sure to be far more concerned about rising debt than stable debt. In a recent briefing on the risk of a fiscal crisis, CBO [Congressional Budget Office] explained that while “there is no identifiable tipping point of debt relative to GDP indicating that a crisis is likely or imminent,” the U.S. debt-to-GDP ratio is “climbing into unfamiliar territory” and “the higher the debt, the greater the risk of such a crisis.” If we do not act soon to reassure the markets, the risk of a crisis will increase, and the options available to avert or remedy the crisis will both narrow and become more stringent. If we wait ten years, CBO projects our economy could shrink by as much as 2 percent, and spending cuts and tax increases needed to plug the hole could nearly double what is needed today. Continued inaction is not a viable option, and not an acceptable course for a responsible government.

4. Import dependence

Link: Arctic oil would drastically reduce US dependence on foreign oil

ABC NEWS 2012. (journalists Cecilia Vega, Alex Waterfield) 9 Oct 2012 “Arctic Battle: Oil Drilling Still Faces Environmental Concerns” <http://abcnews.go.com/International/battle-arctic-oil-drilling-faces-environmental-concerns/story?id=17408236#.UcYQhzQvm8C>

The bottom of the Chukchi Sea, off Alaska's north shore, is one of the most hotly contested places under the sea. It is here that Shell Oil, Co., is looking for oil and Greenpeace is trying to stop them. The oil giant has spent years and billions of dollars jockeying to be first to strike and the payoff stands to be enormous. The ocean floor inside the Arctic Circle may hold a quarter of the Earth's undiscovered oil, enough to drastically reduce the United States' dependency on foreign supplies.

Link: Offshore oil reduces US trade deficit

Prof. Tyler Priest 2013. (associate professor of history and geography at the University of Iowa) April 2013 “Should the U.S. Expand Offshore Oil Drilling?” WALL STREET JOURNAL <http://online.wsj.com/article/SB10001424127887324020504578398610851042612.html>

Offshore oil also does more than help satisfy our energy appetite. Annual federal proceeds from offshore leases have ranged as high as $18 billion in recent years, second only to income taxes as a revenue source. And every barrel of consumption that isn't imported helps ease the U.S. trade deficit.

Impact: Trade deficits hurt US jobs and industry

Link Back to DA3: Trade deficits increase federal deficits

Ian Fletcher 2012. (Senior Economist of the Coalition for a Prosperous America, a nationwide grass-roots organization dedicated to fixing America’s trade policies and comprising representatives from business, agriculture, and labor. He was previously Research Fellow at the U.S. Business and Industry Council, a Washington think tank founded in 1933 ) The Fiscal Cliff and the Trade Deficit, HUFFINGTON POST 21 Nov 2012 <http://www.huffingtonpost.com/ian-fletcher/fiscal-cliff-trade-deficit_b_2169250.html>

For one thing, when America runs a trade deficit, we have to either borrow money from foreigners or sell off existing assets to them to cover the gap. And a lot of that borrowing and asset selling takes the form of federal debt instruments like T-bills. So our appetite for foreign credit to buy imports is related to our appetite for foreign credit to finance our government. For another thing, the reason the fiscal cliff could tip us back into recession is that it would suddenly reduce so-called aggregate demand. That's the economy's total demand for goods and services. But a trade deficit does the same thing, because it means that demand for goods and services is being satisfied by foreign producers, not American ones. So output, jobs, and industries suffer the same way.

NEGATIVE: ASIAN CARP

Tyler Sarna researched some of the evidence in this brief

TOPICALITY

1. Not “marine” resources

**Marine**: “Relating to a system of open-ocean and unprotected coastal habitats, characterized by exposure to wave action, tidal fluctuation, and ocean currents and by the absence of trees, shrubs, or emergent vegetation. Water in the marine system is at or near the full salinity of salt water.” (The American Heritage Science Dictionary) 2010. <http://science.yourdictionary.com/marine>

**Chicago Area Waterway System**: “Over 100 miles of rivers and canals form the Chicago Area Waterway System (CAWS), which connects Lake Michigan with the Mississippi River via the Lower Des Plaines and Illinois rivers. The CAWS includes the Chicago River, the Chicago Sanitary and Ship Canal, the Cal-Sag Channel and the Calumet Rivers.” (The EPA website) last updated on May 17, 2012. <http://www.epa.gov/region5/chicagoriver/>

Standard:

The resolution that we are here to debate has clear boundaries. The resolution clearly tells us that “Resolved: The United States federal government should substantially reform its marine natural resource policies”, and this clearly limits the debate to marine natural resource policy.

Violation:

The Affirmative team has brought a case that is not about marine resource policy. Their plan only deals with natural resources in the freshwater rivers and canals in Illinois instead of dealing with marine resources. If they dealt with the Asian Carp issue by taking action inside of the Great Lakes, then they would have been topical because the Great Lakes experience all of the phenomena (except salinity) required by the definition provided. However, they chose to take action outside of the bounds they were given by the resolution by taking action in rivers instead.

Impact:

Affirmative efforts to expand debate beyond the resolution are unfair to Negative teams, because they make it impossible to research against any possible Affirmative case if the Resolution is not going to be used as the boundary for debate this year. You should discourage Affirmatives from doing this by awarding Negative ballots any time it happens. They’ll get the message and start being more careful and policy debate will be improved for everyone.

2. No substantial change in policy

**Standard:** Resolution requires substantial reform to a policy

**Definition:** “Substantial” means“b : considerable in quantity : significantly great” *(Merriam Webster Online Dictionary 2013* [*http://www.merriam-webster.com/dictionary/substantial*](http://www.merriam-webster.com/dictionary/substantial)*)*

Violation: Status Quo already has a policy of stopping Asian carp from getting into Lake Michigan. Reversing that policy would be a substantial change. Adding some additional efforts to it are merely a minor repair to an existing policy. Our policy on stopping Asian carp was signed into law by Pres. Obama in 2012.

American Sportsfishing Association 2013. “The Advancing Threat of Asian Carp” <http://asafishing.org/advocacy/legislative-action/the-advancing-threat-of-asian-carp/>

On April 19, 2012, Senator Debbie Stabenow (D-Mich.) and Representative Dave Camp (R-Mich.) introduced the Stop Asian Carp Act into both chambers of Congress (S. 2317 and H.R. 4406). These bills will help protect the Great Lakes’ $7 billion sportfishing industry by requiring the Army Corps of Engineers, within eighteen months, to prepare an action plan to prevent Asian carp and other invasive species from entering the Great Lakes. This bill was signed into law by the President in July 2012, as a part of the larger Transportation Bill, and will expedite current efforts to stop the spread of the Asian carp.

HARMS / SIGNIFICANCE

Multiple experts agree: no imminent threat to Lake Michigan from Asian carp

US Army Corps of Engineers 2010. Brief filed in the case of Michigan v. US Army Corps of Engineers, 1 Oct 2010, in U.S. District Court, Northern District of Illinois <http://www.greatlakeslaw.org/files/usace_post_hrg_brief.pdf>

As confirmed by multiple agencies’ experts, any Asian carp that are in the Chicago Area Waterway System (“CAWS”) likely exist in very low numbers and do not present an imminent threat to Lake Michigan. It is uncertain whether a sustainable population of Asian carp could establish itself in Lake Michigan by way of the CAWS and, if they could, what impacts would result.

No evidence electric barrier has failed, no imminent threat of Asian carp getting established in Lake Michigan, and current efforts are addressing the threat

US Army Corps of Engineers 2010. Brief filed in the case of Michigan v. US Army Corps of Engineers, 1 Oct 2010, in U.S. District Court, Northern District of Illinois <http://www.greatlakeslaw.org/files/usace_post_hrg_brief.pdf>

As demonstrated during the September 7-10, 2010, hearing, the Federal Defendant (in conjunction with its state and federal partners on the Asian Carp Regional Coordinating Committee (“ACRCC”)) has reasonably concluded that 1) only a low number of individual Asian carp exist above the electric barrier, 2) there is no evidence that the electric barrier has failed and 3) the potential for the establishment of a self-sustaining population in the CAWS above the electric barrier or in Lake Michigan is not imminent in a legal sense and remains an unknown based on the characteristics of these fish. Furthermore, contrary to Plaintiffs’ claims that the situation is at a “critical juncture” that merits the drastic relief they seek, Federal Defendant’s filings and testimony have established, largely unaddressed by Plaintiffs, that the current intensive inter-agency efforts, which even Plaintiffs acknowledge are unusual in their scope, are addressing the threat posed by Asian carp to the Great Lakes.

“One fish was found in Lake Calumet” – Response: Doesn’t prove anything for sure

eDNA results where the 1 fish was found are all negative – how reliable is eDNA?

US Army Corps of Engineers 2010. Brief filed in the case of Michigan v. US Army Corps of Engineers, 1 Oct 2010, in U.S. District Court, Northern District of Illinois <http://www.greatlakeslaw.org/files/usace_post_hrg_brief.pdf>

Further, the eDNA results for the sampling from Lake Calumet (where the one fish above the barrier was found) have all been negative, Peabody Decl. ¶ 15; Plfs. PI Hearing Ex.2, and in areas below the electric barrier where live fish are known to be abundant the results are not always positive. Plfs. Ex. 14 at ¶ 24 The live fish caught in Lake Calumet also does not equate to a sustainable population of fish above the electric barrier, nor does it show any alleged failure of the barrier. That one fish’s origins are unknown. Chapman Decl. ¶¶ 28-29. No one knows if the fish swam across the electric barriers, was carried to the location via ballast water or a bait bucket, or released above the electric barrier by a third party.

eDNA does not prove there are any Asian carp in the Great Lakes

US Army Corps of Engineers 2010. Brief filed in the case of Michigan v. US Army Corps of Engineers, 1 Oct 2010, in U.S. District Court, Northern District of Illinois <http://www.greatlakeslaw.org/files/usace_post_hrg_brief.pdf>

The state of the eDNA science does not yet permit anyone to conclude that live Asian carp are in the canal system in numbers that present an imminent threat. Negative eDNA results comprise a super-majority of the results when compared to the number of samples taken. See Plfs. PI Ex. 2. For example, in 2010, out of 536 samples taken, 10 were positive for silver carp and none were positive for bighead carp. Quarles Decl. ¶ 57; Plfs. PI Ex. 2. A positive eDNA result may correspond to a live fish, a dead fish, or simply the presence of fish mucus, feces, urine, or other cells. Id.; Lodge 114:24-116:4 (acknowledging that a limitation of eDNA is that there is no way of measuring the relative abundance of fish producing the detection signal and no way to tell the number of fish). Dr. Lodge may believe that a positive eDNA result shows “multiple” live fish, but at the current time, that prediction cannot be confirmed or even supported by other evidence.

eDNA test flawed – false positive and false negative results are quite possible

The California Aquaculture Association 2013. (Nathan StonePh. D.in Aquaculture) 19April 2013 “eDNA: Implications for Aquaculture” <http://www.caaquaculture.org/2013/04/19/edna-implications-for-aquaculture/>

Three major concerns are: 1) detection of eDNA does not mean that a live organism is present; 2) false positives are to be expected, and 3) detection assays should first be standardized and validated, laboratories should be accredited, and laboratory performance testing should take place. Research results presented in a February 2013 interim report of the Environmental DNA Calibration Study (ECALS) highlighted the existence of numerous possible sources of eDNA other than live fish. This means that positive eDNA results do not always mean that the live organism is present. For example, vessel hulls were found to have considerable amounts of adhering DNA, even on boats that had been transported overland. Fishing nets were another major source, although additional testing is needed given some apparent contamination during testing. Fish-eating birds were shown to be potential sources of Asian carp eDNA; feces of birds fed a meal of silver carp had positive eDNA for up to a week afterwards. Silver carp DNA was detected for up to 30 days in bird droppings on metal sheets exposed to temperatures up to 140°F. Throat and cloacal samples from some cormorants collected for tagging tested positive for silver carp DNA. Positive hits were also obtained from sediment and river bank samples. Storm sewers outside of fish markets were also possible sources of Asian carp eDNA. Rates of false positives and negatives must be considered. An article by Frischer et al. in the December 2012 issue of “Lake and Reservoir Management” compared the accuracy and reliability of three methods for detecting zebra and quagga mussel larvae in plankton samples. Spiked samples (containing known numbers of actual larvae, not just eDNA) were sent to 11 participating laboratories for PCR detection. Overall, PCR was the least accurate method (compared to microscopy using cross-polarized light, and an automated method), with a 75.8% accuracy rate and 7.1% false positives. Darling and Mahon (2011)1 provide an excellent overview of the benefits and challenges in using eDNA for monitoring. They describe what is called the false positive paradox; when used for detecting very rare organisms, even highly specific DNA-based methods could give misleading results when the detection rate is near or below the false positive rate. The paper makes clear that managers should understand possible sources of error when using eDNA methods.

Already did an extermination of Asian carp – just one problem: they didn’t find any

US Army Corps of Engineers 2010. Brief filed in the case of Michigan v. US Army Corps of Engineers, 1 Oct 2010, in U.S. District Court, Northern District of Illinois <http://www.greatlakeslaw.org/files/usace_post_hrg_brief.pdf>

The December 2009 rotenone event, which poisoned 5.7 miles of waterway below the electricbarrier resulted in the discovery of only one Asian carp. Wooley Decl. ¶¶ 22-28. The May rotenoneevent near the O’Brien lock was conducted in an area where multiple positive eDNA samples hadbeen collected, and no Asian carp were found out of 130,000 pounds of fish recovered. Id. ¶¶ 43-44.Dr. Lodge attempted to discredit the May rotenone event and lack of discovery of any Asian carp byclaiming that fish sank to the bottom and were not seen. Lodge 154:4-15. That is incorrect. TheACRCC [Asian Carp Regional Coordinating Committee] accounted for such a possibility by utilizing underwater cameras and divers to ensure thatall dead fish were collected.

Summary of all the evidence leads to the conclusion that the number of Asian carp is low

US Army Corps of Engineers 2010. Brief filed in the case of Michigan v. US Army Corps of Engineers, 1 Oct 2010, in U.S. District Court, Northern District of Illinois <http://www.greatlakeslaw.org/files/usace_post_hrg_brief.pdf>

Putting all of the evidence together -- the eDNA results (both positive and negative), the extraordinary electrofishing and netting activities above the electric barrier, the lack of fish recovered during the rotenone activities, the one fish discovered in Lake Calumet, the larval fish tows, the evidence that the electric barrier is effectively deterring fish migration, the scientific opinions of the risk assessment panel, and the efforts to reduce propagule pressure below the electric barrier – one must conclude that the numbers of Asian carp above the electric barrier are low.

Asian carp wouldn’t likely invade Lake Michigan: Not enough plankton

US Army Corps of Engineers 2010. Brief filed in the case of Michigan v. US Army Corps of Engineers, 1 Oct 2010, in U.S. District Court, Northern District of Illinois <http://www.greatlakeslaw.org/files/usace_post_hrg_brief.pdf>

The science behind the management of invasive species looks at forecasting the introduction and establishment of that invasive species. Lodge 108: 3-7. In order to predict whether a species can successfully invade an area, scientists look at the potential pathways, the characteristics of the species, whether food would be abundant, whether the species could reproduce in the area, and how temperature would affect the species. Lodge 108:8 - 109:18; see generally Chapman. Asian carp primarily eat plankton. Chapman 380:13-21. One expert (Dr. Susan Cooke) has modeled areas of Lake Michigan and labeled those areas a “plankton desert.”

Even if an invasion were to happen, the problem is decades away

US Army Corps of Engineers 2010. Brief filed in the case of Michigan v. US Army Corps of Engineers, 1 Oct 2010, in U.S. District Court, Northern District of Illinois (first brackets added; second brackets in original) <http://www.greatlakeslaw.org/files/usace_post_hrg_brief.pdf>

Of importance to the question of timing, Mr. [Duane] Chapman [fish biologist with US Geological Survey] explains that the establishment of a fish population depends on the number of fish present and invaders usually require multiple introductions. Chapman 385:23-386:18, 393:2-4 (“Ninety percent of invasions are thought to fail . . . .”). The best information available provides evidence that if such an invasion [of Asian carp into the Great Lakes] does occur, it will probably take many years (possibly one to three decades) for the population to become problematic, based on the history of Asian carp invasions, models of invasive species and the size of the Great Lakes. Chapman 386:19-390:12; Wooley 469:16-24 (discussing the risk assessment experts estimations that it could take up to 25 years for the establishment of an Asian carp population in Lake Michigan).

Invasive species create more biodiversity

Prof. Mark Sagoff 2008. (PhD environmental ethicist, Acting Director and Senior Research Scholar at the Institute for Philosophy and Public Policy in the School of Public Policy at the University of Maryland; Pew Scholar in Conservation and the Environment and past President of the International Society of Environmental Ethics; has published widely in journals of philosophy, law, economics, and public policy, including Amicus Journal, Atlantic Monthly, EPA Journal, Nature Conservancy), 11 Oct 2008, JOURNAL OF AGRICULTURAL ENVIORNMENAL ETHICS, "Environmental Harm: Political not Biological" <http://www.springerlink.com/content/k85k9p50766611g4/fulltext.pdf>

Separated from their former populations, introduced species diverge in morphology and in behavior, forming new kinds of populations. Exotic species also hybridize with natives to produce novel lineages (Allendorf and Lunquist 2003). For many reasons, ‘‘the net consequence of these invasions is generally an increase in total species richness’’ (Sax et al. 2007, 466). New varieties emerge; homogenous populations diverge; evolution accelerates; biodiversity flourishes.

Marine environments benefit from new species

Prof. Mark Sagoff 2008. ( PhD environmental ethicist, Acting Director and Senior Research Scholar at the Institute for Philosophy and Public Policy in the School of Public Policy at the University of Maryland; Pew Scholar in Conservation and the Environment and past President of the International Society of Environmental Ethics; has published widely in journals of philosophy, law, economics, and public policy, including Amicus Journal, Atlantic Monthly, EPA Journal, Nature Conservancy) 11 Oct 2008, JOURNAL OF AGRICULTURAL ENVIORNMENAL ETHICS, "Environmental Harm: Political not Biological" <http://www.springerlink.com/content/k85k9p50766611g4/fulltext.pdf>

According to Sax and Gaines (2008, 11,492), ‘‘the average increase observed across oceanic islands is highly regular, with most islands showing a strikingly consistent doubling in net plant richness.’’ The naturalization of introduced species is continuing at such a pace that ‘‘many islands are now coming close to matching the species richness levels of continental environments’’ (Sax and Gaines 2008, 11,493). The same trend applies to animals. ‘‘In Hawaii, for example, 40 new species of freshwater fish have become established, and the 5 native species are still present’’ (Zimmer 2008).

No harm from exotic fish

Carl Zimmer 2008 (journalist) 9 Sept 2008, "Exotic species may aid diversity, research suggests," NEW YORK TIMES, <http://www.nytimes.com/2008/09/09/health/09iht-09inva.16000625.html>

Fish also show this pattern, said James Brown of the University of New Mexico. He said that whenever he visits a river where exotic fish have been introduced, "I ask, 'Have you seen any extinctions of the natives?' " "The first response you get is, 'Not yet,' as if the extinction of the natives is an inevitable consequence. There's this article of faith that the net effect is negative." Brown does not think that faith is warranted. In Hawaii, for example, 40 new species of freshwater fish have become established, and the 5 native species are still present. Brown and his colleagues acknowledge that invasive species can push native species out of much of their original habitat. But they argue that native species are not becoming extinct, because they compete better than the invasive species in certain refuges.

INHERENCY

Electric barrier is working

US Army Corps of Engineers 2010. Brief filed in the case of Michigan v. US Army Corps of Engineers, 1 Oct 2010, in U.S. District Court, Northern District of Illinois (brackets added) <http://www.greatlakeslaw.org/files/usace_post_hrg_brief.pdf>

Nor have Plaintiffs offered any evidence whatsoever that the electric barrier fails to effectively deter Asian carp migration. These allegations, made in their reply brief for the first time, are unsupported by any relevant facts or expert testimony. In contrast, Federal Defendant has explained at length, via declarations and oral testimony, the Corps’ empirically well-documented conclusion that the electric barrier is working to effectively deter Asian carp and is not simply an experiment of unknown efficacy as Plaintiffs contend. There exists a laborious and painstaking process by which the Corps has designed and implemented, and continues to evaluate and fine tune the components of the barrier. Peabody 226:12-229:20, 267:4-269:22; Peabody Decl. ¶ 22; Quarles Decl. ¶¶ 9-38; see generally Shea Decl. The ACRCC’s [Asian Carp Regional Coordinating Committee]many other efforts, including the Corps’ construction of the barrier along the Des Plaines River and with the I&M Canal, complement and ensure the efficacy of the barrier.

Federal efforts already underway to exterminate Asian Carp

Chicago Tribune 2012. (reporter Cynthia Dizikes) 27March 2012 “Scientists developing poison pill for Asian carp” <http://articles.chicagotribune.com/2012-03-27/news/ct-met-carp-microtoxins-20120327_1_mississippi-river-basin-poison-pill-invasive-species>

Biologist Jon Amberg has spent the last two years obsessed with fish guts, laboring over a singular challenge: Develop a poison pill that will kill Asian carp and leave other fish unscathed. Voracious and freakishly resilient, the fish has left a trail of destruction on its decades-long migration up the Mississippi River and into Illinois, seemingly undeterred by the ordinary ammo of invasive species warfare. http://articles.chicagotribune.com/images/pixel.gifhttp://articles.chicagotribune.com/images/pixel.gifNow, designer drugs and engineered poisons, often called "bio-bullets," have become increasingly popular among scientists trying to create sniper-shot solutions to unyielding problems, from malignant pests in rivers and fields to tumors in human bodies. "If you look at Asian carp as being kind of like a cancer, we're in essence developing a drug to be able to target it without killing the 'cells' around it," said Amberg, who works for theU.S. Geological Survey in La Crosse, Wis.

EPA is implementing new initiative to block Asian carp

Cameron Davis 2010. (Senior Advisor to the Administrator U.S. Environmental Protection Agency) testimony before the U.S. House Transportation & Infrastructure Committee Water Resources & Environment Subcommittee Tuesday, February 9, 2010 <http://www.epa.gov/ocirpage/hearings/testimony/111_2009_2010/2010_0209_cd.pdf>

EPA is stepping up to use its funding authority under the Initiative to help slow the migration of Asian carp. In December, EPA announced more than $13 million in funding for emergency measures and additional monitoring to be executed by the Corps. This work will address potential bypasses between either the Des Plaines River or the Illinois and Michigan Canal and the Chicago Sanitary Ship Canal during high water events. Currently, we are working with the other federal agencies and Illinois to fast-track additional investments under the Initiative that will address Asian carp populations that may be upstream of the electric barriers.

US Army Corps of Engineers has a 4-part strategy

Part 1) Electric barrier

Medill Reports 2013. (journalistsKate Van Winkle and Lyndsey Gilpin, graduate students in journalism at Northwestern)13March 2013“Fight against Asian carp still targeting the Chicago River” <http://news.medill.northwestern.edu/chicago/news.aspx?id=218961>

The corps has developed a four-part strategy to tackle aquatic invasive species problems. The electric barrier currently in place in the Chicago Sanitary and Ship Canal, near Romeoville southwest of Chicago, is part one. The barrier constantly pulses electricity to deter fish from nearing the locks, which maintain the flow of the Chicago River and allow boat traffic to navigate the waterway.

Part 2) Monitoring location

Medill Reports 2013. (journalists Kate Van Winkle and Lyndsey Gilpin, graduate students in journalism at Northwestern)13March 2013“Fight against Asian carp still targeting the Chicago River” <http://news.medill.northwestern.edu/chicago/news.aspx?id=218961>

The second part is monitoring location. Telemetry, or tagging, is used to keep track of the numbers of aquatic species. Several hundred fish are currently tagged and the corps can track their movement up or downstream.

Part 3) Efficacy studies

Medill Reports 2013. (journalists Kate Van Winkle and Lyndsey Gilpin, graduate students in journalism at Northwestern) 13 March 2013 “Fight against Asian carp still targeting the Chicago River” <http://news.medill.northwestern.edu/chicago/news.aspx?id=218961>

Efficacy studies make up the third part. These look at potential ways around the electric barrier and if the electricity is working at its optimal parameters, Schreiner said. Efficacy studies also include testing water samples for traces of environmental DNA, or eDNA, that signals the presence of Asian carp. Study results released in February suggest that the eDNA traces found in Chicago-area waterways are not from live Asian carp and do not indicate that an Asian carp invasion is imminent. EDNA testing in Chicago-area waterways began in 2010. “These fish are miles and miles and miles away and the scientists have said that they haven’t moved north in six years,” said Margaret Frisbie, executive director of Friends of the Chicago River, a nonprofit that works to preserve and improve Chicago waterways environmentally and economically. “That really tells you that we have more breathing room to deal with these problems. It is still very serious and we’re committed to figuring out what the final strategies are, but hopefully lawsuits and threats of closing the Chicago locks are off the table.”

Part 4) The Great Lakes Mississippi River Interbasin Study

Medill Reports 2013. (journalists Kate Van Winkle and Lyndsey Gilpin, graduate students in journalism at Northwestern) 13 March 2013 “Fight against Asian carp still targeting the Chicago River” <http://news.medill.northwestern.edu/chicago/news.aspx?id=218961>

The Great Lakes Mississippi River Interbasin Study, called GLMRIS, is the fourth component of the corps’ strategy and addresses questions about long-term solutions for invasive species prevention. Possible solutions vary from complete separation of the Chicago and Mississippi water basins to maintaining existing preventative measures indefinitely. “What [GLMRIS] is going to force us to do in 18 months is produce a suite of engineering solutions,” Schreiner said. “So right now, our engineers are in the process of going through planning avenues that include our federal and nonfederal partners to make sure we include all the species we should be going after and what are the engineering solutions we might apply to those types of problems.”

Turn: Aff plan would detract from Long Term Strategy

CHRISTIAN SCIENCE MONITOR 2012. (journalist Trevor Quirk) 27 Feb 2012 “Why Asian carp are such a threat” <http://www.csmonitor.com/Science/2012/0227/Why-Asian-carp-are-such-a-threat>

The US Supreme Court has refused to hear the Great Lakes states' appeal to close shipping locks to stymie the on-going incursion of Asian carp. Michigan, Minnesota, Ohio, Pennsylvania, and Wisconsin are suing the Army Corps of Engineers to provide greater protection to prevent the fish from entering the Great Lakes. While this suit continued, the five states sought an injunction to have the Corps close locks on waterways that connect the Mississippi River with Lake Michigan. The federal government said that the efforts proposed by these states would detract from the long-term strategy of the Corps. This is the third time such an appeal has been rejected.

SOLVENCY

Complete disconnection wouldn’t solve the problem

Medill Reports 2013. (journalistsKate Van Winkle and Lyndsey Gilpin, graduate students in journalism at Northwestern) 13 March 2013 “Fight against Asian carp still targeting the Chicago River” <http://news.medill.northwestern.edu/chicago/news.aspx?id=218961>

Although the ship canal is the most obvious entryway for invasive species, it is possible for species transfer to occur by way of illegal trafficking, fishing, boating or alternate waterways. “[A] complete disconnection would be a very costly undertaking, both monetarily and in terms of time,” said Dr. Solomon David, a postdoctoral research associate at the Shedd Aquarium. “Imagine if we were to still end up with Asian carp and other invaders in the Great Lakes via other, potentially more viable pathways.”

Carp are more likely to enter the Great Lakes somewhere other than the Chicago Area. No assurance hydrologic separation would keep them out

The Investigative Post. (journalist Justin Sondel) 4April 2013 “Asian carp invasion of Great Lakes looms” <http://www.investigativepost.org/2013/04/04/an-asian-carp-invasion-of-the-great-lakes-looms/>

Reuben Goforth, an assistant professor of forestry and natural resources at Purdue, was one of the researchers on the spawning study. He said that the study shows that the fish may be able to expand their range as they adapt to different conditions, though there is no immediate concern about the fish making its way up the Wabash and through the series of rivers, streams, ditches, and creeks that eventually lead into Lake Erie. “We can’t completely discount any pathway, but I would consider it extremely unlikely that the carp could use that path,” Goforth said. “It might become more of a concern over time. That would require a lot of changes in their spawning ecology.” Goforth stressed that the findings of the research say nothing conclusive about the carp’s ability to enter the Great Lakes somewhere other than the Chicago Area Waterway System. “In terms of their natural movements, that is their most likely path,” Goforth said. His research team has yet to see whether the eggs found upstream will produce fish that can survive into adulthood. But Goforth said he isn’t convinced that a hydrologic separation would keep the fish out. “If we’re going to find established populations in the Great Lakes, it’s probably going to be more a result of human introductions,” Goforth said.

Asian carp solution continues to evolve – engineering alone will not solve

Cameron Davis 2010. (Senior Advisor to the Administrator U.S. Environmental Protection Agency) testimony before the U.S. House Transportation & Infrastructure Committee Water Resources & Environment Subcommittee Tuesday, February 9, 2010 <http://www.epa.gov/ocirpage/hearings/testimony/111_2009_2010/2010_0209_cd.pdf>

One thing we have learned is that the Asian carp situation continues to evolve. Therefore, the Framework must unify everyone to generally move in the same direction, while allowing all agencies’ responses to adapt as necessary. Second, we want to establish a multi-tiered defense. This would include structural, chemical, biological, operational and management solutions. We cannot fight biology with engineering alone.

DISADVANTAGES

1. Thousands of lost jobs / economic impact.

2. Link: $29 billion of commerce passing through the shipping locks would be impacted

CHICAGO JOURNAL 2010. (journalist Ian Fullerton) 27 Oct 2010 “New ideas on Asian Carp control“ <http://www.chicagojournal.com/news/10-27-2010/New_ideas_on_Asian_Carp_control>

Mark Biel, the executive director for the Chemical Industry Council of Illinois, said he didn’t put much stock in the group’s suggestions. “The NRDC’s document is an interesting read, but I’m not sure it’s of much value in the overall discussion on how to control Asian Carp,” he said. Biel also chairs UnLock Our Jobs, a coalition of Midwest businesses that use the canals to move products through the lake and river systems. The group has taken an active stance against the option of canal closure, warning that doing so could stifle $29 billion worth of commodities travel through the Chicago shipping locks.

Impact: Hydrologic separation would hurt businesses and drive up costs for consumers by disrupting transportation, tourism and commercial fishing

The Investigative Post. (journalist Justin Sondel) 4April 2013 “Asian carp invasion of Great Lakes looms” <http://www.investigativepost.org/2013/04/04/an-asian-carp-invasion-of-the-great-lakes-looms/>

Lynn Muench is the senior vice president of regional advocacy for the American Waterways Operators, a trade organization that represents 350 companies—both in Washington and in state capitals—that move freight on rivers, the Great Lakes, and on the coasts. She said that the hydrologic separation would hurt businesses and drive up costs for consumers, and that it doesn’t guarantee that carp won’t end up in the Great Lakes. “There are several companies in the towing industry that would be put out of business because that is their business, to tow barges from the lake to the rivers or back and forth,” Muench said. While hydrologic separation could save jobs in the tourism and commercial fishing industries, it would cause thousands of jobs to be shed in the shipping industry, Muench said.

3. Flood risk. Modifications to Calumet and Little Calumet Rivers to block Asian carp would increase flood risk

US Army Corps of Engineers 2010. Brief filed in the case of Michigan v. US Army Corps of Engineers, 1 Oct 2010, in U.S. District Court, Northern District of Illinois (brackets added) <http://www.greatlakeslaw.org/files/usace_post_hrg_brief.pdf>

Plaintiffs similarly fail to establish that it is in the public interest to install block nets and/or physical barriers in the Calumet and Little Calumet Rivers. Reply at 26-27 (asserting, without support, that block nets “are far less likely to contribute to flooding than fixed, impermeable structures.”). Plaintiffs compound the risks posed by their initial request for single block nets in each river by proposing that multiple, parallel block nets be installed in each river. Id. Each block net installed would increase flood risks, as the nets would catch the “great deal of debris” that flow through the CAWS during flood conditions. Peabody 357:23-359:3; Su Decl. ¶ 17; Su 566:21- 567:10. While the Corps continues to study the possibility of using block nets to fight Asian carp, it has been unable to identify a barrier that would be effective at impeding Asian carp without inducing flooding. Peabody 358:17-359:3; Peabody Decl. ¶ 58. As with Plaintiffs’ proposed mandatory relief requiring the installation of bulkheads and sluice gate screens, Plaintiffs fail to establish that block nets or interim barriers would not increase flood risks.

NEGATIVE: CHESAPEAKE BAY POLLUTION CREDITS

NEGATIVE PHILOSOPHY

Pollution trading fails philosophically: You can’t sell what you don’t own

RICHARD TOSHIYUKI DRURY, MICHAEL E. BELLIVEAU, J. SCOTT KUHN , and SHIPRA BANSAL 1999. (Drury - J.D. Yale Law School, 1990, is the Legal Director of Communities for a Better Environment (CBE), San Francisco . Belliveau - B.S. Massachusetts Institute of Technology, 1979, former CBE Executive Director, is the Director of Just Economics for Environmental Health. Kuhn - J.D. Hastings Law School, 1997, is a Staff Attorney with CBE . Bansal - B.S. University of California - Berkeley, 1994, is a Staff Scientist with CBE.) POLLUTION TRADING AND ENVIRONMENTAL INJUSTICE: LOS ANGELES’ FAILED EXPERIMENT IN AIR QUALITY POLICY, DUKE ENVIRONMENTAL LAW & POLICY FORUM Spring 1999. (ellipses in original) <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1177&context=delpf>

A more elegant, if not romantic, sentiment about pollution trading can be found in the words inspired by Chief Seattle nearly 150 years ago: What is it that the white man wishes to buy, my people ask me? The idea is strange to us. How can you buy or sell the sky, the warmth of the land, the swiftness of antelope? How can we sell these things to you and how can you buy them? . . . If we do not own the freshness of the air and the sparkle of the water, how can you buy them from us?

Alternate Voting Criterion: What matters is morally acceptable outcomes, not economic efficiency

RICHARD TOSHIYUKI DRURY, MICHAEL E. BELLIVEAU, J. SCOTT KUHN , and SHIPRA BANSAL 1999. (Drury - J.D. Yale Law School, 1990, is the Legal Director of Communities for a Better Environment (CBE), San Francisco . Belliveau - B.S. Massachusetts Institute of Technology, 1979, former CBE Executive Director, is the Director of Just Economics for Environmental Health. Kuhn - J.D. Hastings Law School, 1997, is a Staff Attorney with CBE . Bansal - B.S. University of California - Berkeley, 1994, is a Staff Scientist with CBE.) POLLUTION TRADING AND ENVIRONMENTAL INJUSTICE: LOS ANGELES’ FAILED EXPERIMENT IN AIR QUALITY POLICY, DUKE ENVIRONMENTAL LAW & POLICY FORUM Spring 1999. <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1177&context=delpf>

Ultimately, no regulatory program can survive if it does not generate morally acceptable outcomes. Economic efficiency alone does not create a sound basis for public policy if it results in immoral results such as toxic hot-spots in disempowered communities, fraudulent emission reductions, or actual increases in pollution. As domestic environmental agencies and the international community consider expanding pollution trading to combat regional pollution and global climate change, the social and moral costs should be fully weighed, not just the economic benefits.

INHERENCY

States are already trading: Maryland, Pennsylvania and Virginia have pollution trading systems

[Note: the “Bay” in the context of this card is the Chesapeake Bay]

Prof. Rena Steinzor, Prof. Robert Verchick, Nick Vidargas, and Yee Huang 2012. (Steinzor - Professor of Law at the University of Maryland Francis King Carey School of Law and President of Center for Progressive Reform. Verchick - Gauthier-St. Martin Eminent Scholar and Chair in Environmental Law, Loyola University New Orleans College of Law, Vidargas and Huang – policy analysts at Center for Progressive Reform. ) FAIRNESS IN THE BAY – Environmental Justice and Nutrient Trading, Aug 2012 <http://www.progressivereform.org/articles/WQT_and_EJ_1208.pdf>

Under the Bay TMDL, pollution sources that are regulated under the CWA face mandatory but potentially costly requirements to further reduce their discharges. In response, the three central Bay states—Maryland, Pennsylvania, and Virginia—have enthusiastically embraced nutrient trading in an effort to placate strong resistance to regulatory intervention by pollution sources.

MINOR REPAIR / COUNTERPLAN

Modify Clean Water rules for CAFOs (Concentrated Animal Feeding Operations)

Pew Charitable Trusts 2012. (independent non-profit non-partisan global research and public policy organization) 13 Feb 2012 “Cleaning Up The Chesapeake Bay” (brackets and ellipses in original) <http://www.pewenvironment.org/news-room/fact-sheets/cleaning-up-the-chesapeake-bay-8589942050#sthash.2dxGEZGU.dpuf>

According to the U.S. Department of Agriculture (USDA), the recommended practices for using manure as a crop fertilizer are not being implemented on a staggering 99 percent of manured cropland in the bay watershed. “[T]he majority of the acres in the region lack consistent use of appropriate rates, timing and method of application … including nearly all of the acres receiving manure,” the USDA found. Reductions in bay nutrients will require significant improvements in manure management, particularly those practices associated with concentrated animal feeding operations. CAFOs, as they are known, often house thousands of animals under one roof and in many instances generate more manure than can responsibly be used as fertilizer for local crops. To reduce this pollution threat to the bay, the Pew Charitable Trusts urges the President to direct the EPA revise its rule on CAFOs under the Clean Water Act. A rule requiring CAFOs throughout the country, including those within the Chesapeake Bay watershed, to obtain Clean Water Act permits and take responsibility for proper management of all the manure they generate would significantly improve the bay’s health and help to ensure that all pollution sources do their share to clean up.

HARMS

EPA says: Status Quo is on target meeting pollution goals for Chesapeake Bay

BALTIMORE SUN 2012. (Timothy Wheeler, journalist) 9 July 2012 “Chesapeake Bay cleanup on track, officials say” <http://articles.baltimoresun.com/2012-07-09/features/bs-gr-bay-progress-20120709_1_bay-states-runoff-and-air-pollution-cleanup-goals>

The multistate effort to restore the Chesapeake Bay is on track to meet its latest timetable for cleaning up the ailing estuary, even though states failed to achieveall the short-term pollution reduction goals they set for themselves three years ago, officials said Monday. U.S. Environmental Protection Agency Administrator Lisa P. Jackson said Maryland and the other five states that drain into the bay, as well as the District of Columbia and the federal government, have all made "extraordinary progress" the past two years in accelerating their cleanup efforts.



EPA says: Pollution in the Chesapeake Bay is declining

BALTIMORE SUN 2012. (Timothy Wheeler, journalist) 9 July 2012 “Chesapeake Bay cleanup on track, officials say” <http://articles.baltimoresun.com/2012-07-09/features/bs-gr-bay-progress-20120709_1_bay-states-runoff-and-air-pollution-cleanup-goals>

The EPA's Jackson said that while the bay still has a long way to go to recover its vitality, she was encouraged after hearing reports from her staff and state officials. They ticked off a list of recent accomplishments, including restoring nearly 3,800 acres of wetlands, reopening 148 miles of streams for fish to spawn and planting trees along 240 miles of shoreline. Based on computer modeling, officials said those and other steps taken over the past three years had reduced the torrent of nutrients and sediment fouling the bay from inadequately treated sewage, fertilizer runoff and air pollution. Nitrogen alone declined by nearly 16 percent, they estimated.



Clean Water Blueprint is beginning to work: Bay pollution is declining

Chesapeake Bay Foundation 2013. (an organization set up by the legislatures of Maryland, Virginia and Pennsylvania that coordinates efforts to improve the Chesapeake Bay) 2 Jan 2013 “Chesapeake Bay Health Improves” <http://www.thebaynet.com/news/index.cfm/fa/viewstory/story_ID/30719>

The Chesapeake Bay Foundation’s (CBF) 2012 State of the Bay Report shows the health of the Bay improved one point over the last report in 2010, and is up four points since 2008, a 10 percent improvement in less than five years. Of the 13 indicators that make up the report, five improved, seven stayed the same, and only one declined.“Continued progress shows what can be done when governments, businesses, and individuals work together to save local rivers, streams, and the Chesapeake Bay,” CBF President William C. Baker said. “While the Bay is still dangerously out of balance, I am cautiously optimistic for the future. The federal/state Clean Water Blueprint for the Chesapeake Bay is in place and beginning to work.”

SOLVENCY

Experts say: More study needed before we do Chesapeake Bay pollution trading

BALTIMORE SUN 2012. (Timothy Wheeler, journalist) 9 July 2012 “Chesapeake Bay cleanup on track, officials say” <http://articles.baltimoresun.com/2012-07-09/features/bs-gr-bay-progress-20120709_1_bay-states-runoff-and-air-pollution-cleanup-goals>

"We have economic challenges we have to keep in mind," said Pennsylvania's secretary of environmental protection, Michael Krancer, who noted that studies have shown that cleanup costs can be reduced significantly by allowing such "market-based" arrangements. Chris Pyke, chairman of a panel of scientists and other technical experts advising the cleanup, acknowledged the potential of pollution trading to cut costs drastically. But he cautioned that the effectiveness of the states' trading policies has yet to be demonstrated, and urged more study.

Nonpoint sources are reluctant to participate

“The Bay” in context of this card is the Chesapeake Bay

Prof. Rena Steinzor, Prof. Robert Verchick, Nick Vidargas, and Yee Huang 2012. (Steinzor - Professor of Law at the University of Maryland Francis King Carey School of Law and President of Center for Progressive Reform. Verchick - Gauthier-St. Martin Eminent Scholar and Chair in Environmental Law, Loyola University New Orleans College of Law, Vidargas and Huang – policy analysts at Center for Progressive Reform. ) FAIRNESS IN THE BAY – Environmental Justice and Nutrient Trading, Aug 2012 (TMDL = total maximum daily load; the total amount of pollution allowed to enter the Bay) <http://www.progressivereform.org/articles/WQT_and_EJ_1208.pdf>

The Bay TMDL imposes mandatory limits on the amounts of nitrogen, phosphorus, and sediment that can enter the Bay and its tributaries. As a result, Bay states have embraced water quality trading programs as one tool to achieve these limits in a cost-effective manner. Water quality trading aligns *buyers*—typically point sources—that are legally obligated to meet a specific environmental standard with *sellers*—typically nonpoint sources—that can meet that standard at a significantly lower cost. Trading sounds ideal on paper, but in practice it is an entirely different story. Despite the creation of trading programs in various locations throughout the country, nonpoint sources have been reluctant to participate. EPA and state governments have simply not had the necessary experience to fine-tune this pollution control tool.

Race to the bottom. Interstate trading leads to search for the weakest regulatory environment to generate credits

Prof. Rena Steinzor, Prof. Robert Verchick, Nick Vidargas, and Yee Huang 2012. (Steinzor - Professor of Law at the University of Maryland Francis King Carey School of Law and President of Center for Progressive Reform. Verchick - Gauthier-St. Martin Eminent Scholar and Chair in Environmental Law, Loyola University New Orleans College of Law, Vidargas and Huang – policy analysts at Center for Progressive Reform. ) FAIRNESS IN THE BAY – Environmental Justice and Nutrient Trading, Aug 2012 <http://www.progressivereform.org/articles/WQT_and_EJ_1208.pdf>

EPA and Bay states should define a regulatory preference for *upstream* trades within a single basin to create the best chance for water quality improvement and to avoid disproportionate impacts. Downstream trading—when an upstream source purchases credits from a downstream credit-generator—can cause local water quality violations and lead to degradation in the interim segment. Likewise, interstate trading can generate a “race to the bottom” as sources seek the weakest regulatory baseline for their credit purchases. Virginia’s proposed regulations prohibit trades that would lead to water quality violations by specifically limiting downstream and inter-basin trading.

Supply and demand factors are highly uncertain to work effectively in Chesapeake Bay pollution trading

Pilot trading programs aren’t seeing many trades

Prof. Rena Steinzor, Prof. Robert Verchick, Nick Vidargas, and Yee Huang 2012. (Steinzor - Professor of Law at the University of Maryland Francis King Carey School of Law and President of Center for Progressive Reform. Verchick - Gauthier-St. Martin Eminent Scholar and Chair in Environmental Law, Loyola University New Orleans College of Law, Vidargas and Huang – policy analysts at Center for Progressive Reform. ) FAIRNESS IN THE BAY – Environmental Justice and Nutrient Trading, Aug 2012 <http://www.progressivereform.org/articles/WQT_and_EJ_1208.pdf>

On paper, trading sounds rational and economically efficient: an agricultural operator earns a premium for behavior that society would like to encourage in the first place; the regulated polluter achieves compliance with its permit; and nutrient levels in the Bay are reduced. However, the reality of nutrient trading suggests caution and a strong dose of realism are needed. A robust and effective trading program requires steady supply and demand as well as significant resources for continual monitoring and enforcement. Given the difficult economic times and political polarization, it is highly uncertain that the Bay trading programs will experience the supply, demand, or support required for a robust and effective market. With EPA assistance, dozens of pilot programs across the country have been conceived, designed, and implemented. However, just a handful of programs have seen more than a few actual trades, and most programs have experienced none.

Fraud and cheating block effectiveness of pollution trading schemes. Example: Los Angeles

RICHARD TOSHIYUKI DRURY, MICHAEL E. BELLIVEAU, J. SCOTT KUHN , and SHIPRA BANSAL 1999. (Drury - J.D. Yale Law School, 1990, is the Legal Director of Communities for a Better Environment (CBE), San Francisco . Belliveau - B.S. Massachusetts Institute of Technology, 1979, former CBE Executive Director, is the Director of Just Economics for Environmental Health. Kuhn - J.D. Hastings Law School, 1997, is a Staff Attorney with CBE . Bansal - B.S. University of California - Berkeley, 1994, is a Staff Scientist with CBE.) POLLUTION TRADING AND ENVIRONMENTAL INJUSTICE: LOS ANGELES’ FAILED EXPERIMENT IN AIR QUALITY POLICY, DUKE ENVIRONMENTAL LAW & POLICY FORUM Spring 1999. <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1177&context=delpf>

Furthermore, when an emissions trading approach is employed, the incidence of fraud may be greater. Pollution trading programs create stronger incentives to manipulate the numbers and cheat, because credits that are fraudulently created are still worth money. The Los Angeles pollution trading experience with car scrapping has been plagued by a history of under-reporting of *actual* emissions from industry and an over-reporting of *claimed* emission reductions from cars. Pollution trading programs primarily rely on industry self-reporting of emission reductions and increases. Based on these self-reports, regulatory agencies must allocate air pollution credits. In Los Angeles, widespread under-reporting, inaccurate modeling, and potential financial windfalls for polluters plague the pollution trading program.

Trading is LESS efficient at reducing pollution than command-and-control regulatory approach

RICHARD TOSHIYUKI DRURY, MICHAEL E. BELLIVEAU, J. SCOTT KUHN , and SHIPRA BANSAL 1999. (Drury - J.D. Yale Law School, 1990, is the Legal Director of Communities for a Better Environment (CBE), San Francisco . Belliveau - B.S. Massachusetts Institute of Technology, 1979, former CBE Executive Director, is the Director of Just Economics for Environmental Health. Kuhn - J.D. Hastings Law School, 1997, is a Staff Attorney with CBE . Bansal - B.S. University of California - Berkeley, 1994, is a Staff Scientist with CBE.) POLLUTION TRADING AND ENVIRONMENTAL INJUSTICE: LOS ANGELES’ FAILED EXPERIMENT IN AIR QUALITY POLICY, DUKE ENVIRONMENTAL LAW & POLICY FORUM Spring 1999. <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1177&context=delpf>

Under the command and control technology-based approach, emissions uncertainties are less relevant. The important question is whether the pollution control action was taken or not. Regardless of the pollution control strategy employed, it is a simple matter to verify whether equipment was installed and is properly operating, or a process changed or a raw material substituted. Although uncertainty remains over actual emissions, verification of compliance with technology-based pollution control requirements ensures that emissions have declined, usually by significant amounts. To avoid impeding the trading market, the RECLAIM program verifies transactions after the fact and does not examine the underlying actions to ensure that claimed emission reductions are real. SCAQMD simply verifies that all the paperwork is in order after the trade has already taken place. At the end of the allotted time period, the agency ensures that enough emission reductions credits are in hand at each facility to match the requirement to reduce emissions by a certain percentage. Credits are based on claimed emission reductions, which are subject to great uncertainty. In the trading program, industry makes many diverse emission reduction claims. Even if significant agency resources were available, it is impractical to verify that all emission reduction claims are real and accurate. This diffusion of accountability for reducing emissions renders pollution trading programs inherently less enforceable than technology-based regulations.

Los Angeles pollution trading failure applies to any market emissions trading scheme

RICHARD TOSHIYUKI DRURY, MICHAEL E. BELLIVEAU, J. SCOTT KUHN , and SHIPRA BANSAL 1999. (Drury - J.D. Yale Law School, 1990, is the Legal Director of Communities for a Better Environment (CBE), San Francisco . Belliveau - B.S. Massachusetts Institute of Technology, 1979, former CBE Executive Director, is the Director of Just Economics for Environmental Health. Kuhn - J.D. Hastings Law School, 1997, is a Staff Attorney with CBE . Bansal - B.S. University of California - Berkeley, 1994, is a Staff Scientist with CBE.) POLLUTION TRADING AND ENVIRONMENTAL INJUSTICE: LOS ANGELES’ FAILED EXPERIMENT IN AIR QUALITY POLICY, DUKE ENVIRONMENTAL LAW & POLICY FORUM Spring 1999. <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1177&context=delpf>

The reality of pollution trading on the ground has not been as rosy as the academics and economists predicted. The experience in Los Angeles shows that, in economic terms, the emissions trading market has been plagued by market failures like any other market. These market failures have created pollution hot-spots and have allowed trading fraud and anti-democratic outcomes. These results occurred in a region with vast human and financial capital, including perhaps the largest and most sophisticated air pollution regulatory institution in the world. These difficulties came from the oldest trading programs ever developed for urban air pollution, but they are not unique to pollution trading in Los Angeles. Rather, similar concerns and variations on the problems encountered in Los Angeles are likely to be experienced in any market incentives program that relies on trading in emission reduction credits.

DISADVANTAGES

1. Permanent Pollution. AFF plan ensures continued algal blooms, deoxygenated water and fish kills.

Wenonah Hauter 2012 . (Executive Director of Food & Water Watch; has worked extensively on food, water, energy and environmental issues at the national, state and local level; served as Director of Public Citizen’s Energy and Environment Program; was environmental policy director for Citizen Action; was at the Union of Concerned Scientists; M.S. in Applied Anthropology from the University of Maryland) <http://www.foodandwaterwatch.org/pressreleases/goodlatte-holden-chesapeake-bay-bill-trades-away-bay-protections/>

The Chesapeake Bay Program Reauthorization and Improvement Act recently introduced by Reps. Bob Goodlatte (R-Va.) and Tim Holden (D-Penn.) is designed to ignore the real problems underlying pollution in the Chesapeake Bay: industrialized agriculture and urban sprawl. Decades of bad policies have created the problems that currently afflict the Bay, and this bill would ensure continued algal blooms, deoxygenated water and fish kills.

2. Masking DA: Plan distracts us from real solutions. Pollution trading abandons effective efforts to clean up Chesapeake Bay and encourages continuation of unsustainable industries.

Wenonah Hauter 2012 . (Executive Director of Food & Water Watch; has worked extensively on food, water, energy and environmental issues at the national, state and local level; served as Director of Public Citizen’s Energy and Environment Program; was environmental policy director for Citizen Action; was at the Union of Concerned Scientists; M.S. in Applied Anthropology from the University of Maryland) <http://www.foodandwaterwatch.org/pressreleases/goodlatte-holden-chesapeake-bay-bill-trades-away-bay-protections/>

“The environmental community failed to take a stand against pollution trading in past failed legislation and in the EPA’s Total Maximum Daily Load Program, the current plan for cleaning up the Bay. This bill and its embrace of supposed ‘free market environmentalism’ abandons the Chesapeake Bay to the whims and profiteering of industry and Wall Street. “With its embrace of pollution trading, the Goodlate-Holden Bill would gut the federal Clean Water Act and let unsustainable industries, including concentrated industrialized poultry production, off the hook for their pollution. This bill would abandon the concept of setting enforceable standards to clean up the Chesapeake Bay, leaving it vulnerable to the whims of market-based schemes designed to allow polluters to keep polluting.”

3. Disproportionate impact on minority communities.

Link: Affirmative plan has no provisions for evaluating the impact on different communities, particularly low-income and minorities

Link: Trading system must evaluate justice impacts

Prof. Rena Steinzor, Prof. Robert Verchick, Nick Vidargas, and Yee Huang 2012. (Steinzor - Professor of Law at the University of Maryland Francis King Carey School of Law and President of Center for Progressive Reform. Verchick - Gauthier-St. Martin Eminent Scholar and Chair in Environmental Law, Loyola University New Orleans College of Law, Vidargas and Huang – policy analysts at Center for Progressive Reform. ) FAIRNESS IN THE BAY – Environmental Justice and Nutrient Trading, Aug 2012 <http://www.progressivereform.org/articles/WQT_and_EJ_1208.pdf>

Explicitly and specifically consider environmental justice impacts when designing and implementing trading programs. Bay states should document and clearly describe how they will consider environmental justice and the extent to which they will rely on input from affected communities. For example, only Pennsylvania mentions environmental justice in its trading policies, and EPA’s recent review of Bay states’ trading programs did not consider environmental justice issues. This lack of attention to environmental justice concerns is unacceptable.

Link: Trading moves “hot spots” of heavy pollution into minority/low-income communities

Prof. Rena Steinzor, Prof. Robert Verchick, Nick Vidargas, and Yee Huang 2012. (Steinzor - Professor of Law at the University of Maryland Francis King Carey School of Law and President of Center for Progressive Reform. Verchick - Gauthier-St. Martin Eminent Scholar and Chair in Environmental Law, Loyola University New Orleans College of Law, Vidargas and Huang – policy analysts at Center for Progressive Reform. ) FAIRNESS IN THE BAY – Environmental Justice and Nutrient Trading, Aug 2012 <http://www.progressivereform.org/articles/WQT_and_EJ_1208.pdf>

Although the total amount of pollution should theoretically decrease, areas of high pollution concentration pose a risk of harmful localized nutrient loading, or “hot spots” of excessively nutrient-rich waters where algae and other water-borne pathogens thrive. Excess nutrients in the Bay also drive algal blooms that support the growth of toxic algae, antibiotic resistant bacteria, and other pathogens. Hot spots may put low-income and minority communities, and especially subsistence fishermen, at risk of the human health impacts that may decline elsewhere in the Bay. Moreover, if states adopt interstate trading, discharges will become increasingly detached from credits, and the risk of hot spots will increase.

Link: Minority communities have no alternatives to avoid pollution in their local regions

Prof. Rena Steinzor, Prof. Robert Verchick, Nick Vidargas, and Yee Huang 2012. (Steinzor - Professor of Law at the University of Maryland Francis King Carey School of Law and President of Center for Progressive Reform. Verchick - Gauthier-St. Martin Eminent Scholar and Chair in Environmental Law, Loyola University New Orleans College of Law, Vidargas and Huang – policy analysts at Center for Progressive Reform. ) FAIRNESS IN THE BAY – Environmental Justice and Nutrient Trading, Aug 2012 <http://www.progressivereform.org/articles/WQT_and_EJ_1208.pdf>

For all communities, hot spots can put an end to clean water, economic growth, and days spent fishing, crabbing, swimming, and boating in and on the Bay and its tributaries. The 2005 survey of Baltimore area fishermen found that the vast majority of anglers travel less than 25 miles to their fishing spot.30 Low-income and minority communities may lack alternative recreational opportunities if their nearest swimming or fishing holes are harmed or engage in water-based activities in higher proportions than the general population. As a result, they may be disproportionately exposed to health risks caused by trading nutrients and shifting pollution around the Bay. A recent article in the *Baltimore Sun* highlighted how low-income and minority communities use the watershed for numerous everyday activities, even when raw sewage overflows into the waterways they use.31 Trading programs should not create new environmental injustices.

Impact: The ability to buy credits means polluters in low-income and minority communities could actually increase their pollution and discharge more sewage

Prof. Rena Steinzor, Prof. Robert Verchick, Nick Vidargas, and Yee Huang 2012. (Steinzor - Professor of Law at the University of Maryland Francis King Carey School of Law and President of Center for Progressive Reform. Verchick - Gauthier-St. Martin Eminent Scholar and Chair in Environmental Law, Loyola University New Orleans College of Law, Vidargas and Huang – policy analysts at Center for Progressive Reform. ) FAIRNESS IN THE BAY – Environmental Justice and Nutrient Trading, Aug 2012 <http://www.progressivereform.org/articles/WQT_and_EJ_1208.pdf>

Disproportionate health and environmental impacts on low-income and minority communities. If trading programs are not carefully designed and monitored, trading can cause localized concentrations of nutrients and accompanying contaminants in local waters, posing a significant threat to human health and aquatic ecosystems. For example, a sewage treatment plant could address its additional pollution by either purchasing reductions elsewhere or by installing control measures onsite. If the plant purchases credits, it will be able to discharge more sewage. These additional discharges may create “hot spots” or high concentrations of pollution in adjacent waterways that could expose residents of nearby communities, especially local fishermen and their families, to pathogens and other harmful co-pollutants.

Example: Los Angeles air pollution trading scheme led to health impacts in minority communities

Prof. Rena Steinzor, Prof. Robert Verchick, Nick Vidargas, and Yee Huang 2012. (Steinzor - Professor of Law at the University of Maryland Francis King Carey School of Law and President of Center for Progressive Reform. Verchick - Gauthier-St. Martin Eminent Scholar and Chair in Environmental Law, Loyola University New Orleans College of Law, Vidargas and Huang – policy analysts at Center for Progressive Reform. ) FAIRNESS IN THE BAY – Environmental Justice and Nutrient Trading, Aug 2012 (SCAQMD=South Coast Air Quality Management District) <http://www.progressivereform.org/articles/WQT_and_EJ_1208.pdf>

The first, a cap and trade program for SO2 and NOx called RECLAIM, suffered from several fatal flaws—including a cap that was set too high— leading to only very modest emissions reductions. Even worse, though, was SCAQMD’s other effort: a car-scrapping program, in which stationary sources were allowed to offset their emissions by paying owners of old cars to take them off the road. Because regulators placed no limits on the number of allowances stationary sources could purchase and lacked the resources and will to properly oversee the program, the car-scrapping program caused devastating hot spots around several participating stationary sources. As a result, the communities around those sources, which ranged from 75 to 90 percent people of color compared to an average of 36 percent in the region, suffered enhanced cancer risk. Sadly, it took years to abate the increased environmental burden in these communities, leaving communities already at risk to suffer the ill effects of offsetting. The experience in Los Angeles highlights what happens to the lowest income and most marginalized communities when regulators fail to take their best interests to heart when regulating pollution and implementing such “innovative” solutions as trading programs.

Impact: Vulnerable communities face heightened health risks

Prof. Rena Steinzor, Prof. Robert Verchick, Nick Vidargas, and Yee Huang 2012. (Steinzor - Professor of Law at the University of Maryland Francis King Carey School of Law and President of Center for Progressive Reform. Verchick - Gauthier-St. Martin Eminent Scholar and Chair in Environmental Law, Loyola University New Orleans College of Law, Vidargas and Huang – policy analysts at Center for Progressive Reform. ) FAIRNESS IN THE BAY – Environmental Justice and Nutrient Trading, Aug 2012 <http://www.progressivereform.org/articles/WQT_and_EJ_1208.pdf>

Discharges that disproportionately impact low-income and minority communities should be forbidden. A trading scheme must not allow such discharges to simply be offset elsewhere, leaving vulnerable communities with unimproved water quality and heightened health risks.

Impact: Justice violation. Every community has an equal right to a clean environment

Prof. Rena Steinzor, Prof. Robert Verchick, Nick Vidargas, and Yee Huang 2012. (Steinzor - Professor of Law at the University of Maryland Francis King Carey School of Law and President of Center for Progressive Reform. Verchick - Gauthier-St. Martin Eminent Scholar and Chair in Environmental Law, Loyola University New Orleans College of Law, Vidargas and Huang – policy analysts at Center for Progressive Reform. ) FAIRNESS IN THE BAY – Environmental Justice and Nutrient Trading, Aug 2012 <http://www.progressivereform.org/articles/WQT_and_EJ_1208.pdf>

The environmental justice movement recognizes that every person should have equal access to a healthy environment and some minimum level of natural resources to pursue a safe, purposeful, and dignified existence.5 In 1994, President Clinton issued Executive Order 12,898, which initiated official federal consideration of environmental justice and equity in earnest. The order directs federal agencies to collect data on the health and environmental impacts of agency actions and develop policies to achieve environmental justice in their programs, activities, and regulations. It also states that environmental justice must be part of every agency mission “[t]o the greatest extent practicable and permitted by law.”

Impact: Justice violation

RICHARD TOSHIYUKI DRURY, MICHAEL E. BELLIVEAU, J. SCOTT KUHN , and SHIPRA BANSAL 1999. (Drury - J.D. Yale Law School, 1990, is the Legal Director of Communities for a Better Environment (CBE), San Francisco . Belliveau - B.S. Massachusetts Institute of Technology, 1979, former CBE Executive Director, is the Director of Just Economics for Environmental Health. Kuhn - J.D. Hastings Law School, 1997, is a Staff Attorney with CBE . Bansal - B.S. University of California - Berkeley, 1994, is a Staff Scientist with CBE.) POLLUTION TRADING AND ENVIRONMENTAL INJUSTICE: LOS ANGELES’ FAILED EXPERIMENT IN AIR QUALITY POLICY, DUKE ENVIRONMENTAL LAW & POLICY FORUM Spring 1999. <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1177&context=delpf>

Regardless of one’s views on pollution rights and wrongs, distributional fairness, which lies at the heart of environmental justice concerns, cannot easily be ignored. As opposed to a technology-based regulatory strategy, pollution trading has higher public health risks because it concentrates pollution in neighborhoods surrounding polluters. These neighborhoods tend to be low-income communities of color. Environmental injustice results when regional pollution trading leads to disproportionate localized toxic exposures and risks to low income communities, a majority of which are ethnic and racial minorities.

4. Seasonal credit usage.

Link: Affirmative plan has no time restrictions on when a pollution credit can be used

Impact: Pollution hot spots. Failure to manage time of usage creates harmful pollution impacts because agricultural pollution is seasonal

Prof. Rena Steinzor, Prof. Robert Verchick, Nick Vidargas, and Yee Huang 2012. (Steinzor - Professor of Law at the University of Maryland Francis King Carey School of Law and President of Center for Progressive Reform. Verchick - Gauthier-St. Martin Eminent Scholar and Chair in Environmental Law, Loyola University New Orleans College of Law, Vidargas and Huang – policy analysts at Center for Progressive Reform. ) FAIRNESS IN THE BAY – Environmental Justice and Nutrient Trading, Aug 2012 <http://www.progressivereform.org/articles/WQT_and_EJ_1208.pdf>

To minimize hot spots, and ensure that trades do not exacerbate known water quality problems Bay states should consider when credits may be used. For example, runoff from agricultural lands is seasonal and may not coincide with seasonal pollutant extremes in the watershed. A trade that decreases pollution at a time of year when it is least effective, while increasing pollution during a seasonal extreme, is not only ineffective but also potentially harmful.

5. Human rights / moral violation.

We trade away the public’s right to a clean environment and make pollution a “right”

RICHARD TOSHIYUKI DRURY, MICHAEL E. BELLIVEAU, J. SCOTT KUHN , and SHIPRA BANSAL 1999. (Drury - J.D. Yale Law School, 1990, is the Legal Director of Communities for a Better Environment (CBE), San Francisco . Belliveau - B.S. Massachusetts Institute of Technology, 1979, former CBE Executive Director, is the Director of Just Economics for Environmental Health. Kuhn - J.D. Hastings Law School, 1997, is a Staff Attorney with CBE . Bansal - B.S. University of California - Berkeley, 1994, is a Staff Scientist with CBE.) POLLUTION TRADING AND ENVIRONMENTAL INJUSTICE: LOS ANGELES’ FAILED EXPERIMENT IN AIR QUALITY POLICY, DUKE ENVIRONMENTAL LAW & POLICY FORUM Spring 1999. <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1177&context=delpf>

What once was a wrong—polluting—is now a ‘right’. The immorality of pollution trading lies in its treatment of a public resource, pollution-free air, as a private commodity. Instead of people having the right to breathe free, businesses have the right to pollute as much as they can afford.

Trading removes social stigma associated with pollution and justifies it morally: Pollution becomes a “right” rather than a “wrong”

RICHARD TOSHIYUKI DRURY, MICHAEL E. BELLIVEAU, J. SCOTT KUHN , and SHIPRA BANSAL 1999. (Drury - J.D. Yale Law School, 1990, is the Legal Director of Communities for a Better Environment (CBE), San Francisco . Belliveau - B.S. Massachusetts Institute of Technology, 1979, former CBE Executive Director, is the Director of Just Economics for Environmental Health. Kuhn - J.D. Hastings Law School, 1997, is a Staff Attorney with CBE . Bansal - B.S. University of California - Berkeley, 1994, is a Staff Scientist with CBE.) POLLUTION TRADING AND ENVIRONMENTAL INJUSTICE: LOS ANGELES’ FAILED EXPERIMENT IN AIR QUALITY POLICY, DUKE ENVIRONMENTAL LAW & POLICY FORUM Spring 1999. (ellipses in original; quotes in brackets added to show internal quotation) <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1177&context=delpf>

Although it appears to have become socially unacceptable to discuss the morality of public policy, this poses an important obstacle for pollution trading. Pollution trading removes the social stigma associated with pollution. Rather than treating pollution as a social ill that we should attempt to eliminate to the extent feasible, trading programs turn pollution into another commodity, to be traded when economically efficiency dictates. What is wrong with polluting, when only money for the required pollution credits stands between socially acceptable behavior and socially aberrant activity? As Sandel points out, in a trading scheme, pollution becomes a right rather than a wrong:  
  
[“]If a company . . . is fined for spewing excessive pollutants into the air, the community conveys its judgment that the polluter has done something wrong. A fee, on the other hand, makes pollution just another cost of doing business, like wages, benefits, and rent . . . . The distinction between a fine and a fee for despoiling the environment is not one we should give up too easily. Suppose there were a $100 fine for throwing a beer can in to the Grand Canyon, and a wealthy hiker decided to pay $100 for the convenience. Would there be nothing wrong in his treating the fine as if it were simply an expensive dumping charge?[“]

NEGATIVE: CORAL REEF PROTECTION

most of the evidence in this brief was researched by Matthew Baker

NEGATIVE PHILOSOPHY

Protected Areas (PAs) are over-valued and have numerous shortcomings

Dr. Camilo Mora & Dr. Peter F. Sale 2011. (Mora - PhD in Biology from the University of Windsor with a dissertation titled ‘Importance of Dispersal in Reef Fishes’ and Associate Professor at the Univesrity of Hawaii, Manoa. Sale - PhD in ecology and management of coral reefs and tropical costal management) July 28, 2011, “Ongoing global biodiversity loss and the need to move beyond protected areas: a review of the technical and practical shortcomings of protected areas on land and sea,” Marine Ecology Progress Series, <http://www.int-res.com/articles/theme/m434p251.pdf>

The different shortcomings we have outlined suggest that those advocating the improvement and expansion of the global network of PAs clearly overestimate the reach of PAs and underestimate the magnitude of the challenge of reversing the ongoing bio-diversity loss globally.

INHERENCY

Coral is flourishing in the deep waters of the Great Barrier Reef

Analysis: What may be happening is that scuba divers are reporting “coral is endangered” and that makes the headlines, but down below the depths where scuba divers can go, it is flourishing

CNN 2012. “Great Barrier Reef Found to Have Thriving Deep Water Coral,” 26 Oct 2012 <http://www.cnn.com/2012/10/26/world/asia/australia-deep-water-coral-reef>

“A recent survey of the Coral Sea and Great Barrier Reef has found coral flourishing in deep waters, a stark contrast to the shallower reefs that have seen a drastic decline over the last few decades. The healthy coral populations were discovered to be below 30 meters -- beyond the usual reach of most scuba divers -- and even found at depths of 80 meters, according to the Catlin Seaview Survey. "The Holmes and Flinders Reefs in the Coral Sea are renowned for having been badly damaged, said Pim Bongaerts, of the University of Queensland's Global Change Institute, who was leading the deep reef survey. "Yet we have found their deep reef zone is hardly disturbed at all. In fact the most striking thing is the abundance of coral on the deep reef. What has blown me away is to see that even 70 to 80 meters down, there are significant coral populations."”

The expansion in coral distribution ranges indicates that fundamental change in coastal ecosystems is in progress

Hiroya Yamano, Kaoru Sugihara, and Keiichi Nomura 2011. (Yamano and Sugihara are with the Center for Global Environmental Research, National Institute for Environmental Studies, Tsukuba, Japan. Nomura is with the Kushimoto Marine Park Center, Kushimoto, Japan ) February17, 2011, “Rapid poleward range expansion of tropical reef corals in response to rising sea surface temperatures,” Geophysical Research Letters, Vol. 38, <ftp://soest.hawaii.edu/coastal/Climate%20Articles/Reefs%20poleward%20expansion%202011.pdf>

“Rising temperatures caused by climatic warming may cause poleward range shifts and/or expansions in species distribution. Tropical reef corals (hereafter corals) are some of the world’s most important species, being not only primary producers, but also habitat‐forming species, and thus fundamental ecosystem modification is expected according to changes in their distribution. Although most studies of climate change effects on corals have focused on temperature induced coral bleaching in tropical areas, poleward range shifts and/or expansions may also occur in temperate areas. We show the first large‐scale evidence of the poleward range expansion of modern corals, based on 80 years of national records from the temperate areas of Japan, where centurylong measurements of in situ sea‐surface temperatures have shown statistically significant rises. Four major coral species categories, including two key species for reef formation in tropical areas, showed poleward range expansions since the 1930s, whereas no species demonstrated southward range shrinkage or local extinction. The speed of these expansions reached up to 14 km/year, which is far greater than that for other species. Our results, in combination with recent findings suggesting range expansions of tropical coral‐reef associated organisms, strongly suggest that rapid, fundamental modifications of temperate coastal ecosystems could be in progress.”

Nature explains and solves for tropical coral reductions: Tropical coral are reducing due to warming Sea Surface Temperatures (SSTs) but they migrate north to cooler regions and reproduce there

Hiroya Yamano, Kaoru Sugihara, and Keiichi Nomura 2011. (Yamano and Sugihara are with the Center for Global Environmental Research, National Institute for Environmental Studies, Tsukuba, Japan. Nomura is with the Kushimoto Marine Park Center, Kushimoto, Japan ) February17, 2011, “Rapid poleward range expansion of tropical reef corals in response to rising sea surface temperatures,” Geophysical Research Letters, Vol. 38, <ftp://soest.hawaii.edu/coastal/Climate%20Articles/Reefs%20poleward%20expansion%202011.pdf>

Note that all of the expanded species have been in IUCN (International Union for Conservation of Nature) extinction risk categories of “Near Threatened” or “Vulnerable” since 1998, when temperature‐induced mass bleaching occurred [Carpenter et al., 2008] (Table 1). Adult colonies in these regions exhibited spawning [Mezaki et al., 2007; van Woesik, 1995], indicating that corals newly settled as a result of expansion have the potential to reproduce and expand farther northward. Thus, temperate areas may serve as refugia for tropical corals in an era of global warming, while corals in tropical areas suffer declines because of rising SSTs [Hoegh‐Guldberg et al., 2007].

SOLVENCY

Main cause of reef destruction: Cyclones (No way AFF can prevent cyclones)

Other causes: Native species eating the coral, and water getting too warm (also beyond AFF’s solvency)

CNN 2012. “Great Barrier Reef Found to Have Thriving Deep Water Coral,” 26 Oct 2012 <http://www.cnn.com/2012/10/26/world/asia/australia-deep-water-coral-reef>

Earlier this month a report, by the Australian Institute of Marine Science (AIMS) and the University of Wollongong, revealed that the Great Barrier Reef had lost half its coral cover in the last 27 years. Researchers say most of the damage to the shallower coral was wrought in recent years by a succession of powerful cyclones. Other threats that are hindering its ability to recover include the crown-of-thorns starfish, or COTS, a native species which feeds on coral, and coral bleaching that occurs when water becomes too warm.

Main cause of coral bleaching: Warmer ocean temperatures

Analysis: Nothing AFF can do about that

National Geographic News quoting reef scientist Melanie McField in 2003. (written by Brian Handwerk and Lauri Hafvenstein ) Belize Reef Die-Off Due to Climate Change?25 Mar 2003 <http://news.nationalgeographic.com/news/2003/03/0325_030325_belizereefs.html>

"This coral bleaching is pretty solidly tied to rising ocean temperatures," said Melanie McField, a Belize-based reef scientist with the World Wildlife Fund, a non-profit environmental organization in Washington, D.C. "It's a fact that global temperatures have risen. There's lots of data and little argument that increased ocean temperatures are the primary agent of bleaching. Ultraviolet light also causes bleaching, and the combination of the two gives you the worst bleaching response." "As for tying overall temperature increases to overall global warming, there is still some debate, but less every year," she said. "I think the majority of scientists agree that global warming is happening and that it's the root cause of these coral bleaching events."

Protected Areas (PAs) only address one of the four primary threats to biodiversity

Dr. Camilo Mora & Dr. Peter F. Sale 2011. (Mora - PhD in Biology from the University of Windsor with a dissertation titled ‘Importance of Dispersal in Reef Fishes’ and Associate Professor at the Univesrity of Hawaii, Manoa. Sale - PhD in ecology and management of coral reefs and tropical costal management) July 28, 2011, “Ongoing global biodiversity loss and the need to move beyond protected areas: a review of the technical and practical shortcomings of protected areas on land and sea,” Marine Ecology Progress Series, <http://www.int-res.com/articles/theme/m434p251.pdf>

“At the global scale, harvesting is one of 4 primary threats to biodiversity. The other 3 are habitat loss due to human appropriation of sites to fill other societal requirements, direct extirpation by an increasing number of invasive species introduced by global trade, and the alteration of habitats into ones no longer suitable for particular species due to climate change and pollution (Fig. 3). Effects of invasive species, and changes to habitat due to climate change or pollution, are not ones that are usually regulated as part of the management of a PA (Jameson et al. 2002, McClanahan et al. 2002) and unfortunately they can have as devastating effects on populations as do harvesting and habitat loss (Mora & Ospina 2001, 2002, McClanahan et al. 2002, Mora et al. 2007).”

Warming, acidification, and pollution are not prevented by MPAs and can preclude the benefits of PAs

Dr. Camilo Mora & Dr. Peter F. Sale 2011. (Mora - PhD in Biology from the University of Windsor with a dissertation titled ‘Importance of Dispersal in Reef Fishes’ and Associate Professor at the Univesrity of Hawaii, Manoa. Sale - PhD in ecology and management of coral reefs and tropical costal management) July 28, 2011, “Ongoing global biodiversity loss and the need to move beyond protected areas: a review of the technical and practical shortcomings of protected areas on land and sea,” Marine Ecology Progress Series, <http://www.int-res.com/articles/theme/m434p251.pdf>

“Human stressors not regulated in PAs can preclude the benefits of even well-managed PAs. In the case of coral reefs, for instance, MPAs can have no direct effects on preventing the loss of corals due to warming, acidification, or pollution (Jones et al. 2004, Coelho & Manfrino 2007, Graham et al. 2008, Mora 2008).”

Global warming could make even well-managed MPAs futile in the longer term

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“Unfortunately, expected CO2 emissions are yielding worrisome scenarios for the viability of coral reef species and indirectly for reef fishes due to the loss of their main sources of habitat and food. For instance, increasing CO2 emissions are expected to significantly impair the calcification (due to acidification) and survival (due to warming) of coral reefs and to reduce the thresholds of coral–alga phase shifts even under optimum levels of grazing and nutrients (Anthony et al. 2011). Anthony et al. (2011) suggested that even well-managed MPAs, where grazing and nutrients are regulated, could be ‘futile in the longer term’ for coral reefs under high CO2 emissions and that only a concerted effort to curb CO2 emissions (i.e. low CO2 scenarios) may increase the chances of maintaining coral-dominated reefs..”

Only way to resolve loss of biodiversity is reduce demand for ecological goods and services

Dr. Camilo Mora & Dr. Peter F. Sale 2011. (Mora - PhD in Biology from the University of Windsor with a dissertation titled ‘Importance of Dispersal in Reef Fishes’ and Associate Professor at the Univesrity of Hawaii, Manoa. Sale - PhD in ecology and management of coral reefs and tropical costal management) July 28, 2011, “Ongoing global biodiversity loss and the need to move beyond protected areas: a review of the technical and practical shortcomings of protected areas on land and sea,” Marine Ecology Progress Series, <http://www.int-res.com/articles/theme/m434p251.pdf>

“Recognizing that biodiversity loss is intrinsically related to our high demand for ecological resources suggests to us that global initiatives need to address our demand for resources more directly if preservation of biodiversity is to be achieved. While we can limit human use of natural resources locally through the effective implementation of PAs, this will only address some causes of biodiversity loss, and, as shown in this review, there are numerous challenges to implement this strategy adequately across the world. As long as our demand for ecological goods and services continues to grow so will the extent of those challenges and the difficulty of using PAs to reduce biodiversity loss (Fig. 3). Therefore, alternative solutions targeting human demand for ecological goods and services, while ensuring human welfare should be prioritized and brought to the forefront of the international conservation agenda. In our view, the only scenario to achieve sustainability and to resolve the ongoing loss of biodiversity and its underlying causes will require a concerted effort to reduce human population growth and consumption and simultaneously increase the Earth’s biocapacity through the transference of technology to increase agricultural and aquacultural productivity (our Fig. 4, Kitzes et al. 2008).”

MPAs done correctly are expensive: A comprehensive global network of Marine Protected Areas would cost over $300 billion

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For land alone, adding the costs of monitoring and compensation for those displaced by PAs would make the annual cost of a comprehensive network of terrestrial PAs on the order of US$300 billion yr–1 (James et al. 1999b). A similar calculation is not available for the ocean, but the price tag could be equal or higher given the larger area of the world’s oceans. Comparison of the expected costs of a well-managed network of PAs with the actual expenditure of US$6 billion annually highlights the clear economic deficit in the current management of PAs, while pinpointing a major vulnerability limiting the chances for their expansion.

If no alternative jobs offered, species extraction is simply displaced yielding no reduction in exploitation

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“If alternative jobs are not offered to harvesters (i.e. fishers, hunters, loggers, etc.), the creation of a PA will tend to displace extraction effort, but not reduce it, and in general this may not improve the overall abundance of harvested species (Hilborn et al. 2006). The extent of harvesting displacement probably varies depending on the socio-economic context, being more pronounced in developing societies, where ‘poverty traps’ can force harvesters into continued exploitation of even depleted resources due to the inability to move to alternative jobs (Cinner 2007, 2011).”

Fishermen in the Coral Triangle may be reluctant to accept alternative jobs for non-economic reasons

Prof. Julian Clifton 2009. (Assistant Professor at the University of Western Australia’s Oceans Institute), 2009, “Comment: Science, funding and participation: key issues for marine protected areas networks and the Coral Triangle Initiative,” Environmental Conservation 36(2), p. 91-96, <http://opwall.com/wp-content/uploads/Clifton-science2009.pdf>

“In contrast, there is little indication in the CTI literature as to how fisherfolk adversely affected by new regulations introduced as part of the MPA network in the Coral Triangle would be recompensed. Fishers may be reluctant to engage in alternative employment such as mariculture or tourism for non-economic reasons (Pollnac *et al*. 2001), whilst there is evidence that these activities may not be associated with a reduction in fishing effort (Gillett *et al*. 2008).”

Political Corruption hinders success of PAs (protected areas)

Dr. Camilo Mora & Dr. Peter F. Sale 2011. (Mora - PhD in Biology from the University of Windsor with a dissertation titled ‘Importance of Dispersal in Reef Fishes’ and Associate Professor at the Univesrity of Hawaii, Manoa. Sale - PhD in ecology and management of coral reefs and tropical costal management) July 28, 2011, “Ongoing global biodiversity loss and the need to move beyond protected areas: a review of the technical and practical shortcomings of protected areas on land and sea,” Marine Ecology Progress Series, <http://www.int-res.com/articles/theme/m434p251.pdf>

“One final social constraint on the success of PAs is widespread political corruption. Soulé (1991) argues that setting aside and then effectively managing areas for protection will be improbable in states with poor and landless people, corruptible authorities, or powerful oligarchies. Unfortunately, the recent World Bank Governance Indicators show that >90% of the countries in the world deal with serious problems of governability (in their scale from 0 to 5, 0 being the worst and 5 the best, the average governability in the world was 2.5, with only 8% of the countries receiving grades >4; Kaufmann et al. 2008). Lack of governability is one of the major challenges to the success of conservation strategies worldwide.”

Broader coverage of Protected Areas doesn’t necessarily lead to better global species protection

Dr. Camilo Mora & Dr. Peter F. Sale 2011. (Mora - PhD in Biology from the University of Windsor with a dissertation titled ‘Importance of Dispersal in Reef Fishes’ and Associate Professor at the Univesrity of Hawaii, Manoa. Sale - PhD in ecology and management of coral reefs and tropical costal management) July 28, 2011, “Ongoing global biodiversity loss and the need to move beyond protected areas: a review of the technical and practical shortcomings of protected areas on land and sea,” Marine Ecology Progress Series, <http://www.int-res.com/articles/theme/m434p251.pdf>

To provide a global overview of the extent to which PAs are preventing the loss of biodiversity, we compared the living planet index (which is the temporal change in the population size of 1686 vertebrate species worldwide; Hails 2008) to the global temporal trend of the area covered by PAs. The results show that the area of the Earth’s land and ocean covered by PAs has increased rapidly in the past few decades (dotted lines in Fig. 1a,b). Unfortunately, terrestrial and marine biodiversity have both experienced rapid declines in the same time span (continuous lines in Fig. 1a,b). There is no way to determine if the rates of biodiversity loss would have been greater in the absence of PAs; however, these trends indicate that the positive results on local biodiversity of some large, well-connected and well-managed PAs (Lubchenco et al. 2003, 2007, Game et al. 2009, Lester et al. 2009) have been overridden in a global context.

Maintaining biodiversity is much simpler than restoring it (which may be impossible in some instances)

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“As a result of our appropriation of resources and more direct impacts, an increasing number of species is threatened by extinction (Baillie et al. 2004, Hails 2008, Secretariat of the Convention on Biological Diversity 2010). This loss is occurring in spite of the goods and services that biodiversity provides to humankind, valued in the order of a few trillion dollars annually (e.g. Costanza et al. 1997; the United Nations Economics of Ecosystems and Biodiversity project[www.teebweb. org], the United Nations–backed Principles for Responsible Investment project [www.unpri.org]). In addition, several studies indicate that maintaining biodiversity is much simpler than restoring it and that, depending on the nature and extent of our impacts, some damaged ecosystems might never return to their original states, meaning that any imperilment or loss could be permanent (Scheffer & Carpenter 2003).”

Migration constrains the effectiveness of even well-managed MPAs

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“Another constraint to the effectiveness of well-managed MPAs is the fact that the life history of many marine species involves travelling through many different environments, where they can be vulnerable to factors other than harvesting and habitat loss. For example, the viability of most marine populations relies on the supply of propagules (Caley et al. 1996); thus, recruitment failures associated with intense early mortality due to acute environmental stressors (Walther et al. 2002, Rijnsdorp et al. 2009) would be expected to render moot any positive responses of populations once inside MPAs (Munday et al. 2009). Likewise, many coastal habitats, such as estuaries and mangroves, provide critical nursery habitat for organisms that spend most of their lives further offshore (Mumby et al. 2004). These coastal habitats are disappearing due to factors such as sea level rise, eutrophication, coastal development and sedimentation, none of which are modified by the usual management programs for PAs (Valiela et al. 2001).”

Several recent field studies indicate that PA failure may be more the rule than the exception

Dr. Camilo Mora & Dr. Peter F. Sale 2011. (Mora - PhD in Biology from the University of Windsor with a dissertation titled ‘Importance of Dispersal in Reef Fishes’ and Associate Professor at the Univesrity of Hawaii, Manoa. Sale - PhD in ecology and management of coral reefs and tropical costal management) July 28, 2011, “Ongoing global biodiversity loss and the need to move beyond protected areas: a review of the technical and practical shortcomings of protected areas on land and sea,” Marine Ecology Progress Series, <http://www.int-res.com/articles/theme/m434p251.pdf>

“Another suggested possibility is that available information is biased by the tendency to publish significant results (Gaston et al. 2008). Stochastic phenomena or local differences that complicate proper replication (Levin 1992), in combination with the considerable uncertainty of assessing the status and trends of populations (Hall 1998), make small-scale studies particu larly prone to large variability. If this is combined with publication biases for significant and expected results, then our knowledge could be significantly biased toward cases where PAs have worked (Gaston et al. 2008). It is possible that PA failures may be just as common. In fact, several recent field studies, sampling groups of PAs using the same sampling methodology, indicate that PA failure may be more the rule than the exception (McClanahan et al. 2006, Mora et al. 2006, 2011, Guidetti & Sala 2007, Graham et al. 2008, Mora 2008, Western et al. 2009).”

DISADVANTAGES

1. Opportunity Cost

Links : (See Solvency Barriers Above)

Impact : Failure of PAs (Protected Areas) would erode public and political support for conservation

Dr. Camilo Mora & Dr. Peter F. Sale 2011. (Mora - PhD in Biology from the University of Windsor with a dissertation titled ‘Importance of Dispersal in Reef Fishes’ and Associate Professor at the Univesrity of Hawaii, Manoa. Sale - PhD in ecology and management of coral reefs and tropical costal management) July 28, 2011, “Ongoing global biodiversity loss and the need to move beyond protected areas: a review of the technical and practical shortcomings of protected areas on land and sea,” Marine Ecology Progress Series, <http://www.int-res.com/articles/theme/m434p251.pdf>

“Although numerous reviews and meta-analyses have built the case for increased use of PAs (Pimm et al. 2001, Halpern & Warner 2002, Lubchenco et al. 2003, 2007, Micheli et al. 2004, Lester et al. 2009, Gaines et al. 2010), few have dealt with failures of PAs or with the general effectiveness of PAs at halting global biodiversity loss. Evaluation of the performance of PAs is critical since failure of PAs to protect biodiversity could erode public and political support for conservation.”

2. Social Conflict

Link: Establishment of PA’s (Protected Areas) creates social conflict

Dr. Camilo Mora & Dr. Peter F. Sale 2011. (Mora - PhD in Biology from the University of Windsor with a dissertation titled ‘Importance of Dispersal in Reef Fishes’ and Associate Professor at the Univesrity of Hawaii, Manoa. Sale - PhD in ecology and management of coral reefs and tropical costal management) July 28, 2011, “Ongoing global biodiversity loss and the need to move beyond protected areas: a review of the technical and practical shortcomings of protected areas on land and sea,” Marine Ecology Progress Series, <http://www.int-res.com/articles/theme/m434p251.pdf>

“The establishment of PAs is known to generate several types of conflict among local residents, e.g. among members of a community, among communities, between communities and the state, and among stakeholder groups (Christie 2004). The nature of these conflicts is varied and may be derived from accurate or erroneous perceptions of an inequitable distribution of the benefits of protection among individuals or groups (Katon et al. 1999, Christie 2004). Conflicts may include power struggles, heavy-handed enforcement methods, competing management goals (e.g. fisheries enhancement vs. tourism development; Agardy et al. 2003, Christie et al. 2003, Christie 2004), and land- and resource-use displacement (West et al. 2006).”

Link: Resolution of PA social problems is not easy

Impact: Violence, human rights violations, and poverty

Dr. Camilo Mora & Dr. Peter F. Sale 2011. (Mora - PhD in Biology from the University of Windsor with a dissertation titled ‘Importance of Dispersal in Reef Fishes’ and Associate Professor at the Univesrity of Hawaii, Manoa. Sale - PhD in ecology and management of coral reefs and tropical costal management) July 28, 2011, “Ongoing global biodiversity loss and the need to move beyond protected areas: a review of the technical and practical shortcomings of protected areas on land and sea,” Marine Ecology Progress Series, <http://www.int-res.com/articles/theme/m434p251.pdf>

Unfortunately, the resolution of social problems arising from the establishment of PAs is not easy (Adams et al. 2004). While coercive mechanisms of enforcement are often used, they always fail (Peluso 1993), at times generating violence, contravening legal and human rights (West et al. 2006), increasing the operational costs of PAs (James et al. 1999b, Balmford et al. 2004), and exacerbating poverty (Adams et al. 2004). The only successful approach requires that local communities understand and embrace the proposed PA program—this requires education to build social and political support (Christie et al. 2003) and ‘local participation’ in the design and management of PAs (Gray 2010).

3. Invasive Species

Link : More Visitors. Setting up MPAs could increase the risk of invasive species by increasing attraction for visitors

The International Union for the Conservation Nature 2008. (The World’s First and Largest Global Environmental Organization) «Invasive species in the Pacific: looking under the water, » <http://cmsdata.iucn.org/downloads/pacific_invasives_1.pdf>

«Paradoxically, setting up a marine protected area may lead to an increase in risk of invasion. Indeed, setting an MPA generates a significant attraction to the area for marine tourism, including recreational boating, yachting, the diving and snorkelling industry, and where allowed, fishing. These activities are likely to lead to increased risks of introducing non-indigenous marine species associated with hull fouling, ballast water (of some cruising yachts), the accidental transfer of species via anchor wells and chains, on wetsuits as spores or microscopic phases, and as bait material from recreational fishing. »

Link : Increased fishing pressure outside the boundary of an MPA makes the regional community more susceptible to non-indigenous species

Dr. Julie Kellner & Dr. Alan Hastings 2009. ( Kellner - PhD in Ecology, Evolution and Marine Biology from UC Santa Barbara and an Assistant Scientist at the Woods Hole Oceanographic Institution. Hastings - PhD in Applied Mathematics from Cornell Univ. and Professor in the Dept of Environmental Science and Policy at UC Davis), « A Reserve Paradox : Introduced Heterogeneity May Increase Regional Invasibility, » Conservation Letters 2 (2009) 115-122, <http://www.azoresbioportal.angra.uac.pt/files/publicacoes_Kellner%20_Haastings2009.pdf>

Even if a native species would resist the invasion of a competitor under unﬁshed conditions, the relative competitive ability of that native (and thus its resistance to invasion) will be reduced in ﬁshed areas. This heterogeneity in population density caused by protection will be ampliﬁed by an effect uniquely created by marine reserve establishment. As a reserve or MPA network is implemented or increases in size, ﬁshing pressure outside its boundaries also increases given that some or all of the displaced effort moves into the remaining ﬁshed areas, which may make the regional community more susceptible to invasion by nonindigenous species (Figure 1).

Impact : Invasive species have significant ecological, economic, and human health impacts

The International Union for the Conservation of Nature 2006, (IUCN is an international organization that promotes environmental research) «Marine Menance : Alien Invasive Species In the Marine Environment, » <http://www.cbd.int/invasive/doc/marine-menace-iucn-en.pdf>

There are an estimated 500 alien marine species within the coastal waters of the US. Around 200 of these are found in San Francisco Bay alone. Worldwide the number is far higher. Why does this matter? Why should we be worried about it, when many intentionally introduced alien species provide us with food, recreation or jobs? The answer is that while many species that are introduced into a new environment do no harm, many others have significant ecological, economic, and human health impacts. Invasive seaweeds have smothered seabeds, invasive crabs roam the sea floor eating everything in their path, invasive jellyfish have led to the collapse of fisheries and people have been killed by pathogens carried around in ballast water. Sometimes the impacts are quick and dramatic but more often they are indirect and subtle and may escape notice for some time.

NEGATIVE: CUBAN OIL DEVELOPMENT

HARMS

Embargo is successful at its purpose: Denies resources to anti-American regime

REUTERS NEWS SERVICE 2008. (Jeff Franks, journalist) 22 May 2008, “U.S. official says Cuba embargo successful,” [www.reuters.com/article/newsOne/idUSN2143173120080522](http://www.reuters.com/article/newsOne/idUSN2143173120080522)

A U.S. trade embargo in place 46 years against Cuba has been successful, U.S. Commerce Secretary Carlos Gutierrez said on Wednesday, even though the island's communist government remains. Gutierrez said the embargo, imposed in 1962 to undermine the government of Fidel Castro, deprived Cuban leaders of resources they would have used for "ill-focused goals." "The purpose of the embargo is to deny resources to a regime who is clearly anti-American, who doesn't like our country, and in that regard the embargo has been extremely successful," Gutierrez said in a phone interview from Washington.

Reverse Plan Advocate: Embargo is a proportionate response to Cuban repression

Ray Walser 2008 (Senior Policy Analyst for Latin America at The Heritage Foundation) 21 March 2008, “The Cuba Embargo: Too Soon to Tear Down the Goal Posts,” FOX News, (the word "primacy" in the text is spelled that way in the original; it should probably be "primary") <http://www.foxnews.com/story/0,2933,340330,00.html>

The communist, totalitarian system perfected between 1959 and the present regrettably remains firmly in place. The structures of power, dominance by a privileged, vanguard party, the planned economy, jails and prisons for political offenders, the omnipresent secret policeman and the inner censor keep Cubans tightly controlled. Raul Castro won’t relax the rules of the totalitarian political game. Until he does, the U.S. shouldn’t remove its primacy sanction. The embargo remains as much as ever a matter of basic principle, a proportionate response to Cuban repression. There is no indication that respect for human rights will improve under Raul.

INHERENCY

Cuba’s Chinese oil rig is safer than US technology

Nick Miroff 2011. (journalist) GLOBAL POST 10 Sept 2011 « Oil discovery in Cuba gets US notice” <http://www.globalpost.com/dispatch/news/regions/americas/cuba/110909/oil-discovery-cuba-united-states>

The fact that the drilling rig was built in China should not raise concerns, said delegation member Lee Hunt, president of the Houston-based International Association of Drilling Contractors, a trade group. As many six other rigs already working safely in the Gulf of Mexico were built in the same Chinese shipyard, Hunt said. “It has the latest generation of equipment,” said Hunt. American trade sanctions against Cuba prohibited the use of more than 10 percent U.S. technology in the rig’s construction, but Hunt said the Norwegian-designed platform will have an American-made blowout-prevention system that is more advanced than the one which failed on the Deepwater Horizon.

41 billion barrels of unexploited oil in areas already open for leasing

Catherine Brahic 2008 (journalist), Aug 2008, NEW SCIENTIST, Offshore oil drilling in the US: what's at stake? <http://www.newscientist.com/article/dn14529-offshore-oil-drilling-in-the-us-whats-at-stake.html?page=2>

In comparison, areas that have already been opened up to drilling as a result of exceptions to the congressional and presidential bans are estimated to hold 41 billion barrels of crude unexploited oil and 6 trillion cubic metres of unexploited natural gas. "Of all the oil and gas believed to exist on the Outer Continental Shelf, 82% of the natural gas and 79% of the oil is located in areas that are currently open for leasing," says Nick Rahall, Democratic representative for West Virginia.

Who needs Cuban oil? US will be self-sufficient in oil by 2035

Robert Samuelson 2012. (economics reporter) The U.S. may become energy-independent after all, WASHINGTON POST <http://www.washingtonpost.com/blogs/post-partisan/post/the-us-may-become-energy-independent-after-all/2012/11/14/ef8624e4-2e7d-11e2-89d4-040c9330702a_blog.html>

Preoccupied by the election, Americans may be under the delusion that most major social and economic changes proceed from the ballot box. Not so. The latest reminder of this comes from a surprising source: the annual World Energy Outlook report from the Paris-based International Energy Agency (IEA). In the report, the agency comes to the startling conclusion that, by 2020, the United States will displace Saudi Arabia — albeit temporarily — as the world’s largest oil producer. Even more astonishing, the United States is projected by 2035 to be virtually self-sufficient in oil, with modest imports coming from secure suppliers.

HARMS/SIGNIFICANCE

Oil prices don’t disrupt the economy like they did in the ‘70s and ‘80s

Jorg Decressin 2012. (International Monetary Fund, research department) 25 May 2012 “Global Economy Learns to Absorb Oil Price Hikes,” <http://www.imf.org/external/pubs/ft/survey/so/2012/num052512a.htm>

Despite a fourfold increase in oil prices over the past decade, the world has absorbed the price hikes with relatively little disruption due to fundamental changes in the workings of the global economy, and the use of macroeconomic policy to mitigate the effects of rises. During the current economic downturn, the price of oil hit over $100 a barrel, and prices rose close to levels only seen in the 1970s. But the increases have not triggered global recessions as they did in the 1970s and 80s.

Greater energy efficiency means oil price shocks don’t have the same impact as in the past

Jorg Decressin 2012. (International Monetary Fund, research department) 25 May 2012 “Global Economy Learns to Absorb Oil Price Hikes,” <http://www.imf.org/external/pubs/ft/survey/so/2012/num052512a.htm>

Oil price shocks do not have the same impact as in the past because economies have become more efficient in the use of energy. The amount of energy it takes to produce a dollar of income has been steadily declining for 40 years. This decline in energy intensity is expected to continue. Major emerging markets are also becoming more efficient in the use of energy, and they are expected to continue to make efficiency gains. By 2030, the major regions of the world—the United States, China, and India—are projected to have the same energy intensity.

SOLVENCY

Cuban oil “on hold indefinitely” – early tests failed to find commercially viable oil

Associated Press 2012. “Cuba Puts Oil Dreams on Hold as Rig Sets Sails ”13 Nov 2012 <http://latino.foxnews.com/latino/news/2012/11/13/cuba-puts-oil-dreams-on-hold-as-rig-sets-sails/>

The only rig in existence that can drill in deep waters off Cuba is preparing to sail away from the island, officials said Tuesday, after the third exploratory well sunk this year proved nonviable in a blow to government hopes of an oil bonanza. While production was always years off even in the event of a big discovery, analysts said the Scarabeo-9's imminent departure means Havana's dreams of injecting petrodollars into a struggling economy will be on hold indefinitely.

US oil firms don’t want the political hassles of trying to do business with Cuba

Nick Miroff 2011. (journalist) GLOBAL POST 10 Sept 2011 « Oil discovery in Cuba gets US notice” <http://www.globalpost.com/dispatch/news/regions/americas/cuba/110909/oil-discovery-cuba-united-states>

If the deposits hold close to 20 billion barrels, as Cuban geologists claim, that would probably attract some interest, said delegation member Richard Sears, a former vice president and deepwater drilling specialist at Royal Dutch Shell. For now, though, Sears said, U.S. firms will likely prefer to work in parts of the world with proven hydrocarbon reserves and fewer political hurdles than Cuba. “The challenge for any company is how you allocate resources,” he said. “Do I want to fight political and public-relations battles?” said Sears. “Or do I put my resources into other parts of the Gulf of Mexico where I have well-established leases?”

Cuban oil is only a few months of US energy consumption

Michael Janofsky 2006 (journalist) 9 May 2006, “Cuba irks U.S. with plans for oil drilling,” NEW YORK TIMES <http://www.nytimes.com/2006/05/09/washington/09drill.html?pagewanted=print&_r=0>

The United States Geological Survey estimates that the energy field on Cuba's side alone may have 4.6 billion barrels of oil and 9.8 trillion cubic feet of natural gas. That much energy is equivalent to just a few months of the United States' total energy consumption. The survey does not specify how much of an energy reserve is on the United States' side of the Florida Straits, just north of Cuba. But almost all of the country's Outer Continental Shelf, waters within 200 miles of shorelines, has been off limits to drilling since the early 1980's because of Congressional bans and executive orders.

Expenses and political risks for oil companies: Cuba can take their assets again like they did before

Mauricio Claver-Carone 2008 (a director of the U.S.-Cuba Democracy PAC in Washington and formerly served as an attorney with the U.S. Treasury) 25 July 2008,”How the Cuban embargo protects the environment,” NEW YORK TIMES <http://www.nytimes.com/2008/07/25/opinion/25iht-edcarone.1.14793496.html>

Equally important, foreign companies trying to do business with Cuba still face a lot of expenses and political risks. If, or when, the Cuban regime decides again to expropriate the assets of these companies, there is no legal recourse in Cuba. Frankly, it is bewildering why some seem to believe that U.S. companies partnering with one more anti-American dictatorship to explore and develop oil fields will somehow reduce fuel costs for American consumers and contribute to U.S. energy independence. One needs only to look at the reaction of the international oil markets when Hugo Chávez of Venezuela nationalized assets of U.S.-based ConocoPhillips and Chevron.

No significant US economic benefit from Cuba

Not much economic benefit for Cuba: Communism keeps them poor regardless

Associated Press 2008. 20 Feb 2008, “Cuban trade embargo expected to remain” <http://usatoday30.usatoday.com/money/economy/2008-02-20-946619999_x.htm>

Gary Hufbauer, an economist with the Peterson Institute, a Washington think tank, said any normalization of relations would have only a slight impact on the U.S. economy because Cuba is such a small market. He said agriculture and tourism would see modest gains. He said Cuba would get a boost if it could once again export to the United States, but he said it has been the communist system, rather than the U.S. trade embargo, that has been the major factor depressing living standards in Cuba. "Some people say that the embargo deprived Cuba of economic resources," Hufbauer said. "But the main reason Cuba is poor is that its economic system is crummy and has been for a long time."

Cuban government will punish anyone who succeeds economically

New York Times 2012. (Damien Cave, journalist) 19 Nov 2012 “Easing of Restraints in Cuba Renews Debate on U.S. Embargo <http://www.nytimes.com/2012/11/20/world/americas/changes-in-cuba-create-support-for-easing-embargo.html?adxnnl=1&adxnnlx=1353427200-+QDfPVZDtZWyiorosuTPeA&_r=1&>

Many Cubans agree that their government cares more about control than economic growth. Business owners complain that inspectors pounce when they see signs of success and demand receipts to prove that supplies were not stolen from the government, a common practice here. One restaurant owner in Havana said he received a large fine for failing to produce a receipt for plastic wrap.

Government of Cuba will profit from trade with US, and soak it for higher taxes

New York Times 2012. (Damien Cave, journalist) 19 Nov 2012 “Easing of Restraints in Cuba Renews Debate on U.S. Embargo <http://www.nytimes.com/2012/11/20/world/americas/changes-in-cuba-create-support-for-easing-embargo.html?adxnnl=1&adxnnlx=1353427200-+QDfPVZDtZWyiorosuTPeA&_r=1&>

Owners of Cuba’s small businesses, mostly one-person operations at this point, say they know that the government would most likely find ways to profit from wider economic relations with the United States. The response to the informal imports that come from Miami in the suitcases of relatives, for instance, has been higher customs duties.

Solvency: Trade doesn't help the average Cuban

Disad Link: Trade gives money to Cuban dictatorship

Carlos Gutierrez 2007 (Secretary of Commerce in Pres. GWBush administration) 24 Oct 2007, Ask the White House on Cuba Policy, <http://2001-2009.state.gov/p/wha/rls/rm/07/q4/94130.htm>

And, though millions of dollars have poured into Cuba from Canada, Europe and other points around the globe, it has not benefited the average Cuban. More investment and money spent in Cuba means more money lining the pockets of the Cuban dictator and his cronies. Instead of comparing Cuba with China, we should compare Cuba to other countries that are similar, such as North Korea.

Past relaxations of the embargo have not produced any improvement in Cuban human rights

Dr. Ray Walser 2012. (PhD; veteran Foreign Service officer; Senior Policy Analyst specializing in Latin America at The Heritage Foundation; former visiting professor of international relations and Latin America politics at the U.S. Military Academy ) Cuban-American Leaders: “No Substitute for Freedom” in Cuba 25 June 2012 <http://blog.heritage.org/2012/06/25/cuban-american-leaders-no-substitute-for-freedom-in-cuba/>

When it comes to dealing with the Castro dictatorship in Cuba, there are several schools of thought. The one preferred by Washington liberals, idealists, and the architects of the Obama Administration’s Cuba policy holds that increased travel, remittances, and diplomatic engagement is softening hearts, opening Cuba, and loosening the regime’s unwavering commitment to sustain a succession process that preserves the dictatorship of the Cuban Communist Party in a post-Castro era. However, these pleasing liberal assumptions are negated on a daily basis by hard-headed facts on the ground in Cuba. With each new step lifting restrictions on travel and remittances have come more demands for additional actions—not a reciprocal loosening of the regime’s grip on its citizens.

Lifting embargo gives no significant economic benefit to the Cuban people

Ray Walser 2008 (Senior Policy Analyst for Latin America at The Heritage Foundation) 21 March 2008, “The Cuba Embargo: Too Soon to Tear Down the Goal Posts,” FOX News <http://www.foxnews.com/story/0,2933,340330,00.html>

Lifting the embargo will not significantly benefit the prosperity and material well-being of the Cuban people. If the game were to end now, the chief beneficiaries would be the large business corporations with more capital than conscience.

DISADVANTAGES

1. Environmental damage

Link: If AFF plan succeeds, we’ll have more oil drilling in the Gulf of Mexico – if it doesn’t do that, it doesn’t solve.

Link: Blocking Cuban oil drilling is good for the environment

Mauricio Claver-Carone 2008 (a director of the U.S.-Cuba Democracy PAC in Washington and formerly served as an attorney with the U.S. Treasury) 25 July 2008,”How the Cuban embargo protects the environment,” NEW YORK TIMES <http://www.nytimes.com/2008/07/25/opinion/25iht-edcarone.1.14793496.html>

For many years the U.S. embargo has served to protect America's national security interests; today it is also serving to prevent Cuba's regime from drilling near U.S. shores. And that's good for the environment.

Link & Impact: Fossil fuel drilling threatens waterways and all life on earth. We need to reduce it, not increase it

Dr. David Suzuki & Dr. Faisal Moola 2010 (Suzuki – PhD zoology; former professor in the genetics department at the University of British Columbia . Moola – PhD; adjunct professor in the University of Toronto's Faculty of Forestry) Drilling in the Gulf of St. Lawrence is not worth the risk 11 Nov 2010 <http://www.davidsuzuki.org/blogs/science-matters/2010/11/drilling-in-the-gulf-of-st-lawrence-is-not-worth-the-risk/>

Our dependence on fossil fuels is not sustainable. In burning these fuels for energy, we cause pollution and greenhouse gases that contribute to climate change, which threatens the health of humans and all life on Earth. And exploration and drilling threatens the health of our waterways and all the life that depends on them. The sooner we reduce our reliance on fossil fuels, through energy conservation and by developing cleaner, renewable sources of energy, the better off we'll all be.

Link: BP 2010 Oil Spill lessons not learned – faulty equipment still active in the Gulf of Mexico in 2013

Bloomberg News 2013. “Are Faulty Bolts Threatening Global Offshore Drilling?” 7 Feb 2013 <http://gcaptain.com/us-halts-offshore-drilling-on-wells-with-faulty-bolts/>

Deep-water oil exploration has been disrupted from the Gulf of Mexico to Brazil by the discovery of faulty bolts used in safety equipment less than three years after the worst-ever U.S. maritime crude spill. Energy explorers such as Chevron Corp., Royal Dutch Shell Plc and Transocean Ltd. said they have been directed by U.S. regulators to suspend work aboard rigs that employ General Electric Co. devices connecting drilling tubes to safety gear and the seafloor. The equipment must be retrieved so defective bolts can be replaced, the U.S. Bureau of Safety and Environmental Enforcement said in an alert issued on Jan. 29.

Impact: Offshore drilling hurts the environment, beaches and tourism

Press TV 2011, Aug 25th 2011, PRESS TV (the first Iranian international news network. Global Tehran-based headquarters is staffed with Iranian and foreign media professionals. Press TV is extensively networked with bureaus located in the world's most strategic cities.), “China maritime authority prepared to sue ConocoPhillips over oil spills” <http://www.presstv.com/usdetail/195727.html>

Environmentalists say the top risk from drilling platforms is the wastewater they routinely discharge. Among others, this contains drilling fluids and heavy metals including mercury. According to the Committee Against Oil Exploration, a rig in the Gulf of Mexico rig dumps 90,000 tons of drilling fluid and metal cuttings over its lifetime. The contaminants accumulate in the marine food web and can affect the shoreline as well. The governor of North Carolina has said he is opposed to drilling off his state's coast because of concerns that waste from the platforms might contaminate local beaches and have a negative effect on the tourism industry. Some groups are also concerned that building drilling platforms can affect whale populations. In eastern Russia, a Shell-backed project to build the Sakhalin II drilling platform has been blamed for disturbing local grey whales.

2. Postpones Cuban reform

Link: AFF claims their plan will boost Cuba’s economy with oil revenue

Link: Cuba only reforms when they have no other choice (Aff gives them a lifeline – another choice besides reform). Right now they don’t have to reform because they have Venezuelan aid.

WALL STREET JOURNAL 2012. (Nicolas Casey, Journalist) 22 June 2012 “For Cuba, Chávez's Health Is a Vital Statistic <http://online.wsj.com/article/SB10001424052702303879604577412190274916840.html>

Few analysts think a departure of Mr. Chávez would lead to political revolt in Havana that would threaten the Castros' regime. But it might force Cuba to accelerate free-market reforms. The crisis of the 1990s forced Cuba to adopt limited free-market reforms to survive, including the first licenses for private restaurants. When times got better under Mr. Chávez, Fidel Castro rolled back the reforms. "If Chávez were to kick the bucket, then the impetus toward reform would probably return because there wouldn't be any other alternative," said Arch Ritter, an economist specializing in Cuba at Carleton University in Ottawa.

Link: Venezuelan politics are changing since Chavez died and Maduro took over – their aid to Cuba will run out

Michael Shifter 2013. (masters degree in sociology; President of the Inter-American Dialogue; Adjunct Professor of Latin American Studies at Georgetown University's School of Foreign Service.[1] He is a member of the Council on Foreign Relations ) 25 June 2013 “Comment: Did the Latin American left die with Chávez?” <http://www.sbs.com.au/news/article/1782210/Comment-Did-the-Latin-American-left-die-with-Chave>

The episode was another reminder of the privileged access and influence Cuba has enjoyed in Venezuelan politics since Chávez came to power. The island receives an estimated subsidy of $4 billion to $5 billion annually through discounted oil and has vigorously backed Maduro, who is close to the Cuban regime. In exchange for these subsidies, Cuba provides Venezuela with medical and security support and has effectively operated as a proxy for PDVSA, Venezuela's national oil company, to**conduct** financial transactions with little oversight. Still, though the governments of Cuba, along with those of ALBA members Nicaragua, Ecuador, and Bolivia, cheered when Maduro was officially declared the winner of the April 14 election, they can hardly be reassured by his shaky political position in Venezuela. They know that given the depth of the economic crisis, Venezuela's generous oil-backed aid cannot continue indefinitely.

Impact: Totalitarian government strengthened

José Azel 2008 (Institute for Cuban and Cuban-American Studies, Univ. of Miami) 3 Mar 2008, "Cuba: Snuff Out the Embargo (Pro Versus Con Debate)" <http://www.businessweek.com/debateroom/archives/2008/02/cube_snuff_out.html>

There are many negative unintended consequences to unilaterally lifting the embargo without meaningful changes in Cuba’s political and economic model. Most important of all, it would ensure the continuation of the current totalitarian regime by strengthening state enterprises that would be the main beneficiaries of currency inflows into business owned by the Cuban government.

3. Strengthens and prolongs the totalitarian regime

José Azel 2008 (Institute for Cuban and Cuban-American Studies, Univ. of Miami) 3 Mar 2008, "Cuba: Snuff Out the Embargo (Pro Versus Con Debate)" <http://www.businessweek.com/debateroom/archives/2008/02/cube_snuff_out.html>

There are many negative unintended consequences to unilaterally lifting the embargo without meaningful changes in Cuba’s political and economic model. Most important of all, it would ensure the continuation of the current totalitarian regime by strengthening state enterprises that would be the main beneficiaries of currency inflows into business owned by the Cuban government.

NEGATIVE: FISHING ITQs

NEGATIVE PHILOSOPHY

We can’t say fisheries management has “failed” so we need ITQs: We haven’t tried management yet

Mark J. Spalding 2013. ( President of The Ocean Foundation; J.D., Loyola Law School; Masters degree in Pacific International Affairs, former Director of the Environmental Law and Civil Society Program, and Editor of the Journal of Environment and Development, at the Graduate School of International Relations & Pacific Studies, Univ of Calif at San Diego) There are Many Tools for Effective Fisheries Management: Preventing unintended negative consequences of catch shares, 13 Mar 2013 <http://www.oceanfdn.org/blog/?wpfb_dl=7>

Dr. Callum Roberts, with the Environment Department of the University of York, United Kingdom states; “I think the economist Seth Macinko put it well when he said ‘Why are we turning to catch shares as a solution to management failure when we haven't really tried management yet!’” A more comprehensive management approach to over-fishing must include provisions to protect habitat, ensure the protection of the entire food web and multiple species dependencies, prevent monopolies and remain sensitive to fish-dependent communities.

DEFINITION

Definition: IFQ is a form of ITQ – ITQs are IFQs that you can re-sell

Impact: IFQ evidence applies to ITQs because ITQs are a form of IFQ

South Atlantic Fishery Management Council 2006. (a federal agency, one of eight regional fishery management councils in the United States) Dec 2006, IFQs/ITQs – An Overview <http://www.safmc.net/Portals/6/SocioEcon/IFQs/IFQfactsheet_eng.pdf>

An Individual Fishing Quota (IFQ) is commonly described as a fishery management program that allows an individual or entity the privilege to harvest a percentage of the Total Allowable Catch (TAC). For our purposes, TAC would likely refer to the commercial quota. An Individual Transferable Quota (ITQ) describes an IFQ program that allows individual quota to be *transferred* from one person or entity to another.

HARMS

2/3 of overfished species have bounced back in recent years – Status Quo conservation laws are effective

NATIONAL GEOGRAPHIC DAILY NEWS 2013. (journalist Brian Handwerk) 26 Mar 2013 “Once Decimated U.S. Fish Stocks Enjoy Big Bounce Back, [http://news.nationalgeographic.com/news/2013/03/130326-fish-stocks-rebound-fisheries-management/#](http://news.nationalgeographic.com/news/2013/03/130326-fish-stocks-rebound-fisheries-management/)

**Two-thirds of the closely monitored U.S. fish species once devastated by** overfishing **have bounced back in a big way thanks to management plans instituted 10 to 15 years ago, a new study says. And fish aren't the only ones celebrating. Recovering populations can mean more revenue and jobs for some fishermen—but unfortunately success hasn't been universal.** Authors of a new Natural Resources Defense Council report said the results prove that critically overfished species can be rebuilt, even from very low levels, when Mother Nature is given a chance to recover. That's good news in a world where rampant overfishing is a critical concern. "This demonstrates that when we trace the historic arch of these fisheries in which rebuilding requirements were put in place 15 years ago, we see real positive news. We see populations that were depleted or in decline turned around and rebuilt or well on their way to rebuilding," said principal author Brad Sewell. "It's not 100 percent. It's two-thirds, so it's not unbridled good news but it does show the effectiveness of a law that has had its share of controversy," he added.

Fish stocks are being rebuilt – we’re moving in the right direction

Erik Stokstad 2012. (journalist) SCIENCE INSIDER “Floundering? Hardly. U.S. Fisheries Continue to Improve” 14 May 2012 <http://news.sciencemag.org/scienceinsider/2012/05/floundering-hardly-us-fisheries.html>

The latest numbers on the status of fisheries in the United States, released today by the National Oceanic and Atmospheric Administration (NOAA), show continued progress toward ending overfishing. Six stocks that were previously overfished have been declared rebuilt—having reached a healthy population size—the biggest improvement since NOAA began issuing the reports in 1997. That raises the total number of rebuilt stocks to 27. "This is evidence that we are moving in the right direction and that sacrifices that fishermen have made are paying off," says Lee Crockett of the Pew Environment Group.

US fisheries have turned the corner on ending overfishing and fish stocks are rebuilding

Samuel D. Rauch 2012. (Acting Assistant Administrator for Fisheries at NOAA) National Oceanic and Atmospheric Administration, National Marine Fisheries Service NATIONAL MARINE FISHERIES SERVICE 2011 REPORT TO CONGRESS THE STATUS OF U.S. FISHERIES, published in May 2012 <http://www.nmfs.noaa.gov/sfa/statusoffisheries/2011/RTC/2011_RTC_Report.pdf>

As the nation reaches a historic milestone in 2012—with the full implementation of annual catch limits (ACLs) and accompanying accountability measures for all domestic stocks—it is fitting this report is equally historic in the progress it documents toward rebuilding our nation’s fisheries. In 2011, a record six stocks were determined to be rebuilt, with a decrease in the numbers of both overfished stocks and stocks experiencing overfishing. These results underscore the strength of our science-based management process, and clearly demonstrate we are actively turning the corner on ending overfishing and rebuilding our nation’s fisheries.

Significant measurable progress has been achieved in rebuilding US fisheries since 2000

National Oceanic and Atmospheric Administration, National Marine Fisheries Service 2012. NATIONAL MARINE FISHERIES SERVICE 2011 REPORT TO CONGRESS THE STATUS OF U.S. FISHERIES, published in May 2012 <http://www.nmfs.noaa.gov/sfa/statusoffisheries/2011/RTC/2011_RTC_Report.pdf> (brackets added)

NMFS [National Marine Fisheries Service] measures the sustainability of our Nation’s fisheries through the Fish Stock Sustainability Index (FSSI). The FSSI measures the performance of 230 key stocks, and the score increases as additional assessments are conducted, overfishing is ended, and stocks rebuild to the level that provides maximum sustainable yield. The FSSI was first reported in 2005, with an end-of-year score of 495.5. The value of the FSSI has been calculated back to 2000. Out of 920 possible points, the index increased from 357.5 in 2000 to 598.5 in 2011 (see Figure 3). The 67% increase in the FSSI in 11 years represents significant progress in sustainably managing our fisheries.

SOLVENCY

1. No stewardship / environmental conservation benefits

No support for the theory that IFQ “property rights” ensure good stewardship

Prof. Daniel W. Bromley and Dr. Seth Macinko 2007. (Bromley - Professor of Applied Economics, Univ. of Wisconsin-Madison. Macinko - PhD from Dept of Environmental Sci., Policy & Mgmt, Univ of Calif-Berkeley; Assistant Prof in Dept of Marine Affairs at Univ of Rhode Island) 31 Oct 2007, “Rethinking Fisheries Policy in Alaska: Options for the Future,” prepared at the request of the Alaska Dept of Fish & Game, [www.fishsec.org/downloads/1237996615\_49271.pdf](http://www.fishsec.org/downloads/1237996615_49271.pdf) (in context, “rationalization” refers to the privatization programs being tested in Alaskan fisheries, as opposed to the free-for-all open commons policy)

Rationalization experiments using IFQs have also been justified on the grounds that if those who fish have “property rights” (allegedly what the IFQ represents) they will then quite automatically become good stewards of the resource. There is no plausible support for this presumption. To believe a claim of stewardship – leaving fish in the water to grow and perhaps reproduce for the benfit of future stock enhancement – requires assurance on the part of this far-sighted steward that those fish (or their abundant progeny) will be there next season (or any other future season).

Stewardship has nothing to do with ownership

Prof. Daniel W. Bromley and Dr. Seth Macinko 2007. (Bromley - Professor of Applied Economics, Univ. of Wisconsin-Madison. Macinko - PhD from Dept of Environmental Sci., Policy & Mgmt, Univ of Calif-Berkeley; Assistant Prof in Dept of Marine Affairs at Univ of Rhode Island) 31 Oct 2007, “Rethinking Fisheries Policy in Alaska: Options for the Future,” prepared at the request of the Alaska Dept of Fish & Game, [www.fishsec.org/downloads/1237996615\_49271.pdf](http://www.fishsec.org/downloads/1237996615_49271.pdf)

The basic flaw in attributing stewardship to “owning IFQs” is that stewardship has nothing to do with ownership, and everything to do with attitudes and expectations. Both private owners and public owners exhibit varying degrees of stewardship toward nature. Some owners and government agencies are good stewards, some are not. There is no magic remedy in terms of promoting stewardship. The talk of ownership as a necessary precondition to stewardship is simply a diversion that deflects attention away from the very real distributional struggle involved when government entities endow some with public wealth and disenfranchise others.

No improvement in conservation behavior among fishers under ITQ schemes

Mark J. Spalding 2013. ( President of The Ocean Foundation; J.D., Loyola Law School; Masters degree in Pacific International Affairs, former Director of the Environmental Law and Civil Society Program, and Editor of the Journal of Environment and Development, at the Graduate School of International Relations & Pacific Studies, Univ of Calif at San Diego) There are Many Tools for Effective Fisheries Management: Preventing unintended negative consequences of catch shares, 13 Mar 2013 <http://www.oceanfdn.org/blog/?wpfb_dl=7> (brackets added)

Over the long term, it has also not been proven that fishers become better stewards—that they fish more carefully, deploy their gear more selectively, avoid damaging sensitive habitats, retrieve lost and tangled gear, or support science-based cuts in their allowed catch to build populations for the future solely by virtue of implementing CS/ITQ [catch share / individual transfer quota] schemes. In addition, fishers are pressured to pursue self-limiting conservation strategies because they are promised it will result in an increase in the amount of fish they can catch but there is no evidence that such behavior (or reward) necessarily follows, especially under economic duress.

Private ownership doesn’t prevent natural resource extinction

Prof. Daniel W. Bromley and Dr. Seth Macinko 2007. (Bromley - Professor of Applied Economics, Univ. of Wisconsin-Madison. Macinko - PhD from Dept of Environmental Sci., Policy & Mgmt, Univ of Calif-Berkeley; Assistant Prof in Dept of Marine Affairs at Univ of Rhode Island) 31 Oct 2007, “Rethinking Fisheries Policy in Alaska: Options for the Future,” prepared at the request of the Alaska Dept of Fish & Game, [www.fishsec.org/downloads/1237996615\_49271.pdf](http://www.fishsec.org/downloads/1237996615_49271.pdf)

But there remains a fundamental theoretical flaw in the idea that a sole owner will be a good steward. If a sole owner has a strong incentive to maximize annual income over a particular series of year (seasons), there is nothing in private ownership that will protect a natural resource being driven to extinction so that the proceeds of harvest can be spent or invested in some other activity. This well-known phenomenon has been clearly documented in the economics literature [Clark, 1973; Page, 1978; Smith, 1968].

2. More study needed. Before we can implement ITQs, we need to study how to reduce their negative consequences. Since the Status Quo is already reversing fisheries collapse, we don’t need to rush ITQs.

Mark J. Spalding 2013. ( President of The Ocean Foundation; J.D., Loyola Law School; Masters degree in Pacific International Affairs, former Director of the Environmental Law and Civil Society Program, and Editor of the Journal of Environment and Development, at the Graduate School of International Relations & Pacific Studies, Univ of Calif at San Diego) There are Many Tools for Effective Fisheries Management: Preventing unintended negative consequences of catch shares, 13 Mar 2013 <http://www.oceanfdn.org/blog/?wpfb_dl=7> (brackets added)

Before we can further implement CSs/ITQs we must define the rules to prevent unintended negative social, economic and environmental consequences, and what we do when they occur. Any economic incentives must be structured to avoid conditions that could trigger claims of "interference with economic benefit” (of individual quota owners) whenever habitat or species protections (or a reduction in the TAC) become a scientific necessity. We must also put in place monitoring and policy tools to be used in combination with CSs/ITQs to ensure the significant excess capacity we have in fishing boats and gear does not just shift to other fisheries and geographies. US federal fisheries management law emphasizes fairness, equity and consideration of community interests, so why wouldn't we at least consider how we might allocate fishing privileges and public resources within these priorities? It’s something to think about as fishery populations shift in response to temperature and chemistry changes in the ocean, and of course, as we open new, vulnerable, fisheries-rich areas like the Arctic to high risk oil and gas extraction activities. The most simplistic solution is unlikely to be the best. The path to achieving our sustainable fishery management goals requires step-by-step, thoughtful, multi-pronged approaches. Implementation of the first visionary federal fishery law of 1996 and its 2006 cousin have been slow and frustrating. But a dedicated coalition of organizations (and their funders) around the country hung in there. And substantial progress has been made in reducing overfishing in the United States. Many fisheries are in recovery and we need to use every tool to keep them that way. We want to make sure that we do not abandon our hope of ensuring that fishing-dependent communities have a stable economic, environmental, and socio-cultural future.

3. Fish don’t cooperate: ITQs are meaningless because fish move between international zones

Prof. Rebecca Bratspies 2009. (CPR Member Scholar; Associate Professor of Law, CUNY School of Law, New York) 10 July 2009, “Privatize the Seas? If Only Solving Overfishing Were so Easy” [www.progressivereform.org/CPRBlog.cfm?idBlog=63218838-F816-5CDF-B5A53CF9FF4402FB](http://www.progressivereform.org/CPRBlog.cfm?idBlog=63218838-F816-5CDF-B5A53CF9FF4402FB)

Fisheries present an unusual set of challenges that make it extremely difficult to have effective regulatory oversight. Regulators have clearly defined geographies of authority but fish do not cooperate by staying in one place. Many fisheries straddle Exclusive Economic Zones (EEZs – waters under the effective control of a coastal state) and the high seas (you may remember that Spain and Canada almost went to war over precisely this issue in the 1990s), rendering ITQs meaningless. The Alaskan Pollock fishery, for example, spans the so-called Bering Sea Donut Hole—a region of the high seas in an area otherwise within the EEZs of the United States, Canada and Russia. Other fisheries straddle the EEZs of more than one state, making decisions about TAC and catch share into international agreements.

4. No incentives. No incentive for conservation under IFQs: Someone else will catch the fish that is conserved

Prof. Daniel W. Bromley and Dr. Seth Macinko 2007. (Bromley - Professor of Applied Economics, Univ. of Wisconsin-Madison. Macinko - PhD from Dept of Environmental Sci., Policy & Mgmt, Univ of Calif-Berkeley; Assistant Prof in Dept of Marine Affairs at Univ of Rhode Island) 31 Oct 2007, “Rethinking Fisheries Policy in Alaska: Options for the Future,” prepared at the request of the Alaska Dept of Fish & Game, [www.fishsec.org/downloads/1237996615\_49271.pdf](http://www.fishsec.org/downloads/1237996615_49271.pdf)

It is impossible for IFQs automatically to instill far-sightedness on the part of any holder of an IFQ as long as there are other IFQ holders able to benefit from the forbearance of others. After all, what is to prevent others from taking the fish that one individual decides to leave in the water so that it can grow and reproduce? There is only one way to instill the sort of stewardship that IFQ proponents seem to have in mind – make a single fishing firm the sole owner of the entire stock. In this setting, the fishing firm that leaves fish in the water is assured that those fish (and their progeny) will be there in the future. This does not, of course, guarantee that the sole owner will be able to find those fish – or their more abundant progeny – next year.

5. No safety benefits. The alleged safety improvements of ITQs are already being achieved with Status Quo fisheries management regulations

Zeke Grader and Glen Spain. 2008. (Grader - Executive Director for the Pacific Coast Federation of Fishermen’s Associations. Spain - PCFFA’s Northwest Regional Director) THE PACIFIC COAST FEDERATION OF FISHERMEN'S ASSOCIATIONS, INDEPENDENCE LOST - Individual Quotas and Privatization May Be Deadly for Fishermen <http://www.pcffa.org/fn-jul08.htm>

Great claims have been made for both the conservation and safety benefits of ITQ/IFQs and similar assigned right quota systems, particularly by Environmental Defense, some of its foundation sponsors, and a few scientists. Its almost certainly true that, compared to the old-style “derby” type of come-one, come-all fishery management, an assigned quota system has at least the potential to both better conserve the resource and make fishing less risky. But are these claims true in real practice? Unfortunately, nearly all the legitimate scientific comparisons are between some specific (and often unique) ITQ system, and the old-style open derby fisheries. These are the extreme cases. There is far less evidence that a privatized quota system works any better than combinations of the more modern fishery management tools, such as limited weekly take or trip limits, staggered entry or limited entry systems. Today nearly all U.S. fisheries today have extensive time, trip, area and various gear limitations, bycatch “caps” and numerous maximum take provisions, including in some cases weekly harvest caps that help spread out the effort and accomplish many of the same goals that are also attributed to privatized quotas. In other words, the rather drastic step of privatization of what has always been a public resource may make little or no conservation or safety difference as compared to the currently available positive impacts of the numerous other but non-property driven) fishery management tools already used to limit impacts, conserve stocks and prevent accidents.

DISADVANTAGES

1. Unemployment.

Link: ITQs increase unemployment by consolidating fishing into just a few families and corporations. And no clear benefit to overall marine stewardship

Mark J. Spalding 2013. ( President of The Ocean Foundation; J.D., Loyola Law School; Masters degree in Pacific International Affairs, former Director of the Environmental Law and Civil Society Program, and Editor of the Journal of Environment and Development, at the Graduate School of International Relations & Pacific Studies, Univ of Calif at San Diego) There are Many Tools for Effective Fisheries Management: Preventing unintended negative consequences of catch shares, 13 Mar 2013 <http://www.oceanfdn.org/blog/?wpfb_dl=7>

As noted above, the ITQ schemes in New England have been far more controversial. Most of these schemes were imposed by the government, not developed by local fishers, and failed to incorporate appropriate scientific, environmental, technological and cultural concerns. While they have saved lives and made fishing safer, they have also resulted in severe unemployment in a region where few options exist, and where the fishing culture is highly entrenched. The region has seen a major consolidation of the fleet into the hands of a few families and corporations. And the impact on fish populations is very murky; while fish stocks have improved in some places, the ITQ schemes have also pushed fishing boats to exploit different locations and less valuable fish stocks. We have seen little proof that quotas result in better overall marine stewardship.

IFQ programs are designed to drive some fishermen out of business

Prof. Daniel W. Bromley and Dr. Seth Macinko 2007. (Bromley - Professor of Applied Economics, Univ. of Wisconsin-Madison. Macinko - PhD from Dept of Environmental Sci., Policy & Mgmt, Univ of Calif-Berkeley; Assistant Prof in Dept of Marine Affairs at Univ of Rhode Island) 31 Oct 2007, “Rethinking Fisheries Policy in Alaska: Options for the Future,” prepared at the request of the Alaska Dept of Fish & Game, [www.fishsec.org/downloads/1237996615\_49271.pdf](http://www.fishsec.org/downloads/1237996615_49271.pdf)

Consolidation is, therefore, not an unfortunate or unintended side-effect of rationalization. Consolidation is the reason why IFQ programs have been introduced. After all, the term “to rationalize” often means to bring more efficient procedures to bear on an industry. To ”rationalize” often means “to transform.” In fisheries, the transformation has been in terms of excluding the “less efficient” firms. Thus, consolidation cannot be a surprise [Grafton, 1996; Eythorsson, 1996]. It was also understood that consolidation would displace skippers, crew and processing workers. Consolidation was further understood to induce a change in the demand for fishery support services. However, the literature in fisheries economics has presented consolidation as a good thing – even for those who are excluded. It is confidently claimed that once these “inefficient” (low producing) participants are out of fishing they are then free to find work elsewhere –as carpenters, electricians, school teachers. Interestingly, it now seems that many in Alaska – allegedly liberated from a life of hard work and depressed incomes, and thus free to make more money elsewhere – are not as happy as some confident economists predicted they would be.

2. Reduced species protection. This happens in 4 ways:

1) Fishing in former conservation areas. New England experience shows that privatization leads to opening conservation areas where fish were formerly protected

Mark J. Spalding 2013. ( President of The Ocean Foundation; J.D., Loyola Law School; Masters degree in Pacific International Affairs, former Director of the Environmental Law and Civil Society Program, and Editor of the Journal of Environment and Development, at the Graduate School of International Relations & Pacific Studies, Univ of Calif at San Diego) There are Many Tools for Effective Fisheries Management: Preventing unintended negative consequences of catch shares, 13 Mar 2013 <http://www.oceanfdn.org/blog/?wpfb_dl=7>

Economic efficiency assumes that limited access to the resource creates a market for the “right” to fish and encourages fishing fleets to consolidate if catch shares can be transferred or sold. This in turn means fewer fishing boats putting less pressure on a fishery resource, so there will be more fish. In addition, management theoretically becomes easier due to fewer, larger players. In practice, however, scientifically-set catch limits are often challenged on the basis of economic adversity by the new more organized, politically powerful, and better financed interests. As a recent example, commercial fishermen are claiming that a 2010 catch share scheme made conservation areas obsolete, and called on the New England Fishery Management Council to open such conservation areas for fishing.

2) Promoting more destructive fishing methods

3) Limits ability to create protected areas or manage ecosystems

4) Political pressure blocks downward adjustment of Total Allowable Catch

Mark J. Spalding 2013. ( President of The Ocean Foundation; J.D., Loyola Law School; Masters degree in Pacific International Affairs, former Director of the Environmental Law and Civil Society Program, and Editor of the Journal of Environment and Development, at the Graduate School of International Relations & Pacific Studies, Univ of Calif at San Diego) There are Many Tools for Effective Fisheries Management: Preventing unintended negative consequences of catch shares, 13 Mar 2013 <http://www.oceanfdn.org/blog/?wpfb_dl=7>

Real problems such as by-catch and destructive fishing methods, or single species management, are not addressed by CSs/ITQs. As Rust noted in her article, catch share schemes have disproportionately benefited trawler-based fishers over those who rely on traps or more environmentally sustainable hook and line practices. Private ownership of fishery resources may additionally limit managers’ ability to introduce protected areas or establish other ecosystem based management (EBM) measures as required by federal law. New participants may also be denied access into a recovering fishery. And, once issued, downward adjustment of Total Allowable Catch based on scientific measures is next to impossible due to the interests of the shareholders.

**Impact: Turn AFF’s “fisheries collapse” harms – there’s less protection for fish species if you vote Affirmative.**

3. Market Monopolies.

Link: Privatized catch shares lead to monopoly conditions and shutting out competition

Mark J. Spalding 2013. ( President of The Ocean Foundation; J.D., Loyola Law School; Masters degree in Pacific International Affairs, former Director of the Environmental Law and Civil Society Program, and Editor of the Journal of Environment and Development, at the Graduate School of International Relations & Pacific Studies, Univ of Calif at San Diego) There are Many Tools for Effective Fisheries Management: Preventing unintended negative consequences of catch shares, 13 Mar 2013 <http://www.oceanfdn.org/blog/?wpfb_dl=7>

Another touted benefit of catch shares is the protection it offers fishermen and their communities against the instability of the markets. However, factors such as changes in markets and consumer demand (driven by education efforts such as the “fishbuying cards” from the Monterey Aquarium and better labeling by stores like Whole Foods), and the vulnerability of community-based, small-boat fleets to preemption by bigger competitors from other jurisdictions, pose serious threats to the retention of the small-boat, owner-operator character of a given fishery if the goal is primarily either economic or management efficiency. A prime example is the halibut fishery in the Pacific Northwest, where families who were “blessed” to receive quotas have been able to consolidate and reduce the number of competitive vessels , become multi-millionaires themselves (causing friction with their now-unemployed neighbors), choose where they land their fish and where those fish are processed, and control other ancillary services. Essentially, the government has created a new quasi-monopoly with huge barriers to entry for potential competitors.

Impact: Reduced competition reduces efficiency, lowers wages, raises prices on fish

Prof. Daniel W. Bromley and Dr. Seth Macinko 2007. (Bromley - Professor of Applied Economics, Univ. of Wisconsin-Madison. Macinko - PhD from Dept of Environmental Sci., Policy & Mgmt, Univ of Calif-Berkeley; Assistant Prof in Dept of Marine Affairs at Univ of Rhode Island) 31 Oct 2007, “Rethinking Fisheries Policy in Alaska: Options for the Future,” prepared at the request of the Alaska Dept of Fish & Game, [www.fishsec.org/downloads/1237996615\_49271.pdf](http://www.fishsec.org/downloads/1237996615_49271.pdf)

A market economy demands – indeed relies upon – competitive entry for the simple reason that this opportunity for others to enter and compete is the driving force that keeps all owners alert, and therefore all firms efficient. A closed class of firms induces managerial lassitude, offers some scope for putting downward pressure on wages and salaries paid to employees, and offers the chance to put upward pressure on the prices of product delivered to the next step in the commodity chain.

Impact: Consolidation hurts communities and consumers

Mark J. Spalding 2013. ( President of The Ocean Foundation; J.D., Loyola Law School; Masters degree in Pacific International Affairs, former Director of the Environmental Law and Civil Society Program, and Editor of the Journal of Environment and Development, at the Graduate School of International Relations & Pacific Studies, Univ of Calif at San Diego) There are Many Tools for Effective Fisheries Management: Preventing unintended negative consequences of catch shares, 13 Mar 2013 <http://www.oceanfdn.org/blog/?wpfb_dl=7> (Spalding refers in context to “opponents…claim”, and in the context of the article, he is in agreement with what these opponents are claiming)

Opponents of catch shares claim that they merely privatize public resources, which is often incredibly destructive for communities due to consolidation, displacement, social disruption, and loss of community. These constraints impact not only the fishers themselves, but all areas of onshore fishing jobs, such as processing plants, boatyards, insurers, equipment sellers, transportation providers, and so on. From a purely economic standpoint, they promote limited access and other impediments to a free market, which benefits neither communities nor consumers. Contrary to economists’ expectations, they have never led the “winners” to compensate the “losers.”

Impact: Consolidation increases pressure and decimates fish stocks

Prof. Rebecca Bratspies 2009. (CPR Member Scholar; Associate Professor of Law, CUNY School of Law, New York) 10 July 2009, “Privatize the Seas? If Only Solving Overfishing Were so Easy” [www.progressivereform.org/CPRBlog.cfm?idBlog=63218838-F816-5CDF-B5A53CF9FF4402FB](http://www.progressivereform.org/CPRBlog.cfm?idBlog=63218838-F816-5CDF-B5A53CF9FF4402FB)

There are simply too many boats chasing too few fish. The argument that ITQs will result in lower fishing pressure depends heavily on the assumption that as the industry consolidates in the hands of “efficient producers,” those producers will voluntarily retire a portion of their shares. This assumption of producer self-regulation is entirely speculative, and to my mind unlikely. The recent financial crisis is enough to give anyone pause about the ability of markets to self-regulate. Instead, we are likely to see near-monopoly catch share holders seeking to bend the TAC calculation to their short-term economic interests. This will happen against a backdrop of technical advances that facilitate fishing pressures undreamt of in the past, with immense floating fish processing factories decimating entire fish stocks in one go. It is hard to see how creating a market for trading catch shares will solve this problem.

4. High-grading and discarding. “High-grading” means throwing away a small fish you caught already in favor of a bigger one of the same species you caught later, so that you stay within your quota for total fish caught.

Link: IFQ’s promote bad behavior like high-grading and discarding

Prof. Daniel W. Bromley and Dr. Seth Macinko 2007. (Bromley - Professor of Applied Economics, Univ. of Wisconsin-Madison. Macinko - PhD from Dept of Environmental Sci., Policy & Mgmt, Univ of Calif-Berkeley; Assistant Prof in Dept of Marine Affairs at Univ of Rhode Island) 31 Oct 2007, “Rethinking Fisheries Policy in Alaska: Options for the Future,” prepared at the request of the Alaska Dept of Fish & Game, [www.fishsec.org/downloads/1237996615\_49271.pdf](http://www.fishsec.org/downloads/1237996615_49271.pdf)

High grading and discarding, in which lower-valued (perhaps smaller) fish are thrown back, dead or alive, is an important problem in IFQ programs. Recall that IFQ programs do not alter an objective of harvesters – to make sure that their quotas are filled with the most valuable fish available at the lowest possible outlay of time and money. This central fact renders certain durable behaviors detrimental to conservation [Alverson, Freeberg, Murawski, and Pope, 1994]. Indeed, the evidence suggests that incentives to discard or high grade are quite high in IFQ programs [Vestergaard, 1996]. This means that the management agency will be obliged to increase its budget for monitoring and enforcement – thus undermining one of the major assertions about the benefits of IFQ fisheries. The danger here, again, is unrecorded bycatch [Baulch and Pascoe, 1992].

Example: High-grading and discarding went up in the Pollock and Crab fisheries

Prof. Daniel W. Bromley and Dr. Seth Macinko 2007. (Bromley - Professor of Applied Economics, Univ. of Wisconsin-Madison. Macinko - PhD from Dept of Environmental Sci., Policy & Mgmt, Univ of Calif-Berkeley; Assistant Prof in Dept of Marine Affairs at Univ of Rhode Island) 31 Oct 2007, “Rethinking Fisheries Policy in Alaska: Options for the Future,” prepared at the request of the Alaska Dept of Fish & Game, [www.fishsec.org/downloads/1237996615\_49271.pdf](http://www.fishsec.org/downloads/1237996615_49271.pdf) (in context, “rationalization” refers to the privatization programs being tested in Alaskan fisheries, as opposed to the free-for-all open commons policy)

Rationalization of the pollock fleet initially resulted in decreased bycatch through cooperative behavior and significant improvements in product utilization. However, it is our understanding that the Pollock fleet has recently produced record levels of salmon bycatch. Moreover, high grading and associated discarding has apparently increased significantly in the rationalized crab fisheries, largely due to the incentive created by the coupling of market preferences with the more relaxed pace of the rationalized fishery.

Impact: These turn the AFF claims that IFQs promote conservation of fisheries.

5. Bycatch. (This means: incidentally catching some other species you weren’t fishing for, and throwing these dead fish back). ITQs make bycatch worse, leading to more fish thrown away

Impact: Endangered species die – reverses AFF’s conservation advantages

Prof. Rebecca Bratspies 2009. (CPR Member Scholar; Associate Professor of Law, CUNY School of Law, New York) 10 July 2009, “Privatize the Seas? If Only Solving Overfishing Were so Easy” [www.progressivereform.org/CPRBlog.cfm?idBlog=63218838-F816-5CDF-B5A53CF9FF4402FB](http://www.progressivereform.org/CPRBlog.cfm?idBlog=63218838-F816-5CDF-B5A53CF9FF4402FB)

This is not even to mention bycatch—the dirty little secret of the fishing industry. At least half a million endangered marine mammals and an unknown number of endangered sea turtles die every year as bycatch as well. By most estimates, at least 40% of every catch is discarded as bycatch—fish other than the target species. ITQs are likely to exacerbate this problem because it creates a powerful incentive for fishing boats to discard not only unwanted or uncommercial fish, but also any fish potentially subject to someone else’s share.

6. Financial speculators

Link: Quota shares are vulnerable to financial speculation, and a few speculators will control and then crash the market

Zeke Grader and Glen Spain. 2008. (Grader - Executive Director for the Pacific Coast Federation of Fishermen’s Associations. Spain - PCFFA’s Northwest Regional Director) THE PACIFIC COAST FEDERATION OF FISHERMEN'S ASSOCIATIONS, INDEPENDENCE LOST - Individual Quotas and Privatization May Be Deadly for Fishermen <http://www.pcffa.org/fn-jul08.htm>

Once these quota shares are in the hands of non-fishermen, they are vulnerable to financial speculation. When this happens in any economic system, a few well-heeled speculators can jack up the market demand so high that it is more valuable to their holders to sell those shares than to keep them. This causes a rush to the door that can quickly escalate from a trickle to a flood.

Impact: Resource depletion and bankruptcy

Zeke Grader and Glen Spain. 2008. (Grader - Executive Director for the Pacific Coast Federation of Fishermen’s Associations. Spain - PCFFA’s Northwest Regional Director) THE PACIFIC COAST FEDERATION OF FISHERMEN'S ASSOCIATIONS, INDEPENDENCE LOST - Individual Quotas and Privatization May Be Deadly for Fishermen <http://www.pcffa.org/fn-jul08.htm>

A good analogy of how this could work against the fishing industry comes from the west coast timber industry example of the MAXXAM company takeover more than 20 years ago of a small timber company in northern California called Pacific Lumber Company. For generations this family-owned timber company was running a sustainable timber operation, harvesting mostly old-growth redwoods, but cutting only at or less than the annual forest growth rate. But then the speculators swooped down on them. Financing a hostile corporate takeover entirely through high interest “junk bonds,” the MAXXAM holding company took over control of the Pacific Lumber Company, pledging the “assets of the company” (i.e., all its old-growth forests) as security on these junk bonds. But just as soon as it acquired the company, MAXXAM ramped up the timber harvest to levels that made it very clear they were determined to liquidate the entire old-growth forest in a few decades. More than 20 years later, this fight is still raging. Now in the bankruptcy courts, much of that original forest has been clearcut to pay MAXXAM’s junk bond debts, and most of its employees are long gone. Don’t think this sad tale of junk bond-financed corporate raiders and speculators could not be just as easily applied to the fishing industry. The more freely transferable these fishery quota shares are, the easier pickings they would be for financial speculators and corporate raiders.

NEGATIVE: HYDROKINETIC ENERGY

Tyler Sarna contributed some of the evidence for this brief

HARMS

Plant life is flourishing around the globe due to higher CO2 levels

American Geophysical Union press release 2013. (nonprofit organization of geophysicists, consisting of over 61,000 members from over 146 countries) 31 May 2013 **Elevated carbon dioxide making arid regions greener** <http://wattsupwiththat.com/2013/05/31/agu-says-co2-is-plant-food/>

Scientists have long suspected that a flourishing of green foliage around the globe, observed since the early 1980s in satellite data, springs at least in part from the increasing concentration of carbon dioxide in Earth’s atmosphere. Now, a study of arid regions around the globe finds that a carbon dioxide “fertilization effect” has, indeed, caused a gradual greening from 1982 to 2010.

CO2 is good for plants, animals and humans

Dr. Arthur B. Robinson, Dr. Noah E. Robinson, Dr. Willie Soon 2007. (Arthur – PhD in biochemistry from Univ of Calif-San Diego; president and research professor of the Oregon Institute of Science and Medicine. Noah – PhD; professor of chemistry at Oregon Institute of Science & Medicine. Soon - Ph.D., Aerospace Engineering, Univ of Southern California; physicist at the Harvard-Smithsonian Center for Astrophysics.) Environmental Effects of Increased Atmospheric Carbon Dioxide, Oregon Institute of Science and Medicine, JOURNAL OF AMERICAN PHYSICIANS AND SURGEONS, Vol. 12 <http://www.oism.org/pproject/GWReview_OISM600.pdf>

Human use of coal, oil, and natural gas has not harmfully warmed the Earth, and the extrapolation of current trends shows that it will not do so in the foreseeable future. The CO2 produced does, however, accelerate the growth rates of plants and also permits plants to grow in drier regions. Animal life, which depends upon plants, also flourishes, and the diversity of plant and animal life is increased. Human activities are producing part of the rise in CO2 in the atmosphere. Mankind is moving the carbon in coal, oil, and natural gas from below ground to the atmosphere, where it is available for conversion into living things. We are living in an increasingly lush environment of plants and animals as a result of this CO2 increase. Our children will therefore enjoy an Earth with far more plant and animal life than that with which we now are blessed.

CO2 doesn’t cause warming – no reason to worry about it

Dr. Arthur B. Robinson, Dr. Noah E. Robinson, Dr. Willie Soon 2007. (Arthur – PhD in biochemistry from Univ of Calif-San Diego; president and research professor of the Oregon Institute of Science and Medicine. Noah – PhD; professor of chemistry at Oregon Institute of Science & Medicine. Soon - Ph.D., Aerospace Engineering, Univ of Southern California; physicist at the Harvard-Smithsonian Center for Astrophysics.) Environmental Effects of Increased Atmospheric Carbon Dioxide, Oregon Institute of Science and Medicine, JOURNAL OF AMERICAN PHYSICIANS AND SURGEONS, Vol. 12 <http://www.oism.org/pproject/GWReview_OISM600.pdf>

There are no experimental data to support the hypothesis that increases in human hydrocarbon use or in atmospheric carbon dioxide and other green house gases are causing or can be expected to cause unfavorable changes in global temperatures, weather, or landscape. There is no reason to limit human production of CO2, CH4, and other minor greenhouse gases as has been proposed (82,83,97,123).

Environmental warming is good

Dr. Arthur B. Robinson, Dr. Noah E. Robinson, Dr. Willie Soon 2007. (Arthur – PhD in biochemistry from Univ of Calif-San Diego; president and research professor of the Oregon Institute of Science and Medicine. Noah – PhD; professor of chemistry at Oregon Institute of Science & Medicine. Soon - Ph.D., Aerospace Engineering, Univ of Southern California; physicist at the Harvard-Smithsonian Center for Astrophysics.) Environmental Effects of Increased Atmospheric Carbon Dioxide, Oregon Institute of Science and Medicine, JOURNAL OF AMERICAN PHYSICIANS AND SURGEONS, Vol. 12 <http://www.oism.org/pproject/GWReview_OISM600.pdf>

We also need not worry about environmental calamities even if the current natural warming trend continues. The Earth has been much warmer during the past 3,000 years without catastrophic effects. Warmer weather extends growing seasons and generally improves the habitability of colder regions.

Warming temperatures are part of a natural cycle that started before the industrial age, and warming does not cause any disasters

Dr. Arthur B. Robinson, Dr. Noah E. Robinson, Dr. Willie Soon 2007. (Arthur – PhD in biochemistry from Univ of Calif-San Diego; president and research professor of the Oregon Institute of Science and Medicine. Noah – PhD; professor of chemistry at Oregon Institute of Science & Medicine. Soon - Ph.D., Aerospace Engineering, Univ of Southern California; physicist at the Harvard-Smithsonian Center for Astrophysics.) Environmental Effects of Increased Atmospheric Carbon Dioxide, Oregon Institute of Science and Medicine, JOURNAL OF AMERICAN PHYSICIANS AND SURGEONS, Vol. 12 <http://www.oism.org/pproject/GWReview_OISM600.pdf>

Atmospheric and surface temperatures have been recovering from an unusually cold period. During the time between 200 and 500 years ago, the Earth was experiencing the “Little Ice Age.” It had descended into this relatively cool period from a warm interval about 1,000 years ago known as the “Medieval Climate Optimum.” This is shown in Figure 1 for the Sargasso Sea. During the Medieval Climate Optimum, temperatures were warm enough to al low the colonization of Greenland. These colonies were abandoned after the onset of colder temperatures. For the past 200 to 300 years, Earth temperatures have been grad u ally recovering (26). Sargasso Sea temperatures are now approximately equal to the average for the previous 3,000 years. The historical record does not contain any report of “global warming” catastrophes, even though temperatures have been higher than they are now during much of the last three millennia.

Warming has ended. The climate change models predicting more warming have been discredited

John Casey 2013. (former White House advisor, NASA headquarters consultant and President of the Space and Science Research Association). 24 June 2013. “Letter to Academia” <http://www.spaceandscience.net/sitebuildercontent/sitebuilderfiles/ssrclettertoacademiajune242013.pdf>

You may already be aware of the fact that global warming no longer exists and that there has been no effective growth in the Earth’s temperatures for roughly sixteen years. It is a fundamental fact that global warming, euphemistically called “climate change” by our government, has ended. In addition, it is important to understand that the Earth’s oceans and atmosphere have been in a long term declining mode for ten and seven years, respectively. This real vs. politically correct climate status was not permitted under the GHG theory and the numerous global circulation and global climate models (GCM) that have been developed at the UN and elsewhere over the past three decades. Basically, these GCM, reliant on the flawed GHG theory, just don’t work despite the billions of dollars that have been expended on research in this field. This sad commentary on the validity of these GCM has recently been admitted by some of the leaders of the GHG theory movement. This massive failure of the GHG theory and related climate models have of course been thoroughly exposed via the “Climategate” affair and the many detailed arguments offered to counter the GHG theory by other leading researchers.

Global cooling is coming

John Casey 2013. (former White House advisor, NASA headquarters consultant and President of the Space and Science Research Association). 24 June 2013. “Letter to Academia” <http://www.spaceandscience.net/sitebuildercontent/sitebuilderfiles/ssrclettertoacademiajune242013.pdf>

Regardless of ones views on the causes of climate change, be assured that the threat we face over the next two decades is serious. In the most recent edition of the GCSR, twenty of the twenty-four evaluated climate parameters showed global cooling was now the dominant trend. We have made the outcome of the next cold era as clear and unmistakable as possible in the report: “It should be emphasized that unless a significant unexpected and rapid change in the present declining ocean and atmosphere temperature trends occurs, there are only two climate scenarios that appear likely at this time over the next forty years. Each scenario results in a new cold climate era. One would be a Dalton-class cold era with two hundred year cold weather records being set and the other being a Maunder- class cold era with four hundred year cold weather records.

INHERENCY

Federal hydrokinetic regulatory jurisdictional disputes and cooperation on NEPA were resolved in 2009

RENEWABLE ENERGY & DEMAND-SIDE MANAGEMENT COMMITTEE 2010. (an organization of the Energy Bar Association, which is a non-profit voluntary association of attorneys, non-attorney professionals, and students, whose mission is to promote the professional excellence and ethical integrity of its members in the practice, administration, and development of energy laws, regulations and policies. The article cited here was written by: Contributing Co-Editors – Jeffery S. Dennis and Florence K.S. Davis; Contributors – Tom Campbell and Alana Hake; Richard A. Heinemann; Abraham Silverman and Andrew McLain; O. Julia Weller; Erin M. Anderson; Elizabeth N. Leaderman; and Emile Buzaid.) ENERGY LAW JOURNAL, REPORT OF THE RENEWABLE ENERGY & DEMAND-SIDE MANAGEMENT COMMITTEE <http://www.felj.org/docs/elj311/25-287-RenewableEnergyandDemandSideManagementCommitteeReport-031710.pdf> (brackets added)

For several years, the conflict between the FERC [Federal Energy Regulatory Commission] and the MMS [Minerals Management Service] resulted in delay and uncertainty for developers of renewable energy project on the OCS [outer continental shelf]. In 2009, however, the FERC and the MMS entered into a MOU [memorandum of understanding], which resolved the agencies’ principal jurisdictional differences. The MOU was executed on April 9, 2009 by FERC Chairman Jon Wellinghoff and Interior Secretary Ken Salazar, and envisions complementary roles for the FERC and the MMS in the regulation of hydrokinetic projects. The MOU established that FERC will issue licenses under the Part I of the FPA and that MMS will issue “leases, easements, and rights-of-way” under the OCSLA for hydrokinetic projects located on the OCS. The FERC and MMS agreed to coordinate “to ensure that hydrokinetic projects meet the public interest”, and to cooperate in each other’s respective National Environmental Policy Act review obligations.

The new Memorandum of Understanding has resolved the federal regulatory uncertainty

RENEWABLE ENERGY & DEMAND-SIDE MANAGEMENT COMMITTEE 2010. (an organization of the Energy Bar Association, which is a non-profit voluntary association of attorneys, non-attorney professionals, and students, whose mission is to promote the professional excellence and ethical integrity of its members in the practice, administration, and development of energy laws, regulations and policies. The article cited here was written by: Contributing Co-Editors – Jeffery S. Dennis and Florence K.S. Davis; Contributors – Tom Campbell and Alana Hake; Richard A. Heinemann; Abraham Silverman and Andrew McLain; O. Julia Weller; Erin M. Anderson; Elizabeth N. Leaderman; and Emile Buzaid.) ENERGY LAW JOURNAL, REPORT OF THE RENEWABLE ENERGY & DEMAND-SIDE MANAGEMENT COMMITTEE <http://www.felj.org/docs/elj311/25-287-RenewableEnergyandDemandSideManagementCommitteeReport-031710.pdf>

In agreeing to the MOU, the FERC and the MMS resolved the uncertainty that had previously obstructed development of hydrokinetic projects on the OCS. While questions still remain in the wake of the MOU, the signing of this agreement allowed MMS to finalize its rulemaking governing renewable energy development on the OCS, and allowed for the FERC to move forward with its processes, as discussed below.

FERC (Federal Energy Regulatory Commission) is reducing regulatory burdens

Jon Wellinghoff, James Pederson, and David L. Morenoff 2008. (Wellinghoff is a Commissioner of the Federal Energy Regulatory Commission. He received a B.S. degree from the University of Nevada, Reno; an M.A.T. degree from Howard University; and a J.D. degree from Antioch School of Law. James Pederson is a Legal and Policy Advisor to Commissioner Wellinghoff. He received a B.A. degree from the University of Virginia and a J.D. degree from University of Baltimore Law School. Morenoff is a Legal and Policy Advisor to Commissioner Wellinghoff; J.D. from Harvard Law School.) ENERGY LAW JOURNAL, Vol 29 “FACILITATING HYDROKINETIC ENERGY DEVELOPMENT THROUGH REGULATORY INNOVATION” <http://www.oceanrenewable.com/wp-content/uploads/2009/01/ferchydrokinetic.pdf>

The FERC is responding to the need for innovative regulatory processes to accommodate the nascent status of the hydrokinetic energy industry by introducing greater flexibility into its rules and policies. The adjustments the FERC has made to its regulatory processes have evolved over time and are likely to continue to evolve as the FERC identifies further challenges.

1. Test Projects

The FERC’s first attempt to reduce the regulatory barriers to hydrokinetic energy development involved a finding that under limited circumstances, experimental hydroelectric facilities may be tested without the need for a FERC-issued license. In 2002, the FERC granted Verdant Power, LLC (Verdant) a preliminary permit to study a proposed hydrokinetic project consisting of 494 twenty-one kilowatt turbine generator units (a total of ten MW) to be located below the water surface on the East River, off Roosevelt Island, in Queens County, New York, as well as power control and interconnection facilities to be located on the island (Roosevelt Island Project).

Obama established a Council to build marine spatial plans for more efficient hydrokinetic project licensing. Amanda Righi, who advocates hydrokinetic energy, admitted in 2011:

Amanda Righi 2011. (J.D. candidate, University of Washington School of Law, Class of 2012 ) WASHINGTON JOURNAL OF ENVIRONMENTAL LAW & POLICY. “ROUGH SEAS FOR RENEWABLE ENERGY: ADDRESSING REGULATORY OVERLAP FOR HYDROKINETIC PROJECTS ON THE OUTER CONTINENTAL SHELF » <http://digital.law.washington.edu/dspace-law/bitstream/handle/1773.1/1044/1WJELP079.pdf?sequence=4>

At the federal level, President Obama established the National Ocean Council and a process for development of coastal and marine spatial plans that build upon existing state and regional processes. This Executive Order adopts Interagency Ocean Policy Task Force recommendations and directs the National Ocean Council to establish marine spatial plans for the nine established regions by 2015. When completed, the marine spatial plan will provide agencies and project developers with the information necessary to site and license hydrokinetic projects more effectively and efficiently. Agencies and developers will have baseline information on each site and will have priority sites already identified.

States have hydrokinetic spatial planning. Amanda Righi, who advocates the affirmative plan, admitted in 2011:

Amanda Righi 2011. (J.D. candidate, University of Washington School of Law, Class of 2012 ) WASHINGTON JOURNAL OF ENVIRONMENTAL LAW & POLICY. “ROUGH SEAS FOR RENEWABLE ENERGY: ADDRESSING REGULATORY OVERLAP FOR HYDROKINETIC PROJECTS ON THE OUTER CONTINENTAL SHELF » <http://digital.law.washington.edu/dspace-law/bitstream/handle/1773.1/1044/1WJELP079.pdf?sequence=4>

In the absence of marine spatial planning efforts at the federal level, many state and regional bodies have begun to map their coastal zones. In 2005, Washington established the Washington State Ocean Policy Work Group to summarize the value of ocean resources to the state economy and quality of life and provide recommendations for the management and improvement of these resources. This group began marine spatial planning efforts after the passage of the Washington State Marine Spatial Planning Bill in March 2010. Concurrent with state-level efforts, Washington, Oregon and California formed the West Coast Governors Agreement on Ocean Health in 2006 to address the recommendations of the U.S. Commission on Ocean Policy262 and the Pew Center. This agreement commits the states to collaboratively address coastal waters, beaches and habitats, ecosystem-based management, offshore development, ocean education and literacy, increased scientific monitoring and research, and sustainable economic development.

Federal government has entered agreements with the states to clarify jurisdiction

RENEWABLE ENERGY & DEMAND-SIDE MANAGEMENT COMMITTEE 2010. (an organization of the Energy Bar Association, which is a non-profit voluntary association of attorneys, non-attorney professionals, and students, whose mission is to promote the professional excellence and ethical integrity of its members in the practice, administration, and development of energy laws, regulations and policies. The article cited here was written by: Contributing Co-Editors – Jeffery S. Dennis and Florence K.S. Davis; Contributors – Tom Campbell and Alana Hake; Richard A. Heinemann; Abraham Silverman and Andrew McLain; O. Julia Weller; Erin M. Anderson; Elizabeth N. Leaderman; and Emile Buzaid.) ENERGY LAW JOURNAL, REPORT OF THE RENEWABLE ENERGY & DEMAND-SIDE MANAGEMENT COMMITTEE <http://www.felj.org/docs/elj311/25-287-RenewableEnergyandDemandSideManagementCommitteeReport-031710.pdf> (brackets added)

Contemporaneous with executing the MOU [memorandum of understanding] with the MMS [Minerals Management Service] related to hydrokinetic projects on the federal waters of the OCS [outer continental shelf], discussed above, the FERC [Federal Energy Regulatory Commission] entered into similar framework agreements with Maine, Oregon, and Washington related to hydrokinetic projects in state territorial waters. These largely identical agreements establish that the FERC and the signatory states will, on a case-by-case basis, share relevant information, collaborate on schedules, inform one another as to permitting activities, and generally cooperate in each other’s respective permitting activities. Similar to the MOU with the MMS, these agreements further the development of the regulatory process for hydrokinetic projects.

SOLVENCY

Technology isn’t ready yet. Todd Griset, who advocates the affirmative plan, admitted in 2010:

Todd J. Griset 2010. (J.D., attorney with Preti Flaherty’s Energy and Telecommunications Group) HARNESSING THE OCEAN’S POWER: OPPORTUNITIES IN RENEWABLE OCEAN ENERGY RESOURCES , OCEAN AND COASTAL LAW JOURNAL <http://mainelaw.maine.edu/academics/oclj/pdf/vol16_2/vol16_oclj_395.pdf>

Whether renewable ocean energy development will occur in U.S. waters on a commercial scale remains to be seen. The potential environmental impact of individual units remains largely unknown, let alone the impacts of build-out and development on a larger scale. The slate of technologies available for extracting usable energy from the sea is promising, but most—and particularly those with the greatest potential—remain in an immature state.

Let’s wait and see: They’re just now beginning tests in real world conditions

U.S. Department of Energy 2011. “Water Power for a Clean Energy Future” June 2011 <http://www1.eere.energy.gov/water/pdfs/51315.pdf>

The Water Power Program supports the development and testing of various marine and hydrokinetic systems and components, from proof-of-concept studies to full-scale demonstration projects. In 2010, the program awarded $37 million for the research and development (R&D) of devices, including wave power buoys, tidal power turbines, oscillating water column wave energy converters, river-instream turbines, and ocean thermal energy conversion components. The program also develops tools and models that support the design, development, and optimization of marine and hydrokinetic devices. These projects will help maximize efficient electricity generation at marine and hydrokinetic power plants while mitigating potential environmental effects. In addition, the program has established university-led National Marine Renewable Energy Centers in the Northwest, Florida, and Hawaii to facilitate in-water testing of marine and hydrokinetic devices and components. These centers will have open-water test berths as well as laboratory facilities that will enable researchers to investigate marine and hydrokinetic devices under real-world conditions.

States must approve offshore energy, even when sited in federal waters (no AFF fiat power over the States in this resolution)

Todd J. Griset 2010. (J.D., attorney with Preti Flaherty’s Energy and Telecommunications Group) HARNESSING THE OCEAN’S POWER: OPPORTUNITIES IN RENEWABLE OCEAN ENERGY RESOURCES , OCEAN AND COASTAL LAW JOURNAL <http://mainelaw.maine.edu/academics/oclj/pdf/vol16_2/vol16_oclj_395.pdf>

Furthermore, electricity generated by an offshore project—even one sited in federal waters—must generally be transmitted to shore for distribution and consumption. In practical terms, this requires crossing state-jurisdictional coastal zones. This creates a significant role for states in reviewing and permitting the transmission cables needed to carry the power produced at sea to consumers on land, both in leasing subsurface rights for laying cable and in reviewing the utility aspects of the proposed transmission infrastructure. Even where a state’s authority is limited to reviewing the onshore transmission development associated with an offshore energy project, in practice, states’ evaluations of these transmission aspects are often informed by the understanding that the transmission and generation components are each integral to the fate of the project.

States play large role in the success of ocean energy

Todd J. Griset 2010. (J.D., attorney with Preti Flaherty’s Energy and Telecommunications Group) HARNESSING THE OCEAN’S POWER: OPPORTUNITIES IN RENEWABLE OCEAN ENERGY RESOURCES , OCEAN AND COASTAL LAW JOURNAL <http://mainelaw.maine.edu/academics/oclj/pdf/vol16_2/vol16_oclj_395.pdf>

States may also affect the fate of projects through their regulation of utility activities. Through the exercise of their rights to regulate utilities and establish utility retail rates, states generally have jurisdiction to approve power purchase agreements between offshore energy project developers and utilities. Securing approval of such power purchase agreements is a critical step in any project’s successful development, as developers are generally reluctant to incur the major capital costs required to develop an offshore project without the certainty of an offtake agreement for the power to be produced. While such state review is generally conducted by public utilities commissions or their analogues, experience has shown that issues beyond utility ratemaking, such as aesthetics or environmental considerations, often end up being raised in these utility forums. For example, the Massachusetts Department of Public Utilities heard extensive testimony on such issues in the context of its review of the proposed power purchase agreement between the utility provider National Grid and Cape Wind. Because of the power reserved to states, such issues may play a large role in the ultimate success of renewable ocean energy projects.

Most of the applications for hydrokinetic projects are in state waters, not federal

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In agreeing to the MOU, the FERC and the MMS resolved the uncertainty that had previously obstructed development of hydrokinetic projects on the OCS. While questions still remain in the wake of the MOU, the signing of this agreement allowed MMS to finalize its rulemaking governing renewable energy development on the OCS, and allowed for the FERC to move forward with its processes, as discussed below. In keeping with this new jurisdictional regime, the majority of new preliminary permit applications pending before the FERC pertain to projects located within state territorial waters. Thirty-eight of the fifty-four preliminary permits granted by the FERC in 2009 were for inland waterway projects, while virtually forty of forty-three currently pending applications for preliminary permits are for inland waterway sites. The vast majority of these permit applications are for sites located on either the Mississippi River, or its Ohio River tributary.

Single agency management wouldn’t be optimal: Best option would be for FERC + MMS to work together to regulate hydrokinetic energy

Jon Wellinghoff, James Pederson, and David L. Morenoff 2008. (Wellinghoff is a Commissioner of the Federal Energy Regulatory Commission. He received a B.S. degree from the University of Nevada, Reno; an M.A.T. degree from Howard University; and a J.D. degree from Antioch School of Law. James Pederson is a Legal and Policy Advisor to Commissioner Wellinghoff. He received a B.A. degree from the University of Virginia and a J.D. degree from University of Baltimore Law School. Morenoff is a Legal and Policy Advisor to Commissioner Wellinghoff; J.D. from Harvard Law School.) ENERGY LAW JOURNAL, Vol 29 “FACILITATING HYDROKINETIC ENERGY DEVELOPMENT THROUGH REGULATORY INNOVATION” <http://www.oceanrenewable.com/wp-content/uploads/2009/01/ferchydrokinetic.pdf>

[Finavera (hydrokinetic energy corporation) Chief Executive Officer] Mr. [Jason] Bak further testified that “one of the worst cases” he envisioned would be “if Congress were to do anything to cast uncertainty on FERC’s licensing authority,” because Finavera and other companies were already actively pursuing projects pursuant to the FPA process. With this concern in mind, Mr. Bak urged the Congress to reinforce the FERC’s authority regarding OCS hydrokinetic projects. Mr. Bak stated that this request did not require weakening the MMS’s authority or its ability to carry out its mission, including under EPAct 2005 section 388. Rather, he stated that “MMS is the landlord and has clear power to set lease terms,” and that “the Interior Department has authority to set conditions on Federal hydropower licenses.” These legal and policy considerations together suggest that a cooperative relationship, which respects the jurisdiction and expertise of both the FERC and the MMS, is likely to most effectively facilitate appropriate hydrokinetic energy development. The FERC’s staff detailed how such a relationship could operate in its comments on MMS’s proposed rule. For example, the FERC’s staff stated that “MMS has a critical role to play in all developments proposed on the OCS, that of a land management agency with specific authority under FPA section 4(e) to issue mandatory conditions for any license that the FERC issues for a hydropower project located on the OCS.” The FERC’s staff further explained that this role for the MMS in the licensing process would be similar to that of the United States Forest Service for hydropower projects in national forests and the Bureau of Land Management (BLM) for hydropower projects on federal lands it administers.

DISADVANTAGES

1. Adverse environmental impact – in general.

Hydrokinetic facilities will have adverse environmental impacts. Amanda Righi, who advocates hydrokinetic energy, nevertheless admitted in 2011:

Amanda Righi 2011. (J.D. candidate, University of Washington School of Law, Class of 2012 ) WASHINGTON JOURNAL OF ENVIRONMENTAL LAW & POLICY. “ROUGH SEAS FOR RENEWABLE ENERGY: ADDRESSING REGULATORY OVERLAP FOR HYDROKINETIC PROJECTS ON THE OUTER CONTINENTAL SHELF » <http://digital.law.washington.edu/dspace-law/bitstream/handle/1773.1/1044/1WJELP079.pdf?sequence=4>

Hydrokinetic Facilities Will Likely Have Adverse Environmental Impacts  
Though more research is necessary to fully understand hydrokinetic facilities’ effect on the marine environment, preliminary findings show several potential adverse impacts. These impacts include alteration of current and wave strengths, changes in substrates and sediment transport, habitat alteration for ocean-floor organisms, noise during construction and operation, electromagnetic fields, releases of toxins into the water and interference of animal movements and migrations. The severity of each impact depends on the technology type and project site; however, many of these adverse impacts can be mitigated or avoided with precautionary measures and proper siting.

Will impact water velocity which could lead to the death of a number of creatures and destroy the food web

U.S. Department of Energy 2009. “Report to Congress on the Potential Environmental Effects of Marine and Hydrokinetic Energy Technologies” December 2009 <http://www1.eere.energy.gov/water/pdfs/doe_eisa_633b.pdf>

The extraction of kinetic energy from river and ocean currents or tides will reduce water velocities in the vicinity (i.e., near field) of the project (Bryden et al. 2004). Large numbers of devices in a river will reduce water velocities, increase water surface elevations, and decrease flood conveyance capacity. These effects would be proportional to the number and size of structures installed in the water. Rotors, foils, mooring and electrical cables, and fixed structures will all act as impediments to water movement (Figure 3-2). The resulting reduction in water velocities could, in turn, affect the transport and deposition of sediment (Section 3.2), organisms living on or in the bottom sediments (Section 3.3), and plants and animals in the water column (Section 3.7). Conversely, moving rotors and foils might increase mixing in systems where salinity or temperature gradients are well defined. Changes in water velocity and turbulence will vary greatly, depending on distance from the structure. For small numbers of units, the changes are expected to dissipate quickly with distance and are expected to be only localized; however, for large arrays, the cumulative effects may extend to a greater area. The alterations of circulation/mixing patterns caused by large numbers of structures might cause changes in nutrient inputs and water quality, which could in turn lead to eutrophication, hypoxia, and effects on the aquatic food web.

Could displace bottom dwelling creatures and destroy their habitat

The U.S. Department of Energy. “Report to Congress on the Potential Environmental Effects of Marine and Hydrokinetic Energy Technologies” December 2009 <http://www1.eere.energy.gov/water/pdfs/doe_eisa_633b.pdf>

Installation and operation of hydrokinetic and marine energy projects can directly displace benthic (i.e., bottom-dwelling) plants and animals or change their habitats by altering water flows, wave structures, or substrate composition (Figure 3-5). Many of the designs will include a large anchoring system made of concrete or metal, mooring cables, and electrical cables that lead from the offshore facility to the shoreline. Electrical cables might simply be laid on the bottom, or they more likely will be anchored or buried to prevent movement. Large bottom structures will alter water flow, which may result in localized scour and/or deposition. Because these new structures will affect bottom habitats, consequential changes to the benthic community composition and species interactions in the area defined by the project may be expected (Lohse et al. 2008).

2. Wave and beach conditions altered

Link: Hydrokinetics will alter wave height and beach and navigational conditions

U.S. Department of Energy 2009. “Report to Congress on the Potential Environmental Effects of Marine and Hydrokinetic Energy Technologies” December 2009 <http://www1.eere.energy.gov/water/pdfs/doe_eisa_633b.pdf>

The presence of floating wave energy converters will alter wave heights and structures, both in the near field (within meters of the units or project) and, if installed in large numbers, potentially in the far field (extending meters to kilometers out from the project). The above-water structures of wave energy converters will act as a localized barrier to wind and, thus, reduce wind-wave interactions. Michel et al. (2007) noted that many of the changes would not directly relate to environmental impacts; for example, impacts on navigational conditions, wave loads on adjacent structures, and recreation on nearby beaches (e.g., surfing, swimming) might be expected. Reduced wave action could alter bottom erosion and sediment transport and deposition (Largier et al. 2008).

Link: Hydrokinetic energy changes height of waves or velocity of currents

The U.S. Department of Energy. “Report to Congress on the Potential Environmental Effects of Marine and Hydrokinetic Energy Technologies” December 2009 <http://www1.eere.energy.gov/water/pdfs/doe_eisa_633b.pdf>

Operation of hydrokinetic or ocean energy technologies will extract energy from the water, which will reduce the height of waves or the velocity of currents in the local area. This loss of wave/current energy could, in turn, alter sediment transport and the wave climate of nearby shorelines.

Impact: Unknown. Let’s do some research and study it first, before we damage anything.

3. Noise pollution

Link: Noise generation could cause many long term problems

U.S. Department of Energy 2009. “Report to Congress on the Potential Environmental Effects of Marine and Hydrokinetic Energy Technologies” December 2009 <http://www1.eere.energy.gov/water/pdfs/doe_eisa_633b.pdf>

Freshwater and marine animals rely on sound for many aspects of their lives including reproduction, feeding, predator and hazard avoidance, communication, and navigation (Popper 2003; Weilgart 2007). Consequently, underwater noise generated during installation and operation of a hydrokinetic or ocean energy conversion device has the potential to impact these organisms. Noise may interfere with sounds animals make to communicate, or may drive animals from the area. If severe enough, loud sounds could damage their hearing or cause mortalities. For example, it is known from experience with other marine construction activities that the noise created by pile driving creates sound pressure levels high enough to impact the hearing of harbor porpoises (Figure 3-8) and harbor seals (Thomsen et al. 2006). The effects are less certain for fish (Hasting and Popper 2005), although fish mortalities have been reported for some pile-driving activities (Longmuir and Lively 2001; Caltrans 2001). Noise generated during normal operations is expected to be less powerful, but could still disrupt the behavior of marine mammals, sea turtles, and fish at great distances from the source. Changes in animal behavior or physiological stresses could lead to decreased foraging efficiency, abandonment of nearby habitats, decreased reproduction, and increased mortality (NRC 2005) – all of which could have adverse effects on both individuals and populations.

Impact: Noise kills marine mammals

California Coastal Commission 2013. (California state regulatory agency) Staff Report:Regular Calendar, Feb 2013 Project Description: California portion of Hawaii-Southern California Training and Testing Program –Continuation of and modifications to Navy training and testing activities <http://documents.coastal.ca.gov/reports/2013/3/F9a-3-2013.pdf>

The Commission has been consistent for almost two decades in expressing concerns over the effects of anthropogenic sounds on the marine environment, particularly on marine mammals. As noted in its December 13, 2005, comments to the Marine Mammal Commission’s Advisory Committee on Acoustic Impacts on Marine Mammals, the Commission stated: Anthropogenic noise is a recognized, but largely unregulated, form of ocean pollution that can deafen, disturb, injure, and kill marine life. Many species of marine mammals are known to be highly sensitive to sound and rely upon sound to navigate, find food, locate mates, avoid predators, and communicate with one another. A combination of noise sources, including shipping, oil and gas exploration and production, dredging, construction, and military activities, has resulted in dramatic increases in noise levels throughout the oceans. Over the last ten years, a growing body of evidence has shown that some forms of ocean noise can kill, injure, and deafen whales and other marine mammals. In particular, a sequence of marine mammal strandings and mortalities has been linked to exposure to mid-frequency sonar. There is also evidence that some affected animals do not strand but die at sea. This has increased public concern about the effects of anthropogenic noise on marine mammals, which has been acknowledged in a variety of domestic and international fora.

NEGATIVE: ICEBREAKERS

Tyler Sarna contributed some of the material in this brief

TOPICALITY

1. No policy change.

**Standard:** In order for the Affirmative to be able to pass their plan, they must “substantially reform” some “policies”. Simply reforming our ability to implement policies isn’t enough: the affirmative team must actually reform marine natural resource policies themselves.

**Definition**: A “Policy” is: “b : a high-level overall plan embracing the general goals and acceptable procedures especially of a governmental body” *(Merriam-Webster Online Dictionary 2013* [*http://www.merriam-webster.com/dictionary/policy*](http://www.merriam-webster.com/dictionary/policy)*)*

**Violation:** What probably happened was that they heard the word “marine” and thought that anything the Federal government does with the ocean became topical. The plan of the Affirmative team buys new icebreakers, but there is no change in any of the government’s policies. The U.S. will simply be more capable in fulfilling its existing goals and procedures according to their plan. They will probably say that they are changing the U.S. government’s policies towards the ocean; however, their plan changes no “goals and procedures”: the Coast Guard just has more ships to use for carrying out existing goals and procedures.

**Impact:** Since the Affirmative is not proposing a plan that reforms marine natural resource policies, their plan cannot be debated in this round today. The best way to teach Affirmatives not to do this is to award a Negative ballot, which will give them an incentive next time to work within the boundaries of the resolution. It also preserves fairness and integrity, since Negative teams do not have a fair opportunity to prepare for debate rounds if Affirmatives are allowed to bring up anything they want without regard to the exact wording of the resolution.

MINOR REPAIR / COUNTERPLAN: Disclaim responsibility

The United States Federal Government declares that when any private vessel embarks on commercial activities either inside or outside of American territorial waters, the American Military (including the Coast Guard) is not responsible for clearing a vessel’s way of natural hazards (which includes, but is not limited to, ice).

ADVANTAGE: Solves for all the Northwest Passage shipping issues without spending a dime. If private commercial interests want to sail the NW Passage, let them. And let them contract with someone and pay for the costs of doing so. AFF never establishes why the US Federal Government has any duty to pay for it.

MINOR REPAIR: Refurbish the *Polar Sea*

[Note: The *Polar Sea* is a heavy icebreaker that is deactivated and sitting in port in Washington state. Some of its parts were stripped away to get *Polar Star*, another heavy ice-breaker, back into operation.]

*Polar Sea* can be refurbished in half the time with 1/3 the workforce of building a new icebreaker

Homeland Security Today 2012. (the leading reporting agency on Homeland security). Mickey McCarter (editor of National Guard Today, and a senior reporter for Homeland Security Today with over a decade of experience) 17 December 2012 “Coast Guard Reactivates Heavy Icebreaker Polar Star” <http://www.hstoday.us/single-article/coast-guard-reactivates-heavy-icebreaker-polar-star/2a0db1f3398371a11a8aaf3de2e0c429.html> (brackets added; Maria Cantwell represents Washington state in the US Senate)

"Icebreakers are critical to our national security and America's interests in the Arctic," Cantwell said in a statement Thursday. "As commerce in the Arctic continues to increase, our nation's need for icebreakers will continue to grow. This bill preserves the option of refurbishing the Polar Sea and supports shipbuilding jobs in the Puget Sound as America determines the most cost-effective way to meet our mission requirements for icebreakers." Refurbishing Polar Sea could take five years and employ 300 workers, [Senator Maria] Cantwell's office estimated. Building a new heavy icebreaker could take eight to 10 years and employ more than 1,000 workers.

MINOR REPAIR: Leasing can be an option if icebreaker is only needed for a few years. See below about the new cooling trend that could eliminate the need for NW Passage icebreaking in a few years.

Fierce Homeland Security (a homeland security newsletter). Zach Rausnitz (editor Fierce Homeland security, graduate of Brown University, and interned at the BBC) 9 August 2012 “Papp: The Coast Guard can't lease all its icebreakers” <http://www.fiercehomelandsecurity.com/story/papp-coast-guard-cant-lease-all-its-icebreakers/2012-08-09>

The Coast Guard tends to build and operate ships for more than 30 years. A lease over that time period would cost much more than owning the ships from the start, Papp said at a field hearing the Senate Appropriations subcommittee on homeland security held in Kodiak, Alaska. Papp said the Coast Guard has done a "rudimentary" business case analysis of leased icebreakers. An icebreaker needed for only a few years could make financial sense because maintenance costs wouldn't be as much of a concern, he said.

INHERENCY

Private companies build their own icebreakers

Susan Buchanan 2012. (journalist) 17 Jan 2012 MARITIME REPORTER and MARINE NEWS magazines online, “Arctic Oil Exploration: Shell Awaits New Giant Icebreaker,” <http://www.marinelink.com/news/exploration-icebreaker342119.aspx>

The M/V Aiviq icebreaker, contracted by Shell Oil to support drilling in Alaska’s Chukchi Sea, is scheduled to be completed by Louisiana-based Edison Chouest Offshore in early 2012. The vessel, ordered in July 2009, is on track for April 1, 2012, delivery in Galliano, La., and will then head north, according to Shell Oil spokesman Curtis Smith. The $200m Aiviq is the largest vessel ever built by Chouest, and will be among the most advanced and powerful, non-military icebreakers on the waters.

McMurdo mission is accomplished by contracting foreign vessels

Ronald O’Rourke 2012. (Specialist in Naval Affairs at Congressional Research Service) 6 Apr 2012 Coast Guard Polar Icebreaker Modernization: Background and Issues for Congress (brackets added) http://digital.library.unt.edu/ark:/67531/metadc85474/m1/1/high\_res\_d/RL34391\_2012Apr06.pdf

Although Coast Guard polar icebreakers in the past have performed the annual McMurdo break-in mission, the NSF [National Science Foundation] in recent years has chartered Russian and Swedish contractor-operated icebreakers to perform the mission (with a Coast Guard polar icebreaker standing ready to assist if needed). The NSF has also noted that Healy, though very capable in supporting Arctic research, operates at sea for about 200 days a year, as opposed to about 300 days a year for foreign contractor-operated polar icebreakers.

HARMS / SIGNIFICANCE

1. Warming trend reversing

Link: The AFF’s “need” for Northwest Passage ice breaking is based on climate warming. It’s in their evidence, but if you need more:

CNN 2011 Mike M. Ahlers (a reporter for CNN) 4 November 2011 “Polar icebreaker dispute ties up Coast Guard bill” <http://www.cnn.com/2011/11/03/politics/congress-polar-icebreakers>

The icebreaker issue is one that has been decades in the making, and has gained urgency with the thawing of ice in the Arctic Circle. Diminishing ice, widely believed to be caused by global warming, may actually increase the need for icebreakers, according to a recent report by the Congressional Research Service. The opening of waterways could lead to expanded commercial, cruise and military ship operations, and increase exploration for oil and other resources, the report says.

Link: Warming has ended. The climate change models predicting more warming have been discredited

John Casey 2013. (former White House advisor, NASA headquarters consultant and President of the Space and Science Research Association). 24 June 2013. “Letter to Academia” <http://www.spaceandscience.net/sitebuildercontent/sitebuilderfiles/ssrclettertoacademiajune242013.pdf>

You may already be aware of the fact that global warming no longer exists and that there has been no effective growth in the Earth’s temperatures for roughly sixteen years. It is a fundamental fact that global warming, euphemistically called “climate change” by our government, has ended. In addition, it is important to understand that the Earth’s oceans and atmosphere have been in a long term declining mode for ten and seven years, respectively. This real vs. politically correct climate status was not permitted under the GHG theory and the numerous global circulation and global climate models (GCM) that have been developed at the UN and elsewhere over the past three decades. Basically, these GCM, reliant on the flawed GHG theory, just don’t work despite the billions of dollars that have been expended on research in this field. This sad commentary on the validity of these GCM has recently been admitted by some of the leaders of the GHG theory movement. This massive failure of the GHG theory and related climate models have of course been thoroughly exposed via the “Climategate” affair and the many detailed arguments offered to counter the GHG theory by other leading researchers.

Link: Global cooling is coming

John Casey 2013. (former White House advisor, NASA headquarters consultant and President of the Space and Science Research Association). 24 June 2013. “Letter to Academia” <http://www.spaceandscience.net/sitebuildercontent/sitebuilderfiles/ssrclettertoacademiajune242013.pdf>

Regardless of ones views on the causes of climate change, be assured that the threat we face over the next two decades is serious. In the most recent edition of the GCSR, twenty of the twenty-four evaluated climate parameters showed global cooling was now the dominant trend. We have made the outcome of the next cold era as clear and unmistakable as possible in the report: “It should be emphasized that unless a significant unexpected and rapid change in the present declining ocean and atmosphere temperature trends occurs, there are only two climate scenarios that appear likely at this time over the next forty years. Each scenario results in a new cold climate era. One would be a Dalton-class cold era with two hundred year cold weather records being set and the other being a Maunder- class cold era with four hundred year cold weather records.

**Analysis: Need for AFF plan will go away by itself when the cooling trend kicks in.**

SOLVENCY

“Saving the Antarctic Treaty” – Response: Antarctic Treaty succeeded back during the Cold War, but today it’s in need of reform and lacks political legitimacy

Dr. Anne-Marie Brady 2013. ( PhD; associate professor at School of Social & Political Sciencesm, Univ. of Canterbury, UK) Diplomatic Chill: Politics Trumps Science in Antarctic Treaty System, WORLD POLITICS REVIEW 19 Mar 2013 <http://www.worldpoliticsreview.com/articles/12802/diplomatic-chill-politics-trumps-science-in-antarctic-treaty-system> (brackets added)

The Antarctic Treaty was a product of the Cold War, designed to keep the conflict between the U.S. and the Soviet Union and their respective allies out of the Antarctic region. It succeeded in that regard, but now, two decades after the end of the Cold War, the Antarctic Treaty looks like an antiquated gentleman’s agreement desperately in need of reform. Poorer countries are effectively excluded from Antarctic governance because only those nations with recognized Antarctic interests, whether as original claimant states or through established Antarctic scientific research programs, may become ATCPs [Antarctic Treaty Consultative Parties]. The limitations on which states can have a say on Antarctic affairs undermines the political legitimacy of the treaty, which, as with any international instrument, will be measured by the number of states that sign up to it -- and the extent to which signatories respect its principles.

“Saving the Antarctic Treaty” – Response: Antarctic governance is feeble

Dr. Anne-Marie Brady 2013. ( PhD; associate professor at School of Social & Political Sciencesm, Univ. of Canterbury, UK) Diplomatic Chill: Politics Trumps Science in Antarctic Treaty System, WORLD POLITICS REVIEW 19 Mar 2013 <http://www.worldpoliticsreview.com/articles/12802/diplomatic-chill-politics-trumps-science-in-antarctic-treaty-system>

In many ways the term “Antarctic governance” is in fact a misnomer. There is very little oversight of the various countries active there, and almost no enforcement through Antarctic Treaty System instruments when nations break the governance rules. Instead Antarctic Treaty states are supposed to police themselves by passing national legislation that matches the Antarctic Treaty and by applying this legislation to the activities of their nationals there. The treaty permits and encourages base inspections, but such inspections are not in-depth, and inspectors don’t ask hard questions such as to what extent science is the main activity of the base and whether or not bases follow guidelines on environmental management and reporting.

Maintaining political presence in Antarctica is wasteful

Dr. Anne-Marie Brady 2013. ( PhD; associate professor at School of Social & Political Sciencesm, Univ. of Canterbury, UK) Diplomatic Chill: Politics Trumps Science in Antarctic Treaty System, WORLD POLITICS REVIEW 19 Mar 2013 <http://www.worldpoliticsreview.com/articles/12802/diplomatic-chill-politics-trumps-science-in-antarctic-treaty-system>

However, the main goal of these scientific activities for all of the governments engaged in them is meeting their strategic needs, both political and economic. Science is the currency of Antarctic politics; high-level science garners high-level influence, and having at least a basic scientific program in Antarctica is the fig leaf for maintaining a base there. Though many scientists work cooperatively on international projects, each scientific base in Antarctica is run by national programs, and they act as effective diplomatic posts. This approach is extremely wasteful with regard to resources and generates a significantly larger scientific footprint in Antarctica than if scientific activities and environmental protection, as opposed to simply maintaining presence, were truly the focus of Antarctic Treaty partners.

The Antarctic Treaty prevented conflict in 1959. But times have changed, and Antarctic priorities are different now

Dr. Anne-Marie Brady 2013. ( PhD; associate professor at School of Social & Political Sciencesm, Univ. of Canterbury, UK) Diplomatic Chill: Politics Trumps Science in Antarctic Treaty System, WORLD POLITICS REVIEW 19 Mar 2013 <http://www.worldpoliticsreview.com/articles/12802/diplomatic-chill-politics-trumps-science-in-antarctic-treaty-system>

In 1959, when the Antarctic Treaty was negotiated, the main preoccupation of the dominant Antarctic partners was the prevention of the threat of armed conflict spreading to Antarctica. But in 2013 the priorities of the 28 states actively engaged in Antarctica affairs, as well as the more than 170 other states in the world that are technically eligible to engage in Antarctica but are prevented from doing so due to economic barriers, are very different. The Cold War ended 22 years ago, and political ideology no longer divides the world.

Antarctic Treaty is questionable whether it will survive

Dr. Anne-Marie Brady 2013. ( PhD; associate professor at School of Social & Political Sciencesm, Univ. of Canterbury, UK) Diplomatic Chill: Politics Trumps Science in Antarctic Treaty System, WORLD POLITICS REVIEW 19 Mar 2013 <http://www.worldpoliticsreview.com/articles/12802/diplomatic-chill-politics-trumps-science-in-antarctic-treaty-system>

The Antarctic Treaty System in its present form is not well-suited to deal with these new priorities. It is questionable whether it will survive another 50 years, and indeed for how much longer the period of relative peace and environmental protection that this treaty secured for the Antarctic continent and its oceans will last.

DISADVANTAGES

1. Year-round shipping creates ecological disaster risk

Link: NW Passage ecosystem may not be able to support year-round shipping

Brink: NW Passage ecosystem is more vulnerable than temperate regions

Hannah E. King 2009. (JD candidate, Univ of Maine Law School) PROTECTING THE NORTHWEST PASSAGE: ASSESSING THE THREAT OF YEAR-ROUND SHIPPING TO THE MARINE ECOSYSTEM AND THE ADEQUACY OF THE CURRENT ENVIRONMENTAL REGULATORY REGIMES, OCEAN AND COASTAL LAW JOURNAL Vol. 14 <http://mainelaw.maine.edu/academics/oclj/pdf/vol14_2/vol14_oclj_269.pdf>

Due to the harsh climate of the Arctic and the presence of year-round sea ice, the Northwest Passage’s ecosystem is more vulnerable than other bionetworks. In addition, unlike most of the modern world, local residents depend on the area’s living marine resources for food and cash income. As a result, the Arctic may be unable to support activities, such as year-round shipping, that are sustainable in more temperate regions.

Impact: Oil spill in the NW Passage would have devastating impact

Hannah E. King 2009. (JD candidate, Univ of Maine Law School) PROTECTING THE NORTHWEST PASSAGE: ASSESSING THE THREAT OF YEAR-ROUND SHIPPING TO THE MARINE ECOSYSTEM AND THE ADEQUACY OF THE CURRENT ENVIRONMENTAL REGULATORY REGIMES, OCEAN AND COASTAL LAW JOURNAL Vol. 14 <http://mainelaw.maine.edu/academics/oclj/pdf/vol14_2/vol14_oclj_269.pdf>

The negative environmental impacts associated with the transport of hydrocarbons include: “spills, noise, chemical discharges, and disturbances to ice and habitats caused by the passage of ships.” None of these would have a more profound impact on the Arctic ecosystem than a large oil or liquid natural gas (LNG) spill. Although the statistical likelihood of a spill is low, the impact on aquatic wildlife would be devastating for several reasons. First, the rate of oil decomposition in cold waters is much lower than in more temperate water. Second, Arctic organisms’ low reproductive and population recovery rates make them particularly vulnerable environmental fluctuations. Finally, the harsh climates of the region make clean up of a spill very difficult.

Impact: Significant impact of an oil spill in the NW Passage – many species would be killed

Hannah E. King 2009. (JD candidate, Univ of Maine Law School) PROTECTING THE NORTHWEST PASSAGE: ASSESSING THE THREAT OF YEAR-ROUND SHIPPING TO THE MARINE ECOSYSTEM AND THE ADEQUACY OF THE CURRENT ENVIRONMENTAL REGULATORY REGIMES, OCEAN AND COASTAL LAW JOURNAL Vol. 14 <http://mainelaw.maine.edu/academics/oclj/pdf/vol14_2/vol14_oclj_269.pdf>

An oil spill in the Northwest Passage would have both direct and indirect impacts on the area’s terrestrial and aquatic marine life. First, a spill is likely to have a significant impact on subtidal flora and under-ice biota—the bottom of the food chain—reducing the availability of food. Second, direct contact with oil has the ability to kill a wide variety of species and disperse surviving populations.

2. Seal pups

Link: AFF wants vessels modifying the ice in the NW Passage

Link: Icebreaking hurts ringed seal pups

Hannah E. King 2009. (JD candidate, Univ of Maine Law School) PROTECTING THE NORTHWEST PASSAGE: ASSESSING THE THREAT OF YEAR-ROUND SHIPPING TO THE MARINE ECOSYSTEM AND THE ADEQUACY OF THE CURRENT ENVIRONMENTAL REGULATORY REGIMES, OCEAN AND COASTAL LAW JOURNAL Vol. 14 <http://mainelaw.maine.edu/academics/oclj/pdf/vol14_2/vol14_oclj_269.pdf>

In addition, vessels penetrating the pack-ice near fall freeze or spring break-up are likely to “cause ice sheets to break off from landfast ice, thereby altering the position of the ice edge.” Little is known about the effect of altering the ice edge; however, it is likely that it would lead to redistribution and dispersal of ringed seal and polar bear populations. Furthermore, breaking off sheets of landfast ice, particularly in the spring, may destroy ringed seal lairs built in snow-covered areas along the ice edge, crushing or soaking their pups.

Brink: Ringed Seals are threatened already

Link: Loss of ringed seal pups endangers Polar Bears

National Wildlife Federation, in an article copyrighted 2013. (non-profit organization, largest conservation organization in the US) “Global Warming and Ringed Seals« <http://www.nwf.org/Wildlife/Threats-to-Wildlife/Global-Warming/Effects-on-Wildlife-and-Habitat/Ringed-Seals.aspx>

In December 2012, the National Oceanic and Atmospheric Administration announced that the ringed seal, as well as the bearded seal, **would be listed as a threatened species under the Endangered Species Act** because of the risks posed by melting sea ice and reduced snowfall. Fewer ringed seals could have dire consequences for the polar bear as well. Polar bears hunt seal pups in their maternity dens. However, with pups spending less time in their maternity dens, polar bears are missing an easy and important springtime prey.

Impact: Arctic biodiversity has intrinsic value, as well as providing services to humans

Conservation of Arctic Flora and Fauna 2013. (CAFF is the biodiversity working group of the Arctic Council, an intergovernmental organization of Arctic nations) “Arctic Biodiversity Assessment: Report for Policy Makers “ 15 May 2013 <http://www.arcticbiodiversity.is/index.php/press>

In addition to its intrinsic worth, Arctic biodiversity provides innumerable services and values to people. Arctic habitats are home to species with remarkable adaptations to survive in extreme cold and highly variable climatic conditions. Millions of migratory birds breed in the Arctic and then fly to every continent on Earth, contributing to global biodiversity and ecological health. More than a tenth of the world’s fish catches by weight come from Arctic and sub-Arctic seas. Tourists are travelling north in increasing numbers, and globally there is a growing appreciation of Arctic species and ecosystems as increasingly rare examples of largely pristine biodiversity.

3. Disruption of Inuit subsistence hunting

Link: The Inuit Eskimos will have their subsistence hunting disrupted by ice-breaking

Hannah E. King 2009. (JD candidate, Univ of Maine Law School) PROTECTING THE NORTHWEST PASSAGE: ASSESSING THE THREAT OF YEAR-ROUND SHIPPING TO THE MARINE ECOSYSTEM AND THE ADEQUACY OF THE CURRENT ENVIRONMENTAL REGULATORY REGIMES, OCEAN AND COASTAL LAW JOURNAL Vol. 14 <http://mainelaw.maine.edu/academics/oclj/pdf/vol14_2/vol14_oclj_269.pdf>

Due to the unique conditions of the Arctic, year-round shipping is only possible with vessels equipped to break through the ice. These vessels, known as icebreakers, open water tracks of one to two kilometers and leave behind large piles of ice rubble. Ice rubble may prevent Inuit subsistence hunters from engaging in polar bear and caribou hunts, which require extensive use of large tracts of sea-ice. Furthermore, these rubble piles may interrupt the migratory routes of musk ox and caribou, requiring the animals to expend limited energy reserves to navigate through or around large piles of rubble.

Brink: Inuit economy and subsistence depend on hunting

Hannah E. King 2009. (JD candidate, Univ of Maine Law School) PROTECTING THE NORTHWEST PASSAGE: ASSESSING THE THREAT OF YEAR-ROUND SHIPPING TO THE MARINE ECOSYSTEM AND THE ADEQUACY OF THE CURRENT ENVIRONMENTAL REGULATORY REGIMES, OCEAN AND COASTAL LAW JOURNAL Vol. 14 <http://mainelaw.maine.edu/academics/oclj/pdf/vol14_2/vol14_oclj_269.pdf>

As subsistence hunters, the Canadian Inuit’s welfare is closely linked to the vitality of the marine environment, specifically the health and abundance of marine mammals. Exploitation of marine mammals is central both to the traditional Inuit way of life, as well as their modern existence. Ancestors of the modern day Canadian Inuit migrated from Alaska approximately 4500 years ago. The Inuit subsistence culture developed in response to the harsh climate of the Arctic. Essential to survival in the sub-zero temperatures of the Canadian Arctic is a diet high in iron, protein, and fats—characteristic of marine mammals, which were abundant in the coastal waters of the Canadian Arctic. Today, of the twenty-eight Inuit communities located in the Canadian Arctic, all but one, Baker Lake, are coastal communities whose economy and subsistence continue to be dependent on marine products.

Brink: Arctic cultures are more reliant on hunting & fishing than cultures in other parts of the world – they don’t have much else to eat

Conservation of Arctic Flora and Fauna 2013. (CAFF is the biodiversity working group of the Arctic Council, an intergovernmental organization of Arctic nations) “Arctic Biodiversity Assessment: Report for Policy Makers “ 15 May 2013 <http://www.arcticbiodiversity.is/index.php/the-report/report-for-policy-makers>

Among those who live in the Arctic are dozens of distinct indigenous peoples who call the Arctic home. Their ways of life demonstrate the vitality of language and traditional knowledge, key aspects of the human relationship with biodiversity. Arctic cultures have been more reliant on hunting and fishing than those in almost any other part of the world because of the limited availability of edible wild plants.

Impact: Inuit health will suffer without traditional diets

Hannah E. King 2009. (JD candidate, Univ of Maine Law School) PROTECTING THE NORTHWEST PASSAGE: ASSESSING THE THREAT OF YEAR-ROUND SHIPPING TO THE MARINE ECOSYSTEM AND THE ADEQUACY OF THE CURRENT ENVIRONMENTAL REGULATORY REGIMES, OCEAN AND COASTAL LAW JOURNAL Vol. 14 <http://mainelaw.maine.edu/academics/oclj/pdf/vol14_2/vol14_oclj_269.pdf> (ellipses in original)

In addition, marine mammals, with their high protein and fat content, are more than just a source of income for the Inuit communities of northern Canada. Seals, walruses, and whales provide nutrients essential to the “maintenance of . . . health and energy in the cold and rigorous climate of the Arctic.” Although there has been a recent decline in communities that depend exclusively on hunting and fishing as their main food source, traditional subsistence activities still take place. Even with an increased reliance on imported food, marine mammals continue to play an important role in the health and well-being of the Inuit. Marine mammals and fish are used to supplement commercially produced food products that tend to be insufficient in the unique conditions of the Arctic and are “known to increase the risks of cancer, obesity, . . . and cardiovascular diseases among northern populations.

4. Inuit culture and human rights

Link: Subsistence hunting will be disrupted by ice-breaking. See link in DA3

Link: Preservation of Inuit culture depends on traditional hunting & fishing activities

Hannah E. King 2009. (JD candidate, Univ of Maine Law School) PROTECTING THE NORTHWEST PASSAGE: ASSESSING THE THREAT OF YEAR-ROUND SHIPPING TO THE MARINE ECOSYSTEM AND THE ADEQUACY OF THE CURRENT ENVIRONMENTAL REGULATORY REGIMES, OCEAN AND COASTAL LAW JOURNAL Vol. 14 <http://mainelaw.maine.edu/academics/oclj/pdf/vol14_2/vol14_oclj_269.pdf>

Beyond providing food and income, traditional hunting and fishing activities are a means for the preservation and continuance of the Inuit culture and identity. The Canadian Inuit have been subsistence hunters in northern Canada for thousands of years. Their language as well as their spiritual beliefs are strongly influenced by the marine environment and their traditional livelihood as subsistence hunters. Thus, preservation and protection of the marine ecosystem is essential to the economy, general health, and spiritual welfare of the Canadian Inuit. In addition, the importance of marine mammals to the Inuit way of life requires a management scheme that allows for the continued use of these resources.

Impact: Respect for group cultural traditions is part of the essential human rights that are necessary for human identity

Prof. Siegfried Wiessner 2011. (Professor of Law and Director, Graduate Program in Intercultural Human Rights, St Thomas University School of Law, Miami, Florida) European Journal of International Law Volume 22, Issue 1 “The Cultural Rights of Indigenous Peoples:Achievements and Continuing Challenges“ (ellipses and brackets in original) <http://ejil.oxfordjournals.org/content/22/1/121.full>

Membership of a group is of fundamental importance to individuals, to their pursuit of self-realization, a key human need. In the constant interplay between the individual and society's constituent groups, not only is the individual self shaped and changed, but general patterns of group behaviour are reconstructed and modified as well. Groups of meaning to individuals are thus essential extensions of self, necessary parts of a person’s identity. Interaction with and reliance upon others is a conditio sine qua non for human existence. Furthermore, with respect to the philosophical moorings of human rights, Immanuel Kant's ethical system revolving around the axiom of inviolate human dignity is not necessarily individualist in an exclusivist sense. As Neil MacCormick has found, ‘[t]he Kantian ideal of respect for persons implies … an obligation in each of us to respect that which in others constitutes any part of their sense of their own identity’. That identity is shaped by participation in what he calls ‘cultural communities’, which need appropriate institutional protection. Similarly, Will Kymlicka has pointed out that groups not only provide the cultural structures which constitute the context of choice for individual action, they need to have rights in order to foster individuals’ well-being. Others have argued that groups have distinctly collective interests the moral value of which is on a par with the interests of individuals. In order to respond holistically to human needs and aspirations, law thus needs to strive to protect both the individuals and the groups they form or are born into – communities of destiny or communities of choice. The vulnerability of individuals created the need for individual human rights; the vulnerability of groups, particularly cultures, creates the need for their protection.

5. Noise Pollution

Link: AFF increases shipping in the NW Passage

Link: NW Passage marine mammals are sensitive to noise from ships

Hannah E. King 2009. (JD candidate, Univ of Maine Law School) PROTECTING THE NORTHWEST PASSAGE: ASSESSING THE THREAT OF YEAR-ROUND SHIPPING TO THE MARINE ECOSYSTEM AND THE ADEQUACY OF THE CURRENT ENVIRONMENTAL REGULATORY REGIMES, OCEAN AND COASTAL LAW JOURNAL Vol. 14 <http://mainelaw.maine.edu/academics/oclj/pdf/vol14_2/vol14_oclj_269.pdf> (brackets in original)

There are many species found along potential shipping routes through the Northwest Passage that may be affected by sounds produced by ships, submarines, and airplanes. Although little is known about the long-term effects of noise on marine mammals, studies have indicated that the sensitivity of whales to vessel noise is significant, resulting in “visible changes in the [whales’] surface behavior and audible changes in their underwater vocal activity.”

Impact: Noise kills marine mammals

California Coastal Commission 2013. (California state regulatory agency) Staff Report:Regular Calendar, Feb 2013 Project Description: California portion of Hawaii-Southern California Training and Testing Program –Continuation of and modifications to Navy training and testing activities <http://documents.coastal.ca.gov/reports/2013/3/F9a-3-2013.pdf>

The Commission has been consistent for almost two decades in expressing concerns over the effects of anthropogenic sounds on the marine environment, particularly on marine mammals. As noted in its December 13, 2005, comments to the Marine Mammal Commission’s Advisory Committee on Acoustic Impacts on Marine Mammals, the Commission stated:  
Anthropogenic noise is a recognized, but largely unregulated, form of ocean pollution that can deafen, disturb, injure, and kill marine life. Many species of marine mammals are known to be highly sensitive to sound and rely upon sound to navigate, find food, locate mates, avoid predators, and communicate with one another. A combination of noise sources, including shipping, oil and gas exploration and production, dredging, construction, and military activities, has resulted in dramatic increases in noise levels throughout the oceans. Over the last ten years, a growing body of evidence has shown that some forms of ocean noise can kill, injure, and deafen whales and other marine mammals. In particular, a sequence of marine mammal strandings and mortalities has been linked to exposure to mid-frequency sonar. There is also evidence that some affected animals do not strand but die at sea. This has increased public concern about the effects of anthropogenic noise on marine mammals, which has been acknowledged in a variety of domestic and international fora.

NEGATIVE: LAW OF THE SEA TREATY

NEGATIVE PHILOSOPHY

The 1994 amendments made Law of the Sea less bad. It’s still not Good.

Doug Bandow 2011. (senior fellow at the Cato Institute. A special assistant to President Ronald Reagan, he served as a deputy representative to the third U.N. Conference on the Law of the Sea ) 12 Sept 2011 Washington’s Night of the Living Dead: The Law of the Sea Treaty Stirs <http://www.cato.org/publications/commentary/washingtons-night-living-dead-law-sea-treaty-stirs>

Unfortunately, treaties attract U.S. diplomats like flames attract moths. It’s hard for the State Department to imagine an international agreement to which America is not part. So the Bush and Clinton administrations renegotiated the convention. The result was a set of amendments approved in 1994, which led most nations to accept the treaty. Advocates spoke of having “fixed” the treaty. But they had not. The document isn’t as terrible as before. However, only in Washington does “less bad” count as “good.

INHERENCY

Don’t need UNCLOS for legal demarcation of the Extended Continental Shelf

Steven Groves and Nicolas Loris 2012. (Groves – attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. Loris - master's degree in economics from George Mason Univ; Morgan Fellow at Thomas A. Roe Institute for Economic Policy Studies.) 9 July 2012 “Law of the Sea Treaty: Bad for American Energy Policy « <http://www.heritage.org/research/reports/2012/07/law-of-the-sea-treaty-bad-for-american-energy-policy>

Proponents of UNCLOS argue that without joining the convention, the U.S. would be unable to demarcate the extent of its continental shelf beyond 200 nautical miles. This is simply untrue. The U.S. regularly demarcates the limits of its continental shelf and declares the extent of its maritime boundaries with presidential proclamations, acts of Congress, and bilateral treaties with neighboring countries.

Don’t need UNCLOS to develop oil & gas on the extended continental shelf

Steven Groves and Nicolas Loris 2012. (Groves – attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. Loris - master's degree in economics from George Mason Univ; Morgan Fellow at Thomas A. Roe Institute for Economic Policy Studies.) 9 July 2012 “Law of the Sea Treaty: Bad for American Energy Policy « <http://www.heritage.org/research/reports/2012/07/law-of-the-sea-treaty-bad-for-american-energy-policy>

The U.S. does not need to join the convention in order to access oil and gas resources located on its extended continental shelf (ECS), the Arctic, or the Gulf of Mexico. Instead, it can and should use bilateral treaties with neighboring countries to demarcate the limits of its maritime and continental shelf boundaries.

Don’t need UNCLOS to do seabed mining. Turn: Seabed mining would be penalized by UNCLOS

Steven Groves 2012. (attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. ) The U.S. Can Mine the Deep Seabed Without Joining the U.N. Convention on the Law of the Sea 4 Dec 2012 <http://www.heritage.org/research/reports/2012/12/the-us-can-mine-the-deep-seabed-without-joining-the-un-convention-on-the-law-of-the-sea>

The United States can mine the deep seabed without acceding to the United Nations Convention on the Law of the Sea (UNCLOS). For more than 30 years, through domestic law and bilateral agreements, the U.S. has established a legal framework for deep seabed mining. In fact, U.S. accession would penalize U.S. companies by subjecting them to the whims of an unelected and unaccountable international bureaucracy. U.S. companies would be forced to pay excessive fees, costs, and royalties to the International Seabed Authority for redistribution to developing countries. U.S. interests are better served by not acceding to UNCLOS.

Don’t need UNCLOS for navigation and freedom of the seas: We already have customary international law

Steven Groves 2012. (attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. ) Accession to the U.N. Convention on the Law of the Sea Is Unnecessary to Secure U.S. Navigational Rights and Freedoms <http://www.heritage.org/research/reports/2011/08/accession-to-un-convention-law-of-the-sea-is-unnecessary-to-secure-us-navigational-rights-freedoms>

The navigational rights and freedoms enjoyed by the United States and the Navy are guaranteed not by membership in a treaty, but rather through a combination of long-standing legal principles and persistent naval operations. Specifically, the United States relies on the customary international law of the sea and the U.S. Freedom of Navigation Program to protect those rights and freedoms. Customary international law existed long before UNCLOS and includes the principles of freedom of navigation and overflight on the high seas, “innocent passage” through territorial waters, and passage rights through international straits and archipelagoes. The convention merely codified and elaborated upon widely accepted principles of the customary international law of the sea.

Don’t need UNCLOS to advance US interests in the Arctic

Steven Groves 2012. (attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. ) Accession to the U.N. Convention on the Law of the Sea Is Unnecessary to Secure U.S. Navigational Rights and Freedoms <http://www.heritage.org/research/reports/2011/08/accession-to-un-convention-law-of-the-sea-is-unnecessary-to-secure-us-navigational-rights-freedoms>

The United States should continue to advance its interests, including freedom of navigation, in the Arctic.[149] To the extent that the U.S. requires a “seat at the table” on Arctic issues, its prominent position on the Arctic Council serves that role. Nothing indicates that accession to UNCLOS would be a factor, much less a determinative one, in securing U.S. interests in the Arctic

“Defense Department says we need UNCLOS for navigational rights” – Response: Defense Dept does not and cannot say we need UNCLOS to defend the US

Steven Groves 2012. (attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. ) Accession to the U.N. Convention on the Law of the Sea Is Unnecessary to Secure U.S. Navigational Rights and Freedoms <http://www.heritage.org/research/reports/2011/08/accession-to-un-convention-law-of-the-sea-is-unnecessary-to-secure-us-navigational-rights-freedoms> (“the report” in this context is a 1993 Ocean Policy Review Paper published by the US Department of Defense)

That is not to say that the Department of Defense does not currently support U.S. accession to UNCLOS—it certainly does. However, the Department of Defense does not, and cannot, say either that U.S. membership in UNCLOS is absolutely essential to the preservation of navigational rights and freedoms or that the United States is incapable of protecting those rights unless it accedes to the convention. The 1993 report’s conclusion that the United States is successfully protecting its national security interests on the world’s oceans is correct, and the U.S. has done so without being party to UNCLOS. The practices of the United States and other maritime powers over the course of centuries have created the very customary law of the sea that is the foundation of UNCLOS’s navigational provisions. It is therefore erroneous to claim that the United States may benefit from the convention’s navigational provisions only if it joins the convention.

Customary International Law is sufficient to protect US interests without joining UNCLOS

Steven Groves 2012. (attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. ) Accession to the U.N. Convention on the Law of the Sea Is Unnecessary to Secure U.S. Navigational Rights and Freedoms <http://www.heritage.org/research/reports/2011/08/accession-to-un-convention-law-of-the-sea-is-unnecessary-to-secure-us-navigational-rights-freedoms>

Throughout its history, the United States has successfully protected its maritime interests despite not being an UNCLOS member. Enjoyment of the convention’s navigational provisions is not restricted to UNCLOS members. Those provisions represent widely accepted customary international law, some of which has been recognized as such for centuries. UNCLOS members and nonmembers alike are bound by the convention’s navigational provisions. The body of international law known as the “law of the sea” was not invented in 1982 when UNCLOS was adopted, but rather “has its origins in the customary practice of nations spanning several centuries.”[8] It developed as “customary international law,” which is “that body of rules that nations consider binding in their relations with one another. It derives from the practice of nations in the international arena and from their international agreements.”[9] Although not a party to UNCLOS, the United States is bound by and acts in accordance with the customary international law of the sea and considers the UNCLOS navigational provisions as reflecting international law.

HARMS

“Have to block other countries from eroding our rights” – Response: Erosion isn’t happening, despite dire warnings

Steven Groves 2012. (attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. ) Accession to the U.N. Convention on the Law of the Sea Is Unnecessary to Secure U.S. Navigational Rights and Freedoms <http://www.heritage.org/research/reports/2011/08/accession-to-un-convention-law-of-the-sea-is-unnecessary-to-secure-us-navigational-rights-freedoms>

Proponents have similarly argued that if the U.S. does not join the convention, “it will not be in a position to affect the evolution of this ocean regulatory regime.”[32] Still others insist that time is running out for the United States to realize the benefits of the convention’s navigational provisions. For instance, in 1995, Admiral William Schachte warned, “This may be our last opportunity to ‘lock in’ those critical navigational and overflight rights so essential to our economic and military security.”[33] A dozen years later, in 2007, the Vice Chief of Naval Operations repeated the same warning to the Senate Foreign Relations Committee: “We need to lock in the navigation and overflight rights and high seas freedoms contained in the Convention while we can.”[34] However, the evidence indicates that the navigational provisions of UNCLOS are already locked in to the extent that any aspect of international law can be. Indeed, the passage of time has demonstrated that nations—UNCLOS members and nonmembers alike—have generally adhered to the convention’s navigational provisions in good faith and that those provisions have endured, not eroded.

“Diplomacy / Leadership hindered by not joining UNCLOS” – Response: US is leading the world in maritime law

Steven Groves 2012. (attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. ) Accession to the U.N. Convention on the Law of the Sea Is Unnecessary to Secure U.S. Navigational Rights and Freedoms <http://www.heritage.org/research/reports/2011/08/accession-to-un-convention-law-of-the-sea-is-unnecessary-to-secure-us-navigational-rights-freedoms>

By forgoing UNCLOS membership, the United States is in no way hindering its ability to secure, preserve, or otherwise protect its navigational rights and freedoms. Nor, as contended by several UNCLOS proponents, is it failing to demonstrate leadership on maritime issues by remaining outside the convention.[143] To the contrary, the United States remains the greatest maritime power in the world and is deeply involved in ongoing issues relating to the law of the sea. The United States plays an essential, if not indispensable, role in the development of the law of the sea. The U.S. Navy’s *Commander’s Handbook on the Law of Naval Operations*is the preeminent operational manual on the convention’s navigational provisions and is considered the gold standard by maritime nations worldwide, many of which have adopted it for use by their own navies

US Navy is not restricted by failure to join UNCLOS

Steven Groves 2012. (attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. ) Accession to the U.N. Convention on the Law of the Sea Is Unnecessary to Secure U.S. Navigational Rights and Freedoms <http://www.heritage.org/research/reports/2011/08/accession-to-un-convention-law-of-the-sea-is-unnecessary-to-secure-us-navigational-rights-freedoms>

In sum, freedom of navigation on the high seas has long been recognized as customary international law and was codified as such in 1958 in the Convention on the High Seas. Those same provisions were restated in UNCLOS in 1982. It is therefore erroneous to claim that U.S. membership in UNCLOS is essential to guaranteeing the U.S. Navy’s high seas freedoms. The freedoms of navigation on and overflight over the high seas simply do not hinge on UNCLOS membership. They have existed for hundreds of years as part of the customary international law of the sea.

SOLVENCY

Won’t help Navy with freedom of navigation. Could even harm US naval security if adverse rulings are made

Doug Bandow 2004. (senior fellow at the Cato Institute. A special assistant to President Ronald Reagan, he served as a deputy representative to the third U.N. Conference on the Law of the Sea ) 15 Mar 2004 Sink the Law of the Sea Treaty <http://www.cato.org/publications/commentary/sink-law-sea-treaty>

At the same time, some ambiguous provisions may impinge on freedoms U.S. shipping now enjoys. In Senate testimony last fall, State Department legal adviser William H. Taft IV noted the importance of conditioning acceptance “upon the understanding that each Party has the exclusive right to determine which of its activities are ‘military activities’ and that such determination is not subject to review.” Whether other members will respect that claim is not at all certain. Admiral Michael G. Mullen, the vice chief of naval operations, acknowledges the possibility that a Law of the Sea tribunal could rule adversely and harm U.S. “operational planning and activities, and our security.”

UNCLOS won’t block excess ocean territorial claims

Doug Bandow 2004. (senior fellow at the Cato Institute. A special assistant to President Ronald Reagan, he served as a deputy representative to the third U.N. Conference on the Law of the Sea ) 15 Mar 2004 Sink the Law of the Sea Treaty <http://www.cato.org/publications/commentary/sink-law-sea-treaty>

Nor has signing the Law of the Sea Treaty prevented Brazil, China, India, Malaysia, North Korea, Pakistan, and others from making ocean claims deemed excessive by others. Indeed, last October Adm. Mullen warned that the benefits he believed to derive from treaty ratification did not “suggest that countries’ attempts to restrict navigation will cease once the United States becomes a party to the Law of the Sea Convention.”

DISADVANTAGES

1. Expensive environmental lawsuits

Link: Joining UNCLOS would open the door to international environmental lawsuits

Doug Bandow 2007. (senior fellow at the Cato Institute. A special assistant to President Ronald Reagan, he served as a deputy representative to the third U.N. Conference on the Law of the Sea ) 10 Oct 2007 The LOST Attack on Entrepreneurship <http://blog.psaonline.org/2007/10/10/the-lost-attack-on-entrepreneurship/> (brackets in original)

Moreover, the treaty’s ambiguities invite legal mischief. William C.G. Burns, with the Monterey Institute of International Studies, argues that LOST “is a promising instrument through which such [legal] action might be taken, given its broad definition of pollution to the marine environment and the dispute resolution mechanisms contained within its provision.” Indeed, long-time treaty supporter Bernard Oxman warned LOST advocates not to begin suing the U.S. until Washington ratified the convention. It “is an easy target,” he writes, since “it is amply endowed with indeterminate principles, mind-numbing cross-references, institutional redundancies, exasperating opacity and inelegant drafting, not to mention a potpourri of provisions that any one of us, if asked, would happily delete or change.”

Impact 1: Cost of defending lawsuits. Even if we win the suit, taxpayers still have to pay for all the expense of fighting it

Steven Groves and Nicolas Loris 2012. (Groves – attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. Loris - master's degree in economics from George Mason Univ; Morgan Fellow at Thomas A. Roe Institute for Economic Policy Studies.) 9 July 2012 “Law of the Sea Treaty: Bad for American Energy Policy « <http://www.heritage.org/research/reports/2012/07/law-of-the-sea-treaty-bad-for-american-energy-policy>

Acceding to UNCLOS would create an opportunity to pursue environmental lawsuits against the U.S. based on virtually any maritime activity, such as alleged pollution of the oceans from a land-based source or even through the atmosphere. Regardless of the case’s merits, the U.S. would be forced to defend itself against every such lawsuit—at great expense to U.S. taxpayers.

Impact 2: Lawsuits = costly changes to the US economy

Steven Groves and Nicolas Loris 2012. (Groves – attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. Loris - master's degree in economics from George Mason Univ; Morgan Fellow at Thomas A. Roe Institute for Economic Policy Studies.) 9 July 2012 “Law of the Sea Treaty: Bad for American Energy Policy « <http://www.heritage.org/research/reports/2012/07/law-of-the-sea-treaty-bad-for-american-energy-policy>

Not only that, but any adverse judgment in a climate change lawsuit that imposes penalties or forces the U.S. to curb greenhouse gas emissions would be extremely costly for American consumers. Since a large majority of our energy use comes from carbon-emitting fossil fuels, any emission control measures would increase costs for businesses that would then pass those costs on to consumers. To make matters worse, any adverse judgment would be final, not subject to appeal, and enforceable in the United States.

2. Lost federal revenues

Link: UNCLOS would divert billions of dollars in revenue away from the US Treasury

Steven Groves and Nicolas Loris 2012. (Groves – attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. Loris - master's degree in economics from George Mason Univ; Morgan Fellow at Thomas A. Roe Institute for Economic Policy Studies.) 9 July 2012 “Law of the Sea Treaty: Bad for American Energy Policy « <http://www.heritage.org/research/reports/2012/07/law-of-the-sea-treaty-bad-for-american-energy-policy>

Moreover, accession to UNCLOS will result in billions of dollars in revenue distributed away from the U.S. Treasury to an international bureaucracy that would transfer the wealth to developing nations. Under current U.S. law and policy, all royalties and other revenue generated from exploitation of the U.S. ECS belong to the U.S. and would be deposited into the U.S. Treasury and dispensed in the best interest of the U.S. and the American people. Accession to the treaty would mean transferring a large portion of those royalties to the International Seabed Authority, an international organization established by UNCLOS and seated in Kingston, Jamaica, which would in turn distribute the royalty revenue to various developing nations in a manner that might not advance U.S. national interests.

Impact: Higher deficits hurt the economy

Dr William Gale and Benjamin Harris 2011. (Gale - PhD in economics, Stanford Univ.; senior fellow at the Brookings Institution and co-director of the Urban-Brookings Tax Policy Center; former assistant professor in the Department of Economics at UCLA, and a senior economist for the Council of Economic Advisers under President George H.W. Bush; Harris - master’s degree in economics from Cornell University and a master’s degree in quantitative methods from Columbia University; senior research associate with the Economics Studies Program at the Brookings Institution) “A VAT for the United States: Part of the Solution” <http://www.taxanalysts.com/www/freefiles.nsf/Files/GALE-HARRIS-5.pdf/$file/GALE-HARRIS-5.pdf>

But even in the absence of a crisis, sustained deficits have deleterious effects, as they translate into lower national savings, higher interest rates, and increased indebtedness to foreign investors, all of which serve to reduce future national income. Gale and Orszag (2004a) estimate that a 1 percent of GDP increase in the deficit will raise interest rates by 25 to 35 basis points and reduce national saving by 0.5 to 0.8 percentage points of GDP.

Brink and Impact: The higher the debt, the greater the risk of a crisis. If we don’t act soon, risk of crisis will increase

THE NATIONAL COMMISSION ON FISCAL RESPONSIBILITY AND REFORM 2010. (bipartisan panel appointed by Pres. Obama in 2010 to write a report on ways to solve the imbalance in the federal budget; chaired by Sen. Alan Simpson, Former Republican Senator from Wyoming and Erskine Bowles, Chief of Staff to President Clinton) Dec 2010, “THE MOMENT OF TRUTH - REPORT OF THE NATIONAL COMMISSION ON FISCAL RESPONSIBILITY AND REFORM” (brackets added) [www.fiscalcommission.gov/sites/fiscalcommission.gov/files/documents/TheMomentofTruth12\_1\_2010.pdf](http://www.fiscalcommission.gov/sites/fiscalcommission.gov/files/documents/TheMomentofTruth12_1_2010.pdf)

Predicting the precise level of public debt that would trigger such a crisis is difficult, but a key factor may be whether the debt has been stabilized as a share of the economy or if it continues to rise. Investors, reluctant to risk throwing good money after bad, are sure to be far more concerned about rising debt than stable debt. In a recent briefing on the risk of a fiscal crisis, CBO [Congressional Budget Office] explained that while “there is no identifiable tipping point of debt relative to GDP indicating that a crisis is likely or imminent,” the U.S. debt-to-GDP ratio is “climbing into unfamiliar territory” and “the higher the debt, the greater the risk of such a crisis.” If we do not act soon to reassure the markets, the risk of a crisis will increase, and the options available to avert or remedy the crisis will both narrow and become more stringent.

Non-navigational provisions outweigh any navigational benefits

Steven Groves 2012. (attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. ) Accession to the U.N. Convention on the Law of the Sea Is Unnecessary to Secure U.S. Navigational Rights and Freedoms <http://www.heritage.org/research/reports/2011/08/accession-to-un-convention-law-of-the-sea-is-unnecessary-to-secure-us-navigational-rights-freedoms>

The convention’s royalty-sharing provisions, compulsory dispute resolution requirements, and creation of an international bureaucracy to regulate deep seabed mining are just a few of its major flaws.[152] The navigational benefits claimed by proponents of U.S. accession to UNCLOS must necessarily be balanced against the irrefutably negative aspects of the convention that stem from its non-navigational provisions. The practices of the U.S. Navy and the navies of other major maritime powers created the very customary international law upon which the navigational provisions of UNCLOS are based. The Navy enjoys those same navigational rights and freedoms despite non-accession to the treaty. The Navy’s insistence that a failure to join UNCLOS will hinder its ability to conduct its global mission successfully is belied by the facts and demonstrably disproved by history. Moreover, the Navy’s support for the navigational rights enshrined in UNCLOS is far outweighed by the convention’s dangerous non-navigational provisions.

3. Discouraging seabed mining

Link: Status Quo can do seabed mining under existing law

Steven Groves 2012. (attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. ) The U.S. Can Mine the Deep Seabed Without Joining the U.N. Convention on the Law of the Sea 4 Dec 2012 <http://www.heritage.org/research/reports/2012/12/the-us-can-mine-the-deep-seabed-without-joining-the-un-convention-on-the-law-of-the-sea>

No legal barriers prohibit U.S. access, exploration, or exploitation of the resources of the deep seabed. Deep seabed mining is a “high seas freedom” that all nations may engage in regardless of their membership or non-membership in UNCLOS or any other treaty.

Link: Companies have, in fact, explored seabed mining under US law in Status Quo

Steven Groves 2012. (attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. ) The U.S. Can Mine the Deep Seabed Without Joining the U.N. Convention on the Law of the Sea 4 Dec 2012 <http://www.heritage.org/research/reports/2012/12/the-us-can-mine-the-deep-seabed-without-joining-the-un-convention-on-the-law-of-the-sea>

In 1984, NOAA issued 10-year exploration licenses to four multinational private-sector mining consortia: Ocean Minerals Company (OMCO); Ocean Management, Inc. (OMI); Ocean Mining Associates (OMA); and Kennecott Consortium (KCON). The licenses authorized these consortia to explore the seabed in the Clarion–Clipperton Zone (CCZ), a region of the eastern Pacific Ocean midway between Hawaii and Mexico. Each of the four consortia had U.S. and foreign ownership interests. For example, OMA interests were divided between two American companies—U.S. Steel (25 percent) and Sun Company (25 percent)—and their Belgian and Italian partners (25 percent each). OMCO members included major U.S. companies, including Standard Oil Company and Lockheed Corporation, and the Netherlands’ Royal Dutch Shell. The OMI and KCON consortia included British, Canadian, Japanese, and German interests.

Link: Law of the Sea discourages seabed mining

Doug Bandow 2005. (senior fellow at the Cato Institute. A special assistant to President Ronald Reagan, he served as a deputy representative to the third U.N. Conference on the Law of the Sea ) 13 Oct 2005 “Don’t Resurrect the Law of the Sea Treaty” <http://www.cato.org/publications/policy-analysis/dont-resurrect-law-sea-treaty>

The logjam appears to have broken, with prominent Republicans, and the president himself, signaling support for ratification. But the changes made to the LOST over the years have not altered its fundamental principles, which are collectivist in nature and inimical to U.S. interests. Most objectionable is Section XI, that portion of the treaty governing seabed mining. The provisions of Section XI may have the effect of forever discouraging such operations, even where there might be huge benefits. Regulations are to be administered through a complicated system of committees and agencies within the International Seabed Authority, a creation of the United Nations that has ultimate jurisdiction over the agreement.

Link: Uncertainties introduced by UNCLOS are discouraging seabed mining

Steven Groves 2012. (attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. ) The U.S. Can Mine the Deep Seabed Without Joining the U.N. Convention on the Law of the Sea 4 Dec 2012 <http://www.heritage.org/research/reports/2012/12/the-us-can-mine-the-deep-seabed-without-joining-the-un-convention-on-the-law-of-the-sea> (brackets in original; DSHMRA is Deep Seabed Hard Mineral Resources Act of 1980, the US law that authorizes and licenses companies to mine in international waters. CCZ = Clarion–Clipperton Zone, a region of the eastern Pacific Ocean)

Over the past decades, the status of exploration licenses in the CCZ issued pursuant to DSHMRA has evolved significantly. In 1992, the KCON consortium evaluated the long-term viability of deep seabed mining and “concluded that there is no justification for continuing investment in manganese nodule development.”[30] KCON subsequently notified NOAA of its intent to surrender its license to explore the USA-4 area of the CCZ. About the same time, OMCO applied for and received a license from NOAA to explore USA-4. OMI relinquished its license to explore the USA-2 area in 1999, and OMA surrendered its license to explore USA-3 in 1997.[31] One reason that OMI and OMA surrendered their licenses was their disappointment over the 1994 amendments to UNCLOS. In their annual reports to NOAA, the two consortia stated “that the changes made [in the 1994 Agreement] are not sufficient in terms of being able to attract private sector investment in deep seabed mining.” The reports further stated that the mining regime adopted in the 1994 Agreement presented “economic and political risks that they do not face under [DSHMRA].”[32 ]

Link: UNCLOS adds bureaucracy and regulatory burden on American companies

Steven Groves 2012. (attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. ) The U.S. Can Mine the Deep Seabed Without Joining the U.N. Convention on the Law of the Sea 4 Dec 2012 <http://www.heritage.org/research/reports/2012/12/the-us-can-mine-the-deep-seabed-without-joining-the-un-convention-on-the-law-of-the-sea>

By acceding to UNCLOS, the United States would place itself and its seabed mining companies under the regulatory power and control of the International Seabed Authority, an international organization created by the convention. U.S. companies would be forced to pay excessive fees, costs, and an as yet undetermined percentage of royalties to the Authority to fund its operations and to be redistributed to developing countries. In short, U.S. accession would represent a radical sea change because it would create an unprecedented layer of international bureaucratic authority, oversight, and regulatory burden on American companies.

Link: UNCLOS adds huge burdens to US seabed mining companies

Steven Groves 2012. (attorney; Lomas Senior Research Fellow at Heritage Foundation; former senior counsel to the U.S. Senate Permanent Subcommittee on Investigations; was an associate at Boies, Schiller & Flexner LLP, where he specialized in commercial litigation; served as assistant attorney general for the State of Florida. ) The U.S. Can Mine the Deep Seabed Without Joining the U.N. Convention on the Law of the Sea 4 Dec 2012 <http://www.heritage.org/research/reports/2012/12/the-us-can-mine-the-deep-seabed-without-joining-the-un-convention-on-the-law-of-the-sea>

In addition to requiring a U.S. company to give the Authority access to its logs, equipment, records, facilities, data, and documents, UNCLOS would require the company to provide training in seabed mining to personnel who are not employees of the U.S. company—specifically, nationals from developing countries and personnel employed by the Authority and the Enterprise.[56] The stated purpose for the training mandate is to facilitate the “transfer of technology and scientific knowledge” to the trainees.[57 ] The U.S. company must draw up the training programs in cooperation with the Authority, and it “shall focus on training in the conduct of exploration, and shall provide for full participation by such personnel in all activities covered by the contract.”[58] The company must submit the training program to the Authority for approval before the commencement of exploration.[59] Given the presence of proprietary information, equipment, trade secrets, and business know-how involved in a seabed mining operation and the competitive nature of any capital-intensive industry, forcing a U.S. company to train personnel who will likely work for a competitor one day is particularly onerous. Never in its history has the United States consensually placed its own interests or the operations of its private sector under the complete control of an international regulatory regime such as that established by UNCLOS.

Impact: Trillions of dollars. Seabed mining could unlock vast riches

[Note: This card is also in the Blue Book AFF case for the LOS treaty as an Advantage. If the AFF read it, you don’t need to read it again.]

NEW YORK TIMES 2012. (William J. Broad, journalist) 9 May 2012 “A Gold Rush in the Abyss“ <http://www.nytimes.com/2012/07/10/science/vast-deposits-of-gold-and-other-ores-lure-seabed-miners.html?pagewanted=all&_r=0>

[ocean explorer] Mr. [Tom] Dettweiler has now turned from recovering lost treasures to prospecting for natural ones that litter the seabed: craggy deposits rich in gold and silver, copper and cobalt, lead and zinc. A new understanding of marine geology has led to the discovery of hundreds of these unexpected ore bodies, known as massive sulfides because of their sulfurous nature. These finds are fueling a gold rush as nations, companies and entrepreneurs race to stake claims to the sulfide-rich areas, which dot the volcanic springs of the frigid seabed. The prospectors — motivated by dwindling resources on land as well as record prices for gold and other metals — are busy hauling up samples and assessing deposits valued at trillions of dollars.

4. Revenue redistribution

Link: “If” seabed mining happens in spite of DA3, its revenues will be redistributed to irresponsible Third World governments by UNCLOS

Doug Bandow 2004. (senior fellow at the Cato Institute. A special assistant to President Ronald Reagan, he served as a deputy representative to the third U.N. Conference on the Law of the Sea ) 15 Mar 2004 Sink the Law of the Sea Treaty <http://www.cato.org/publications/commentary/sink-law-sea-treaty>

Were seabed mining ever to thrive, a transparent system for recognizing mine sites and resolving disputes would be helpful. But the Authority’s purpose isn’t to be helpful. It is to redistribute resources to irresponsible Third World governments with a sorry history of squandering abundant foreign aid. This redistributionist bent is reflected in the treaty’s call for financial transfers to developing states and even “peoples who have not attained full independence or other self-governing status”-code for groups such as the PLO. Whatever changes the treaty has undergone, a constant has been Third World pressure for financial transfers. Three voluntary trust funds were established to aid developing countries. Alas, few donors have come forward to subsidize the participation of, say, sub-Saharan African states in the development of ocean mining. Thus, the Authority has had to dip into its own budget to pay into the funds.

Link: The goal of LOST (Law of the Seat Treaty) is income redistribution

Doug Bandow 2011. (senior fellow at the Cato Institute. A special assistant to President Ronald Reagan, he served as a deputy representative to the third U.N. Conference on the Law of the Sea ) 12 Sept 2011 Washington’s Night of the Living Dead: The Law of the Sea Treaty Stirs <http://www.cato.org/publications/commentary/washingtons-night-living-dead-law-sea-treaty-stirs>

Indeed, the convention was but one element of the “New International Economic Order” designed to promote global income redistribution, taking money from productive First World democracies and giving it to collectivist Third World autocracies. To this end, LOST established the International Seabed Authority (ISA), currently located in the hardship post of Jamaica, to regulate private ocean development, mine the seabed through an entity called “the Enterprise,” and subsidize favored nations and groups.

Impact 1: Foreign aid cripples development in poor nations

Dr Mammo Muchie 2008. (professor at the Research Centre on Development and International Relations at Aalborg University in Denmark) 21 April 2008, "Ethiopia: Country Too Dependent On Foreign Aid," Nairobi Business Daily, <http://allafrica.com/stories/200804212023.html>

To give may be easier, but to receive is harder. There is so much one loses when one is a recipient of foreign aid. The latter is often doled out in ways that make it recurrent and essential very often to the detriment of the recipient. It is not always the case that foreign aid solves such critical problems such as feeding ones nation. Feeding a nation must be the responsibility of the government and citizens of a country. It cannot be contracted out to outsiders to help feed a nation. One off help may be necessary and unavoidable when vulnerabilities strike and foreign aid may be useful sometimes depending on how it is given. But if the help continues year in and year out, it comes at the expense of a nation's necessary confidence to take its own development chances by itself. It can cripple a country's agencies.

Impact 2: Redistribution violates human rights

Dr. José Azel 2012. (Ph.D. in International Affairs from Univ of Miami; Senior Scholar at the Institute for Cuban and Cuban-American Studies, Univ of Miami) 16 Apr 2012 “Taxes, the problem with redistrubution of wealth” MIAMI HERALD, <http://kolbyshenir.com/2012/04/15/taxes-the-problem-with-redistribution-of-wealth/>

Imagine a person who works extra hours to earn cash in order to pursue happiness in some activity that requires cash (e.g., going to the theater). Imagine another person who elects to use the extra time on leisure activities that do not require cash (e.g., watching the sunset). What is the difference between seizing the second person’s leisure and requiring some uncompensated social work, which would clearly be forced labor, and taking the first person’s income? Appropriating the results of someone’s labor is equivalent to seizing hours from that person. It gives others a fractional property right in the person, i.e., servitude. Redistribution can only be accomplished by violating individual rights and cannot be maintained without interference with our liberties.

5. Climate Change Agenda

Link: Law of the Sea will be used to move public policy towards Climate Change legislation

Doug Bandow 2011. (senior fellow at the Cato Institute. A special assistant to President Ronald Reagan, he served as a deputy representative to the third U.N. Conference on the Law of the Sea ) 12 Sept 2011 Washington’s Night of the Living Dead: The Law of the Sea Treaty Stirs <http://www.cato.org/publications/commentary/washingtons-night-living-dead-law-sea-treaty-stirs>

The potential for dubious “interpretation” is one of the convention’s greatest threats. The U.N. proclaimed that LOST is not “a static instrument, but rather a dynamic and evolving body of law that must be vigorously safeguarded and its implementation aggressively advanced.” Some treaty proponents forthrightly celebrate expansive litigation possibilities. William C.G. Burns of the Monterey Institute of International Studies argued that LOST “may prove to be one of the primary battlegrounds for climate change issues in the future,” even though no one drafting the convention thought about temperature controls. Burns noted the Treaty’s expansive definition of marine pollution, writing that “the potential impacts of rising sea surface temperatures, rising sea levels, and changes in ocean pH as a consequence of rising levels of carbon dioxide in sea water” could “give rise to actions under the Convention’s marine pollution provisions.” If nothing else, he suggested, “the specter of litigation may help to deepen the commitment of States” to legislate on the issue.

Impact: Economic losses. CO2 regulations lose trillions of dollars and millions of jobs

Ben Lieberman and Nicolas Loris 2009. (Liberman - J.D.; attorney; Senior Policy Analyst for Energy and Environment in the Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation. Loris - Research Assistant, Thomas A. Roe Institute for Economic Policy Studies) 23 April 2009 “Five Reasons the EPA Should Not Attempt to Deal with Global Warming” <http://www.heritage.org/Research/EnergyandEnvironment/wm2407.cfm>

Since 85 percent of the U.S. economy runs on fossil fuels that emit carbon dioxide, imposing a cost on CO2 is equivalent to placing an economy-wide tax on energy use. The Heritage Foundation's Center for Data Analysis study of the economic effects of carbon dioxide cuts found cumulative gross domestic product (GDP) losses of $7 trillion by 2029 (in inflation-adjusted 2008 dollars), single-year GDP losses exceeding $600 billion in some years (in inflation-adjusted 2008 dollars), energy cost increases of 30 percent or more, and annual job losses exceeding 800,000 for several years. Hit particularly hard is manufacturing, which will see job losses in some industries that exceed 50 percent.

NEGATIVE: NAVY SONAR

HARMS/SIGNIFICANCE

Estimates of damage are not nearly as alarming as they appear: Unlikely any animal will hear much

Acoustic Ecology Institute 2008. (non-profit research institution) “Ocean Issues” <http://www.acousticecology.org/srSonarFactCheck.html#Anchor-35882>

Whether the impact is temporary hearing loss or swimming a a few hundred meters to find quieter waters, the conclusion is the same: we should find ways to make less noise. From this perspective, we have an obligation to do our best to make noise–especially intense noise like sonar pings–sparingly, and with real consideration of the rights of animals to be left in peace. Conversely, looking more closely at the numbers, a legitimate case can be made that these estimates are not nearly as alarming as they appear at first glance, and that the practical effect of even likely repeated exposures may be nothing to be especially concerned about. In worst case scenarios, it's unlikely any individual animal will hear sound loud enough to trigger a behavioral response more than once every couple weeks; in most cases, animals will be unlikely to hear sonar more than a few times a year. And, the vast majority of these incidents will involve faint sounds, and very modest behavioral changes, with only a small proportion in the areas close enough to sonar ships to trigger dramatic behavioral change. From this perspective, the ethical dilemma really only kicks in when our noise is loud enough to cause injury or long-term population effects.

NOAA Analysis: Negligible species impact from Navy sonar training

NOAA 2012. National Oceanic and Atmospheric Administration, report published in FEDERAL REGISTER, 7 Feb 2012 “Taking and Importing Marine Mammals; U.S. Navy's Atlantic Fleet Active Sonar Training » <http://www.gpo.gov/fdsys/pkg/FR-2012-02-07/html/2012-2746.htm>

The Navy complied with the requirements of the 2011 LOA. Based on our review of the record, NMFS has determined that the marine mammal take resulting from the 2011 military readiness training and research activities falls within the levels previously anticipated, analyzed, and authorized. Further, the level of taking authorized in 2012 and 2013 for the Navy's AFAST activities is consistent with our previous findings made for the total taking allowed under the AFAST regulations. Finally, the record supports NMFS' conclusion that the total number of marine mammals taken by the 2012 and 2013 AFAST activities will have no more than a negligible impact on the affected species or stock of marine mammals and will not have an unmitigable adverse impact on the availability of these species or stocks for taking for subsistence uses.

NOAA says Navy sonar has negligible impact

NOAA 2009. “NOAA Gives Navy Marine Mammal Protection Measures for Sonar Training off the Atlantic Coast and Gulf of Mexico” 23 Jan 2009 <http://www.noaanews.noaa.gov/stories2009/20090123_sonartraining.html>

NOAA’s Fisheries Service does not expect the exercises to result in serious injury or death to marine mammals and is requiring the Navy to use mitigation measures intended to avoid injury or death. However, in a small number of cases, exposure to sonar in certain circumstances has been associated with the stranding of some marine mammals, and some injury or death potentially could occur despite the best efforts of the Navy. Therefore, the regulations and the letter allow for a small number of incidental injuries to marine mammals. NOAA’s Fisheries Service has determined that these effects would have a negligible impact on the species or stocks involved.

No documented injury or death to marine mammals from Navy sonar

Attorneys for Donald C. Winter, Secretary of the Navy 2008. Brief filed by the petitioners in Supreme Court case of Donald C. Winter, Secretary of the Navy v. Natural Resources Defense Council <http://www.docstoc.com/docs/1412615/07-1239-Petitioner--US-Supreme-Court-Brief>

There have been no observed or documented incidents of injury or death to marine mammals resulting from MFA-sonar exposure in SOCAL in the past 40 years. Nor have there been any mass-stranding incidents or population-level effects in SOCAL attributable to MFA sonar. J.A. 104, 510-512, 541-542, 629; App. 274a-275a. Indeed, while records show that dozens of beaked and other whale strandings have been documented in SOCAL since 1982, not one of those stranding events was temporally correlated to any sonar use.

Dolphins are voting Negative: Dolphins and other mammals like to play with Navy ships when sonar is active

Attorneys for Donald C. Winter, Secretary of the Navy 2008. Brief filed by the petitioners in Supreme Court case of Donald C. Winter, Secretary of the Navy v. Natural Resources Defense Council (brackets in original) <http://www.docstoc.com/docs/1412615/07-1239-Petitioner--US-Supreme-Court-Brief>

Dolphins, porpoises, and other marine mammals often “purposefully swim[] close to [a Navy] ship” and “’play’ by riding on the [ship’s] bow-wave,” “even during active MFA sonar transmissions,” indicating that these animals “are not adversely affected by the use of sonar.” App. 346a.

“2 million animals affected” – Response: But not affected much – the effects are temporary and minor.

CNN 2012. (journalist Phil Gast) 12 May 2012 “Navy treads fine line when defending U.S., protecting marine mammals” <http://edition.cnn.com/2012/05/11/us/navy-marine-mammals> (brackets added)

Government estimates for 2014 to 2019 indicate there may be about 2 million cases of temporary hearing loss among marine animals, Smith told CNN. "Marine mammals use hearing the same way we use sight" to find food, he said. "This kind of constant barrage and harassment is not a recipe for healthy populations," [staff attorney with the Natural Resources Defense Council, Zak] Smith added. [U.S. Pacific Fleet senior environmental planner John] Van Name challenged Smith's assessment, saying the 2 million number includes all behavioral and "temporary" responses, such as an animal turning its head, stopping feeding or moving out of the area. "The animal fully recovers," Van Name said.

SOLVENCY

Whales are very difficult to spot

Jim Cummings 2008. (Executive Director, Acoustic Ecology Institute; presenter of Presentation on Science, Policy, and the Emerging Ethics of Ocean Noise at 2nd International Conference on Acoustic Communication by Animals, Oregon State University; Masters degree in interdisciplinary consciousness studies) AEI FactCheck Navy/NRDC Sonar Debate <http://www.acousticecology.org/srSonarFactCheck.html#Anchor-Dead-11481>

This question of monitoring diligence is especially important. Numerous studies have confirmed the obvious: whales are extremely hard to find, whether searching the surface with binoculars or listening underwater for their calls. Less than 20% of whales present are likely to be spotted using either method. Since they spend so little time at the surface, a five or ten minute scan will be unlikely to spot whales in the vicinity; longer observation periods with multiple observers will see more of what is there, and aircraft offer an even better vantage point, especially at distances of 2000 or more meters. Beaked whales spend only a few minutes at the surface between 60-90 minute dives, so they are extremely unlikely to be spotted at all. The Navy seemingly feels that the extra observation time is unnecessary, since whales are in fact rarely present at all (as suggested by the figures cited by the California appeals court, that whales only came within 2000 meters 2 or 3 times a week, and the Hawaiian figures that whales were within 200 meters less than 2% of the time).

The only reliable way to detect whether whales are present is… Sonar

Dr. Frank Knudsen, Ole Gammelsaeter, Dr Petter Kvadsheim and Dr. Leif Nottestad 2007. (Knudsen – PhD; Gammelsæter, Master of Science, works with Simrad AS, a Norweigian maritime supply company; Kvadsheim - PhD; with Norwegian Defense Research Establishment. Nøttestad – PhD; Institute of Marine Research) March 2007 “Evaluation of fisheries sonar’s for whale detection in relation to seismic survey operations” <http://www.soundandmarinelife.org/Site/Products/SimradProgressReport.pdf>

Presently, visual observations and passive listening using hydrophones are the established methods used to detect whales in relation to seismic surveys. Both methods have limitations. Visual detection is dependent on daylight, good visibility and low sea state. Passive acoustics is only useful when the whales are vocalizing. Availability of these methods alone, therefore limit the time a seismic vessel can operate, and thus, increases the duration and cost of the surveys. Methodology that can reliably detect marine mammals within the established safety zone during all operational weather conditions for seismic surveys, and which is independent of visibility and the vocal behavioral state of the animals, is thus required for cost efficient operations and to secure that marine mammals are not injured or strongly affected by seismic surveys. Physical constraints in the marine environment makes active sonar detections the only means that could come anywhere near fulfilling these requirements.

INHERENCY

Navy is legally required to follow NOAA regulations limiting sonar impact on marine mammals

NOAA 2009. “NOAA Gives Navy Marine Mammal Protection Measures for Sonar Training off the Atlantic Coast and Gulf of Mexico” 23 Jan 2009 <http://www.noaanews.noaa.gov/stories2009/20090123_sonartraining.html>

NOAA’s Fisheries Service has issued regulations and a letter of authorization to the U.S. Navy that includes measures to protect marine mammals while conducting Atlantic fleet active sonar training off the Atlantic coast and in the Gulf of Mexico. The regulations require the Navy to implement measures designed to protect and minimize effects to marine mammals. Along with issuing these regulations, NOAA will undertake a comprehensive review of all mitigation measures applicable to the use of sonar and will report to the Council on Environmental Quality regarding the results of this review within 120 days. These regulations, in effect for five years, govern the incidental take of marine mammals during the Navy's training activities, include required mitigation and monitoring measures, and require annual letters of authorization. The letters of authorization, which are required for the Navy to legally conduct their activities, provide the Navy with the terms and conditions of the marine mammal mitigation measures, and requires annual reports, and Navy review of their activities to show they do not result in more numerous effects or more severe harm to marine mammals than were originally analyzed or authorized.

Navy already identifies areas for special protection and is aware of calving season and areas

CNN 2012. (journalist Phil Gast) 12 May 2012 “Navy treads fine line when defending U.S., protecting marine mammals” <http://edition.cnn.com/2012/05/11/us/navy-marine-mammals> (brackets added)

[staff attorney with the Natural Resources Defense Council, Zak] Smith, of the Natural Resources Defense Council, said the National Oceanic and Atmospheric Administration is trying a different approach. The agency is identifying marine mammal "hot spots" with a high population density, Smith said. The Navy, he said, should do a better job of not using disruptive sonar and explosives in such zones. [U.S. Pacific Fleet senior environmental planner John] Van Name said the Navy already identifies areas for special protection, including a humpback whale sanctuary off Maui. Crews also are aware of calving season and areas.

NOAA regulations will protect marine mammals

NOAA 2009. “NOAA Gives Navy Marine Mammal Protection Measures for Sonar Training off the Atlantic Coast and Gulf of Mexico” 23 Jan 2009 <http://www.noaanews.noaa.gov/stories2009/20090123_sonartraining.html>

“Under the regulations and the letter, the Navy must follow mitigation measures to minimize effects on marine mammals, including:  
- establishing marine mammal safety zones around each vessel using sonar, and using Navy observers to shut down sonar operations if marine mammals are seen within these designated safety zones;  
- implementing a stranding response plan that includes a training shutdown provision in certain circumstances (with special circumstances for North Atlantic right whales) and a memorandum of agreement to allow the Navy to contribute in-kind services to NOAA’s Fisheries Service if the agency has to conduct a stranding response and investigation;  
- minimizing helicopter dipping sonar and object detection exercises in the North Atlantic right whale critical habitat in the southeast Atlantic Ocean from December through March;  
- using several cautionary measures to minimize impacts from torpedo exercises conducted in the North Atlantic right whale critical habitat in the northeast Atlantic Ocean;  
- using designated planning awareness areas to raise awareness of Navy personnel and lessen impacts in designated productive marine mammal habitat;  
- using several cautionary measures to minimize the likelihood of ship strikes of North Atlantic right whales.  
These measures should minimize the potential for injury or death and significantly reduce the number of marine mammals exposed to levels of sound likely to cause temporary loss of hearing.”

Status Quo regulations are working: Navy exercises are conducted with no harm to marine mammals

Attorneys for Donald C. Winter, Secretary of the Navy 2008. Brief filed by the petitioners in Supreme Court case of Donald C. Winter, Secretary of the Navy v. Natural Resources Defense Council <http://www.docstoc.com/docs/1412615/07-1239-Petitioner--US-Supreme-Court-Brief>

The Navy has completed ten of the planned exercises in compliance with the statutes that provide substantive protection for marine mammals: the Marine Mammal Protection Act of 1972 (MMPA), 16 U.S.C. 1361 et seq., and the Endangered Species Act of 1973 (ESA), 16 U.S.C. 1531 et seq. Those ten exercises, like the ones over the past 40 years, have produced no evidence of sonar-related injury to any marine mammal. Various marine mammal species have continued to migrate along the California coast for decades in areas where MFA sonar is routinely used.

DISADVANTAGES

1. Naval combat readiness diminished

Link: Navy sonar training is vital to US naval defenses

Attorneys for Donald C. Winter, Secretary of the Navy 2008. Brief filed by the petitioners in Supreme Court case of Donald C. Winter, Secretary of the Navy v. Natural Resources Defense Council <http://www.docstoc.com/docs/1412615/07-1239-Petitioner--US-Supreme-Court-Brief>

This case concerns a matter of vital importance to the Nation’s naval defenses. The Southern California Operating Area (SOCAL), an area in the Pacific Ocean west of Southern California and Northern Mexico, has long been used by the United States Navy for training exercises. See Pet. App. 336a-337a (hereinafter “App.”); J.A. 123 (maps of SOCAL). The Navy has conducted training using mid-frequency active (MFA) sonar within SOCAL for over 40 years. That historical practice has taken on added significance in light of ongoing hostilities in which the United States is engaged and developments in submarine technology by potentially hostile nations.

Brink: No substitutes, no relocation possible – this is the only opportunity for realistic combat preparatory training

Attorneys for Donald C. Winter, Secretary of the Navy 2008. Brief filed by the petitioners in Supreme Court case of Donald C. Winter, Secretary of the Navy v. Natural Resources Defense Council <http://www.docstoc.com/docs/1412615/07-1239-Petitioner--US-Supreme-Court-Brief>

The exercises are conducted under “austere, hostile conditions” (J.A. 110) that “stress every aspect of strike group performance” through complex battle problems and advanced, unscripted war games (App. 342a-344a). They hone the skills needed to “examine and prioritize every potential threat, balance competing demands of specific warfare commanders, and apportion limited assets to counter threats,” while executing military missions and maintaining “force protection.” J.A. 111; see J.A. 109-110, 116-118, 125-126. Such exercises are often the only opportunity Sailors and Marines have to train in an environment that replicates to the greatest extent possible the real-world military situations they may confront. And the only opportunity for the Navy’s Pacific Fleet strike groups to conduct such training is in COMPTUEX and JTFEX exercises in SOCAL. App. 271a, 342a; J.A. 127-128. SOCAL is the only complex on the west coast containing all land, air, and at-sea bases (including an instrumented range on the ocean floor and amphibious landing areas) necessary to train air, sea, and undersea forces simultaneously in an integrated manner.

Link: Real-world training is essential to naval readiness before a military crisis

Attorneys for Donald C. Winter, Secretary of the Navy 2008. Brief filed by the petitioners in Supreme Court case of Donald C. Winter, Secretary of the Navy v. Natural Resources Defense Council <http://www.docstoc.com/docs/1412615/07-1239-Petitioner--US-Supreme-Court-Brief>

Training in real-world conditions designed to replicate real-world scenarios with a live, subsurface adversary whose tactics will exploit the ocean’s ever-changing complexity is essential. That training is the best practical experience a sonar operator will have before he encounters an actual military crisis.

Impact: Well-trained Navy is key to preventing war and vital to national security

Attorneys for Donald C. Winter, Secretary of the Navy 2008. Brief filed by the petitioners in Supreme Court case of Donald C. Winter, Secretary of the Navy v. Natural Resources Defense Council <http://www.docstoc.com/docs/1412615/07-1239-Petitioner--US-Supreme-Court-Brief>

The existence of a well-equipped and well-trained Navy has long been regarded as vital to the Nation’s security. See 2 State of the Union Messages of the Presidents 1790-1966, at 2038 (Fred L. Israel ed. 1966) (Theodore Roosevelt) (“an adequate and highly trained navy is the best guaranty against war”); The Federalist No. 24 at 160-162 (Alexander Hamilton) (Clinton Rossiter ed. 1961). Congress accordingly has directed that the Navy “shall be organized, trained, and equipped primarily for prompt and sustained combat incident to operations at sea,” and it “is responsible for the preparation of naval forces necessary for the effective prosecution of war.”

2. Persian Gulf instability

Link: Sonar training is essential to Naval deployment in the Middle East for detecting submarines

Attorneys for Donald C. Winter, Secretary of the Navy 2008. Brief filed by the petitioners in Supreme Court case of Donald C. Winter, Secretary of the Navy v. Natural Resources Defense Council <http://www.docstoc.com/docs/1412615/07-1239-Petitioner--US-Supreme-Court-Brief>

In this case, the Navy scheduled a series of up to 14 certification exercises in SOCAL, from February 2007 through January 2009, to prepare naval strike groups for deployment to the western Pacific and Middle East. The use of MFA sonar to detect submarines is an essential element of those exercises, which train the thousands of military personnel in a strike group to operate as an integrated unit in simultaneous air, surface, and undersea warfare.

Link: Our adversaries operate quiet submarines that are difficult to detect

Attorneys for Donald C. Winter, Secretary of the Navy 2008. Brief filed by the petitioners in Supreme Court case of Donald C. Winter, Secretary of the Navy v. Natural Resources Defense Council <http://www.docstoc.com/docs/1412615/07-1239-Petitioner--US-Supreme-Court-Brief>

Anti-submarine-warfare training, including the use of MFA sonar, is a critical aspect of such exercises. App. 9a. The Navy continuously deploys strike groups to high-threat areas in the western Pacific and Middle East where the Nation’s potential adversaries operate modern diesel-electric submarines that incorporate technological advances making them extremely quiet and difficult to detect. J.A. 230, 566-568, 571; App. 270a-271a. A diesel-electric submarine operating on battery power “is nearly undetectable to U.S. and allied naval forces using passive SONAR alone.” App. 274a. MFA sonar is therefore a strike group’s only effective means to detect and track such submarines before they close within weapons range, and such timely detection therefore “is essential to U.S. Navy ship survivability.”

Link: US Navy is key to limiting Iran’s use of submarines in the Persian Gulf

Anshel Pfeffer 2012. (journalist) HA’ARETZ (Israeli newspaper) “How dangerous is Iran's submarine fleet?” <http://www.haaretz.com/blogs/the-axis/how-dangerous-is-iran-s-submarine-fleet.premium-1.444755>

There is another reason that Iran can make only limited use of its submarine fleet. Most of Iran's naval bases are along the 1000-kilometer long coast of the narrow Persian Gulf, which could potentially allow it to block the sea-lanes through which much of the world's oil supplies are delivered, but it also leaves very little room for a submarine to hide, especially in the shallow waters of the Gulf which at no point are deeper than ninety meters. The U.S. Navy, along with its Sunni Arabian Gulf allies and other western nations have a major concentration of anti-submarine assets which spend most of their time observing the Iranian ports and tracking those submarines.

Link/Brink: Iran wants confrontation in the region

Dr. Ariel Cohen and Michaela Bendikova 2012. (Cohen - PhD; Senior Research Fellow in Russian & Eurasian Studies and International Energy Policy in the Allison Center for Foreign Policy Studies, Heritage Foundation. Bendikova - Research Assistant for Missile Defense & Foreign Policy in the Allison Center at Heritage Foundation) Iran’s Menace in Azerbaijan, 16 Mar 2012 <http://blog.heritage.org/2012/03/16/irans-menace-in-azerbaijan/>

It is possible that Iran is growing more wary and aggressive as sanctions start to bite. Azerbaijan is not the only country in the region that Iran targets. Iranian intelligence and its Hezbollah subsidiary recently conducted operations against Israeli targets in Tbilisi, Georgia, New Delhi, and Bangkok. According to some experts, Iran is wary of a major confrontation and wants to provoke Israel into smaller confrontations, because it needs an external threat around which it can organize its increasingly dissatisfied population.

Link: Iran has deadly submarines that could ambush ships in the Strait of Hormuz

Christopher Harmer 2012. (Senior Naval Analyst with the Middle East Security Project; served for 20 years as U.S. Navy officer, including as the Deputy Director of Future Operations at the U.S. Navy Fifth Fleet) 21 June 2012 “FACT SHEET: IRAN'S SUBMARINE FORCE” <http://www.understandingwar.org/reference/fact-sheet-irans-submarine-force>

The Iranian military has acquired a large, capable, and growing submarine force. Industrial developments in Iran in the last month have increased the readiness and lethality of the Iranian submarine force. This fact sheet provides a brief analysis of the Iranian submarine fleet and its potential future capabilities. **Tactical Advantage of Submarines in the Arabian Gulf** Submarines are a significant measure of naval combat power. Because submarines are difficult to detect and track, unlike surface ships or aircraft, they have a strategic advantage that distinguishes elite naval powers. In the confined and shallow waters of the Arabian Gulf, the ability to deploy submarines effectively threatens surface vessels that are channeled into narrow Sea Lines of Communication (the technical term for shipping lanes) by depth, underwater obstacles, oil and gas wells, and territorial boundaries. Because these Lines of Communication force commercial and military vessels to travel defined and predictable routes with minimal deviation, submarines can easily ambush surface traffic in the Arabian Gulf, especially in the Strait of Hormuz where a Traffic Separation Scheme clearly delineates a shipping lane that ships must comply with.

Link: Iran has threatened to blockade oil tankers in the Strait of Hormuz, and they can do it with submarines

Christopher Harmer 2012. (Senior Naval Analyst with the Middle East Security Project; served for 20 years as U.S. Navy officer, including as the Deputy Director of Future Operations at the U.S. Navy Fifth Fleet) 21 June 2012 “FACT SHEET: IRAN'S SUBMARINE FORCE” <http://www.understandingwar.org/reference/fact-sheet-irans-submarine-force>

Because of this regional disadvantage, Iran’s best military option against the GCC exists at sea. None of the GCC states have submarines, leaving Iran as the only regional power with a submarine force. Iran’s submarine force, equipped with torpedoes, cruise missiles, and mines, represents a significant threat to the free flow of commercial shipping through the Strait of Hormuz. Commercial vessels traveling through the Strait of Hormuz are a strategic target, as oil exports through the Strait are the financial lifeline for the GCC. In this sense, commercial shipping vessels are better targets for Iran than GCC or U.S. warships. More importantly, the ability to threaten all surface traffic through the Strait provides Iran the ability to build an effective blockade. Iranian leaders have publicly stated that they are prepared to close the Strait of Hormuz to deny GCC states oil revenues. In December 2011, Ahmad Alam Al-Hoda, a member of the Iranian Assembly of Experts, said, “Do not doubt that Iran has the capability to blockade the UAE and Saudi tankers departing for Europe via the Strait of Hormuz.”

Link: Iran threatens to block the Strait of Hormuz, which carries 17 million barrels/day of oil

David Blair 2012. (journalist) 23 Jan 2012 “Iran threatens to close Strait of Hormuz over EU oil sanctions” THE TELEGRAPH (British newspaper) <http://www.telegraph.co.uk/news/worldnews/middleeast/iran/9032948/Iran-threatens-to-close-Strait-of-Hormuz-over-EU-oil-sanctions.html>

Britain, America and France delivered a pointed signal to Iran, sending six warships led by a 100,000 ton aircraft carrier through the highly sensitive waters of the Strait of Hormuz. The naval deployment, led by an aircraft carrier, defied explicit Iranian threats to close the waterway. It coincided with an escalation in the West's confrontation with Iran over the country's nuclear ambitions. The EU embargo on Iranian oil exports, amounts to the most significant package of sanctions yet agreed. They are also likely to impose a partial freeze on assets held by the Iranian Central Bank in the EU. Tehran has threatened to block the Strait of Hormuz in retaliation. Tankers carrying 17 million barrels of oil pass through this waterway every day, accounting for 35 per cent of the world's seaborne crude shipments.

Link: US military action would be key to clearing the sea lanes and stabilizing oil prices

Dr. Ariel Cohen, Dr. David W. Kreutzer, James Phillips, and Michaela Bendikova 2012. (Cohen - PhD; Senior Research Fellow in Russian & Eurasian Studies and International Energy Policy in the Allison Center for Foreign Policy Studies, Heritage Foundation. Kreutzer - Ph.D., is Research Fellow in Energy Economics and Climate Change in the Center for Data Analysis at The Heritage Foundation. Phillips - Senior Research Fellow for Middle Eastern Affairs. Bendikova - Research Assistant for Missile Defense & Foreign Policy in the Allison Center at Heritage Foundation.) Thinking the Unthinkable: Modeling a Collapse of Saudi Oil Production 9 Apr 2012 <http://thf_media.s3.amazonaws.com/2012/pdf/bg2671.pdf>

Iranian threats to block oil shipping in the Strait of Hormuz, if acted upon, could disrupt the global energy supply and cause oil prices to spike. However, as this report suggests, this scenario is relatively short term. It leaves the oil-producing infrastructure intact, and prices would stabilize if military action, led by the United States, and a coordinated international response successfully restore security to the sea-lanes.

Impact: Losing 5.4 million barrels/day would take $214 billion from US economy, lose 1.5 million jobs

Dr. Ariel Cohen, Dr. David W. Kreutzer, James Phillips, and Michaela Bendikova 2012. (Cohen - PhD; Senior .Research Fellow in Russian & Eurasian Studies and International Energy Policy in the Allison Center for Foreign Policy Studies, Heritage Foundation. Kreutzer - Ph.D., is Research Fellow in Energy Economics and Climate Change in the Center for Data Analysis at The Heritage Foundation. Phillips - Senior Research Fellow for Middle Eastern Affairs. Bendikova - Research Assistant for Missile Defense & Foreign Policy in the Allison Center at Heritage Foundation.) Thinking the Unthinkable: Modeling a Collapse of Saudi Oil Production 9 Apr 2012 <http://thf_media.s3.amazonaws.com/2012/pdf/bg2671.pdf>

However, the initial shock of the net loss of 5.4 mbd in the petroleum market has a corresponding impact on the U.S. economy with the greatest impacts occurring in the first two years. Over the first two years, U.S. GDP loses $214 billion per year. Employment averages 1.1 million jobs below the baseline, bottoming out at more than 1.5 million lost jobs in the second quarter of the second year.

Impact: Oil price shocks hurt the US and world economy

Dr. Shiu-Sheng Chen & Kai-Wei Hsu 2012. (Chen - PhD economics; professor of economics at National Taiwan University; Hsu - economics department, National Taiwan University) Reverse Globalization: Does High Oil Price Volatility Discourage International Trade? Jan 2012, <http://mpra.ub.uni-muenchen.de/36182/1/MPRA_paper_36182.pdf>

It has been shown that the dramatic rise in oil prices during the 1970s was associated with subsequent economic downturns. Although there is some debate as to whether oil price shocks are the main cause of recessions, Hamilton (2009b) asserts that the latest surge in oil prices between June 2007 and June 2008 was an important factor that contributed to the economic recession that began in the US in 2007:Q4. Moreover, a number of recent studies show that oil price shocks have significant effects on a variety of domestic economic activities. An increase in oil prices has a significant negative impact on GDP growth and contributes to a higher inflation rate for most countries (see Hamilton (2009a), Cologni and Manera (2008), and Lardic and Mignon (2008)). Finally, Ordonez et al. (2011) show that the oil price shock is an important driving force of the cyclical labor adjustments in the US labor market, and the job-finding probability is the main transmission mechanism of such a shock.

“Markets will solve for oil prices” - Response: If supply problems become severe, oil markets could fail altogether

The Economist 2011 (respected British news magazine) March 3, 2011 “The price of fear” THE ECONOMIST <http://www.economist.com/node/18285768>

If the supply situation worsens, opportunities for this type of substitution will be fewer, creating supply bottlenecks, shortages of petrol and spikes within price spikes for different crudes and products, even when spare capacity remains. The price differential of about $15 a barrel that has built up between Brent crude, which more closely reflects global trade, and West Texas Intermediate, the benchmark for oil prices in America, is a good example of how oil markets can become distorted by local patterns of supply and demand. If supply gets even more stretched, oil could fetch a far higher price in some parts of the world than others. If supply problems become really grave, oil companies may even declare *force majeure*, raising the prospect that, as in 1978, oil markets fail altogether.

NEGATIVE: OIL DRILLING - GOOD

NEGATIVE PHILOSOPHY

Stopping offshore drilling is an irrational over-reaction

Nicolas Loris 2012. (master's degree in economics from George Mason University ) Oil Rig Explosion Shouldn’t Lead to More Drilling Bans 19 Nov 2012 <http://blog.heritage.org/2012/11/19/oil-rig-explosion-shouldnt-lead-to-more-drilling-bans-2/>

The incentive to reduce risk already exists. What is not needed are sweeping regulations and bans on drilling that adversely affect the entire industry and, consequently, many employees—as well as all American energy consumers. Tens of thousands of people die in traffic fatalities each year, but no one calls for legislation that mandates a national speed limit of 10 miles per hour. Even shortly after the Deepwater Horizon spill in 2010, seven experts from the National Academy of Engineering said that a blanket moratorium was not the answer, it would not significantly reduce the risks of offshore drilling, and it would punish the innocent.

HARMS

Risks are exaggerated: We should expand offshore drilling – the lessons of Deepwater Horizon have already been embodied in new safety rules

Prof. Tyler Priest 2013. (associate professor of history and geography at the University of Iowa) April 2013 “Should the U.S. Expand Offshore Oil Drilling?” WALL STREET JOURNAL <http://online.wsj.com/article/SB10001424127887324020504578398610851042612.html>

As the 2010 Deepwater Horizon disaster demonstrated, there are risks. Critics, however, too often exaggerate the risks, including the impacts of routine drilling operations on ecosystems, and understate the benefits. Expanding offshore drilling with appropriate site selection, oversight and attention to the lessons from Deepwater Horizon—already embodied in new rules on equipment, drilling and safety—should be a central objective of U.S. energy policy.

Cleanup costs don’t justify prohibiting drilling – just make the responsible corporation pay for it

Ben Lieberman 2010. (Senior Policy Analyst in Energy and the Environment in the Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation) “Gulf Oil Spill: Washington’s Response Should Not Preclude Future Exploration“ 5 May 2010 <http://www.heritage.org/research/reports/2010/05/gulf-oil-spill-washingtons-response-should-not-preclude-future-exploration>

BP and other companies involved in the Deepwater Horizon project should pay the cost of the spill. Indeed, major oil spills are major money-losing events for the companies involved—as they should be—which, along with safety regulations, explains why they are so rare. This includes the cleanup costs. The cleanup itself is largely undertaken by the Coast Guard and other federal agencies, but the bill should be paid by the responsible oil companies and not taxpayers. There should be a discussion regarding whether laws like the 1990 Oil Pollution Act need to be prospectively updated to ensure that the polluter pays. But doing so should not be an excuse to impact existing contracts, simply make offshore drilling prohibitively expensive, or even prohibit it altogether.

INHERENCY

Most US waters are closed to oil exploration. Only 15% are open

Hans A. von Spakovsky and Nicolas Loris 2012. (Spakovsky - senior legal fellow in The Heritage Foundation’s Center for Legal and Judicial Studies; former counsel to the Assistant Attorney General for civil rights at US Justice Dept. Loris - master's degree in economics from George Mason University ) Offshore Drilling: Increase Access, Reduce the Risk, and Stop Hurting American Companies, 13 Aug 2012 <http://www.heritage.org/research/reports/2012/08/offshore-drilling-increase-access-reduce-the-risk-and-stop-hurting-american-companies>

The recent lease sale in the Central Gulf of Mexico was a welcoming sign (especially since the Administration delayed part of the sale in 2010), but the new five-year leasing plan for 2012–2017 is extremely disappointing. The Administration failed to unlock the Atlantic and Pacific coasts, as well as the Eastern Gulf of Mexico and areas off Alaska’s coast. As a result, a meager 15 percent of America’s territorial waters are available for oil and gas exploration.

Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) established new safety standards after the BP accident

BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT 2011. (federal agency that regulates offshore oil drilling) 18 Mar 2011 “BOEMRE Approves Third Deepwater Drilling Permit to Meet New Safety Standards“ <http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=15&ved=0CEoQFjAEOAo&url=http%3A%2F%2Fwww.boem.gov%2FBOEM-Newsroom%2FPress-Releases%2F2011%2Fpress0318.aspx&ei=gbzBUdGCJejJ0wGNxYGABA&usg=AFQjCNFxwCvE3OMog3okVQT_jaiwrx0Oew&sig2=CYsY2XglZs0WLsjEfVYlmQ&bvm=bv.47883778,d.eWU&cad=rja> (Note: “ATP” is the name of an oil drilling company)

As part of its approval process, the bureau reviewed ATP’s containment capability available for the specific well proposed in the permit application. ATP has contracted with the Helix Well Containment Group to use its capping stack to stop the flow of oil should a well control event occur. The capabilities of the capping stack meet the requirements that are specific to the characteristics of the proposed well. BOEMRE has worked diligently to help industry adapt to and comply with new, rigorous safety practices. These standards ensure that oil and gas development continues, while also incorporating key lessons learned from the Deepwater Horizon oil spill. This new permit meets the new safety regulations and information requirements in Notices to Lessees (NTL) N06 and N10, and the Interim Final Safety Rule.

Obama Administration enacted aggressive offshore oil regulations after the Deepwater Horizon spill, allowing energy development to safely expand

American Society of Safety Engineers 2012. (world’s oldest professional safety society; global association of occupational safety professionals representing more than 34,000 members worldwide) Regulatory Reform in Response to the Deepwater Horizon <http://www.asse.org/professionalsafety/docs/DeepwaterHorizonArticle.pdf>

In response to the Deepwater Horizon explosion and resulting oil spill in the Gulf of Mexico, the Obama Administration launched the most aggressive and comprehensive reforms to offshore oil and gas regulation and oversight in U.S. history. The reforms, which strengthen requirements for everything from well design and workplace safety to corporate accountability, are helping ensure that the U.S. can safely and responsibly expand development of its energy resources.

Specific details of the new safety regulations enacted after the Deepwater Horizon spill

American Society of Safety Engineers 2012. (world’s oldest professional safety society; global association of occupational safety professionals representing more than 34,000 members worldwide) Regulatory Reform in Response to the Deepwater Horizon <http://www.asse.org/professionalsafety/docs/DeepwaterHorizonArticle.pdf> (brackets added)

BOEMRE [Bureau of Ocean Energy Management, Regulation and Enforcement ] has launched aggressive, comprehensive reforms to offshore oil and gas regulation and oversight.  
 Enhanced Drilling Safety  
•Operators must demonstrate that they are prepared to deal with the potential for a blowout and worst-case discharge per NTL-06.  
•Permit applications for drilling projects must meet new standards for well-design, casing and cementing and be independently certified by a professional engineer per the new Drilling Safety Rule. Drilling standards in the exploration and development stages, for equipment, safety practices, environmental safeguards and oversight, will be strengthened.  
•New guidance, through NTL-10, requires a corporate compliance statement and review of subsea blowout containment resources for deepwater drilling, a key lesson of the Deepwater Horizon oil spill.  
•BOEMRE announced that the bureau will begin to use multiple-person inspection teams for offshore oil and gas inspections. This internal process improvement will improve oversight and will help ensure that offshore operations proceed safely and responsibly. The new process will allow teams to inspect multiple operations simultaneously and thoroughly, and will enhance the quality of inspections on larger facilities.  
Enhanced Drilling Safety  
BOEMRE has imposed, for the first time, requirements that offshore operators maintain comprehensive safety and environmental programs. This includes performance-based standards for offshore drilling and production operations, including equipment, safety practices, environmental safeguards, and management oversight of operations and contractors.

DISADVANTAGES

1. Exporting American jobs.

Link: Stopping offshore drilling means companies take their operations and jobs overseas

Hans A. von Spakovsky and Nicolas Loris 2012. (Spakovsky - senior legal fellow in The Heritage Foundation’s Center for Legal and Judicial Studies; former counsel to the Assistant Attorney General for civil rights at US Justice Dept. Loris - master's degree in economics from George Mason University ) Offshore Drilling: Increase Access, Reduce the Risk, and Stop Hurting American Companies, 13 Aug 2012 <http://www.heritage.org/research/reports/2012/08/offshore-drilling-increase-access-reduce-the-risk-and-stop-hurting-american-companies> (Note: “ATP” in this quote is an oil drilling company)

Since the government imposed the investment-destroying moratoria on the deepwater industry, ATP has continued its struggle to reestablish its developments. ATP had six deepwater wells derailed by the moratorium and more than $1.2 billion in potential revenue was thwarted without reason by the Obama Administration. While the revenue spigot was turned off by President Obama’s executive fiat, the flow of costs and expenses remained wide open not just for ATP, but for many other businesses that depended on the offshore development of the Gulf of Mexico. In an attempt to remain economically viable, ATP has secured licenses in the Levant Basin in the Mediterranean Sea. Rather than creating U.S. jobs while developing oil in American waters for the American market, ATP, as a result of the Obama Administration’s arbitrary regulatory policies, was forced to move its operations overseas.

Impact: Thousands of jobs depend on Gulf oil drilling. We can’t ignore the economic realities, including the fate of workers who had no connection to the BP spill

National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling 2011. (independent, non-partisan committee established by the President to investigate and report on the BP oil spill) Deep Water - The Gulf Oil Disaster and the Future of Offshore Drilling - Report to the President , Jan 2011 <http://docs.lib.noaa.gov/noaa_documents/NOAA_related_docs/oil_spills/DWH_report-to-president.pdf>

We heard deeply moving accounts from oystermen witnessing multi-generation family businesses slipping away, fishermen and tourism proprietors bearing the brunt of an ill-founded stigma affecting everything related to the Gulf, and oil-rig workers dealing with mounting bills and threatened home foreclosures, their means of support temporarily derailed by a blanket drilling moratorium, shutting down all deepwater drilling rigs, including those not implicated in the BP spill. Indeed, the centrality of oil and gas exploration to the Gulf economy is not widely appreciated by many Americans, who enjoy the benefits of the energy essential to their transportation, but bear none of the direct risks of its production. Within the Gulf region, however, the role of the energy industry is well understood and accepted. The notion of clashing interests—of energy extraction versus a natural-resource economy with bountiful fisheries and tourist amenities—misses the extent to which the energy industry is woven into the fabric of the Gulf culture and economy, providing thousands of jobs and essential public revenues. Any discussion of the future of offshore drilling cannot ignore these economic realities.

Impact: Hundreds of thousands of jobs

Hans A. von Spakovsky and Nicolas Loris 2012. (Spakovsky - senior legal fellow in The Heritage Foundation’s Center for Legal and Judicial Studies; former counsel to the Assistant Attorney General for civil rights at US Justice Dept. Loris - master's degree in economics from George Mason University ) Offshore Drilling: Increase Access, Reduce the Risk, and Stop Hurting American Companies, 13 Aug 2012 <http://www.heritage.org/research/reports/2012/08/offshore-drilling-increase-access-reduce-the-risk-and-stop-hurting-american-companies>

The Minerals Management Service estimates that 101 billion barrels of oil and 480 trillion cubic feet of natural gas of proven reserves and undiscovered resources are awaiting exploration in the Outer Continental Shelf (OCS). Opening these areas would generate hundreds of thousands of new jobs, generate hundreds of billions of dollars in government revenue, and bring more oil to the world market, thereby lowering gas prices.

2. Inadequate oil supplies

Link: Affirmative takes substantial potential amounts of oil out of the market. If they don’t, their plan is not significant and deserves to lose for that reason.

Link: Oil prices affect every nation on the planet in significant ways

Dr. S. Fred Singer 2013. (professor emeritus at the University of Virginia and director of the Science & Environmental Policy Project; Senior Fellow of the Heartland Institute and of the Independent Institute) 9 May 2013 The Oil Price Enigma, THE AMERICAN THINKER, <http://www.americanthinker.com/2013/05/the_oil_price_enigma.html#ixzz2WaTDh4j9>

Oil is the single most important commodity purchased today, and its price influences the fortunes of every nation on the planet in significant ways. Yet nobody can tell you with honesty that they know where the price is headed.

Link: Gulf of Mexico = 30% of US oil production

Hans A. von Spakovsky and Nicolas Loris 2012. (Spakovsky - senior legal fellow in The Heritage Foundation’s Center for Legal and Judicial Studies; former counsel to the Assistant Attorney General for civil rights at US Justice Dept. Loris - master's degree in economics from George Mason University ) Offshore Drilling: Increase Access, Reduce the Risk, and Stop Hurting American Companies, 13 Aug 2012 <http://www.heritage.org/research/reports/2012/08/offshore-drilling-increase-access-reduce-the-risk-and-stop-hurting-american-companies>

Yet, even apart from ATP’s lawsuit, Gulf oil production and the regional economy remain fragile. The Gulf of Mexico accounts for nearly 30 percent of America’s oil production and while production fell in 2011 compared to 2010, there has been some modest improvement in Gulf production. The IHS-Petrodata Weekly Rig Count that tracks the usage of offshore platform drilling rigs indicates that the fleet utilization rate for the Gulf of Mexico was 66 percent, up from 55 percent a year ago and 48 percent in January 2011. Still, these rates are dramatically lower than those in other areas of the world.

Link: Global oil demand is growing

FINANCIAL TIMES 2012. ( Javier Blas, commodities editor) Oil demand strong despite anaemic growth. 16 Aug 2012 <http://www.ft.com/cms/s/0/3ddc78fa-e7a2-11e1-86bf-00144feab49a.html#ixzz2WaHtwpE2>

Like a zombie in a low-budget horror movie, oil demand growth is refusing to die. The eurozone is in crisis, US growth is anaemic and China is sputtering. Yet global oil consumption growth, and thus oil prices, is holding up remarkably well. The Opec cartel, which traditionally takes a rather conservative view about the outlook for global oil consumption, graphically described the upbeat mood in its latest monthly report. “World oil demand has overcome the earlier notion of declining momentum and moved to a more stable trend,” the cartel said.

Link: Limited availability of oil supplies is causing and will continue to cause higher oil prices

Analysis: This card is important because it is talking about future projections of world oil availability and price. It won’t do for AFF to say they aren’t stopping existing oil production. This link applies specifically to future production trends.

International Monetary Fund Research Department 2012. (paper written by by Jaromir Benes, Marcelle Chauvet, Ondra Kamenik, Michael Kumhof, Douglas Laxton, Susanna Mursula and Jack Selody and reflects their views, not necessarily the official views of the IMF) May 2012 IMF Working Paper, The Future of Oil: Geology versus Technology <http://www.imf.org/external/pubs/ft/wp/2012/wp12109.pdf> (“Mbd” = million barrels per day)

Earlier EIA forecasts were based on the simple notion that supply would be available to satisfy demand, so that these forecasts essentially only considered the drivers of demand. This turned out to be far too optimistic, and more recent forecasts may be starting to reﬂect the recognition that constraints on oil supply are starting to inﬂuence production and prices. The reason why this may be the case is illustrated in Figure 2, which displays real world oil prices in 2011 U.S. dollars alongside OPEC spare capacity in millions of barrels per day (Mbd). Until the end of 2002 spare capacity had been high in historical terms, and this was accompanied by oil prices that had not been growing signiﬁcantly in real terms. But this changed abruptly in early 2003, around the time of the Iraq war, when spare capacity dropped below the 2 Mbd mark, which by many in the industry is considered the critical mark where supply becomes a constraining factor. From that moment until the onset of the Great Recession real oil prices started a long-term increase that ultimately saw them more than triple, before the demand destruction of the Great Recession led to a sudden increase in spare capacity and a steep decline in oil prices. This however only brought temporary relief to the demand-supply balance in the oil market, for two reasons. First, as we have seen in Figure 1, oil production never regained its historical growth rate of 1.5%-2% per annum after 2005, and has in fact been on what looks like a plateau ever since that time. And second, partial recoveries in many economies restarted demand from 2009 onwards. Spare capacity is therefore again approaching 2 Mbd, and oil prices are ratcheting up again. The combination of a plateau in actual oil production, and of repeated pressure on spare capacity except at a time of deep recession, indicate that physical constraints on oil production are starting to have an increasing impact on prices.

Impact: Oil price increases hurt the US and world economy

Dr. Shiu-Sheng Chen & Kai-Wei Hsu 2012. (Chen - PhD economics; professor of economics at National Taiwan University; Hsu - economics department, National Taiwan University) Reverse Globalization: Does High Oil Price Volatility Discourage International Trade? Jan 2012, <http://mpra.ub.uni-muenchen.de/36182/1/MPRA_paper_36182.pdf>

It has been shown that the dramatic rise in oil prices during the 1970s was associated with subsequent economic downturns. Although there is some debate as to whether oil price shocks are the main cause of recessions, Hamilton (2009b) asserts that the latest surge in oil prices between June 2007 and June 2008 was an important factor that contributed to the economic recession that began in the US in 2007:Q4. Moreover, a number of recent studies show that oil price shocks have significant effects on a variety of domestic economic activities. An increase in oil prices has a significant negative impact on GDP growth and contributes to a higher inflation rate for most countries (see Hamilton (2009a), Cologni and Manera (2008), and Lardic and Mignon (2008)). Finally, Ordonez et al. (2011) show that the oil price shock is an important driving force of the cyclical labor adjustments in the US labor market, and the job-finding probability is the main transmission mechanism of such a shock.

Impact: Oil price increases hurt the US economy

Jeff Rubin 2012. (former chief economist and chief strategist at CIBC World Markets Inc) 23 Sept 2012 How High Oil Prices Will Permanently Cap Economic Growth <http://www.bloomberg.com/news/2012-09-23/how-high-oil-prices-will-permanently-cap-economic-growth.html>

There are many ways an oil shock can hurt an economy. When prices spike, most of us have little choice but to open our wallets. Paying more for oil means we have less cash to spend on food, shelter, furniture, clothes, travel and pretty much anything else. Expensive oil, coupled with the average American’s refusal to drive less, leaves a lot less money for the rest of the economy. Worse, when oil prices go up, so does inflation. And when inflation goes up, central banks respond by raising interest rates to keep prices in check. From 2004 to 2006, U.S. energy inflation ran at 35 percent, according to the Consumer Price Index. In turn, overall inflation, as measured by the CPI, accelerated from 1 percent to almost 6 percent. What happened next was a fivefold bump in interest rates that devastated the massively leveraged U.S. housing market. Higher rates popped the speculative housing bubble, which brought down the global economy. Unfortunately, this pattern of oil-driven inflation is with us again.

Impact: Oil price spikes cause great economic damage

The Economist 2011 (respected British news magazine) March 3, 2011 “The price of fear” THE ECONOMIST <http://www.economist.com/node/18285768>

Nonetheless, whether driven by demand or supply, a large enough spike in the price of oil can do great damage. Economists call such abrupt responses “non-linearities” and they suggest that when the price rises fast enough, consumers and businesses trim their spending and investment plans. This is often because prices are driven by other factors that hurt confidence, such as wide unrest in the Middle East. If another Arab government were toppled, pushing the oil price over $150, the economic impact would almost certainly be larger than the 0.5% to 1% of GDP that simple extrapolation suggests.

3. Federal deficits

Link: Offshore drilling could generate hundreds of billions of dollars in federal revenues

Hans A. von Spakovsky and Nicolas Loris 2012. (Spakovsky - senior legal fellow in The Heritage Foundation’s Center for Legal and Judicial Studies; former counsel to the Assistant Attorney General for civil rights at US Justice Dept. Loris - master's degree in economics from George Mason University ) Offshore Drilling: Increase Access, Reduce the Risk, and Stop Hurting American Companies, 13 Aug 2012 <http://www.heritage.org/research/reports/2012/08/offshore-drilling-increase-access-reduce-the-risk-and-stop-hurting-american-companies>

The Minerals Management Service estimates that 101 billion barrels of oil and 480 trillion cubic feet of natural gas of proven reserves and undiscovered resources are awaiting exploration in the Outer Continental Shelf (OCS). Opening these areas would generate hundreds of thousands of new jobs, generate hundreds of billions of dollars in government revenue, and bring more oil to the world market, thereby lowering gas prices.

Impact: Higher deficits hurt the economy

Dr William Gale and Benjamin Harris 2011. (Gale - PhD in economics, Stanford Univ.; senior fellow at the Brookings Institution and co-director of the Urban-Brookings Tax Policy Center; former assistant professor in the Department of Economics at UCLA, and a senior economist for the Council of Economic Advisers under President George H.W. Bush; Harris - master’s degree in economics from Cornell University and a master’s degree in quantitative methods from Columbia University; senior research associate with the Economics Studies Program at the Brookings Institution) “A VAT for the United States: Part of the Solution” <http://www.taxanalysts.com/www/freefiles.nsf/Files/GALE-HARRIS-5.pdf/$file/GALE-HARRIS-5.pdf>

But even in the absence of a crisis, sustained deficits have deleterious effects, as they translate into lower national savings, higher interest rates, and increased indebtedness to foreign investors, all of which serve to reduce future national income. Gale and Orszag (2004a) estimate that a 1 percent of GDP increase in the deficit will raise interest rates by 25 to 35 basis points and reduce national saving by 0.5 to 0.8 percentage points of GDP.

Brink and Impact: The higher the debt, the greater the risk of a crisis. If we don’t act soon, risk of crisis will increase

THE NATIONAL COMMISSION ON FISCAL RESPONSIBILITY AND REFORM 2010. (bipartisan panel appointed by Pres. Obama in 2010 to write a report on ways to solve the imbalance in the federal budget; chaired by Sen. Alan Simpson, Former Republican Senator from Wyoming and Erskine Bowles, Chief of Staff to President Clinton) Dec 2010, “THE MOMENT OF TRUTH - REPORT OF THE NATIONAL COMMISSION ON FISCAL RESPONSIBILITY AND REFORM” (brackets added) [www.fiscalcommission.gov/sites/fiscalcommission.gov/files/documents/TheMomentofTruth12\_1\_2010.pdf](http://www.fiscalcommission.gov/sites/fiscalcommission.gov/files/documents/TheMomentofTruth12_1_2010.pdf)

Predicting the precise level of public debt that would trigger such a crisis is difficult, but a key factor may be whether the debt has been stabilized as a share of the economy or if it continues to rise. Investors, reluctant to risk throwing good money after bad, are sure to be far more concerned about rising debt than stable debt. In a recent briefing on the risk of a fiscal crisis, CBO [Congressional Budget Office] explained that while “there is no identifiable tipping point of debt relative to GDP indicating that a crisis is likely or imminent,” the U.S. debt-to-GDP ratio is “climbing into unfamiliar territory” and “the higher the debt, the greater the risk of such a crisis.” If we do not act soon to reassure the markets, the risk of a crisis will increase, and the options available to avert or remedy the crisis will both narrow and become more stringent. If we wait ten years, CBO projects our economy could shrink by as much as 2 percent, and spending cuts and tax increases needed to plug the hole could nearly double what is needed today. Continued inaction is not a viable option, and not an acceptable course for a responsible government.

4. Oil imports

Link: We need increased offshore oil to limit reliance on imports

Prof. Tyler Priest 2013. (associate professor of history and geography at the University of Iowa) April 2013 “Should the U.S. Expand Offshore Oil Drilling?” WALL STREET JOURNAL <http://online.wsj.com/article/SB10001424127887324020504578398610851042612.html>

The U.S. will be the world's largest per-capita consumer of crude oil for the foreseeable future. To help meet this demand and limit reliance on imports, the country will need to increase exploration for offshore oil.

Link: Offshore oil reduces US trade deficit

Prof. Tyler Priest 2013. (associate professor of history and geography at the University of Iowa) April 2013 “Should the U.S. Expand Offshore Oil Drilling?” WALL STREET JOURNAL <http://online.wsj.com/article/SB10001424127887324020504578398610851042612.html>

Offshore oil also does more than help satisfy our energy appetite. Annual federal proceeds from offshore leases have ranged as high as $18 billion in recent years, second only to income taxes as a revenue source. And every barrel of consumption that isn't imported helps ease the U.S. trade deficit.

Impact: Trade deficits hurt US jobs and industry

Link Back to DA3: Trade deficits increase federal deficits

Ian Fletcher 2012. (Senior Economist of the Coalition for a Prosperous America, a nationwide grass-roots organization dedicated to fixing America’s trade policies and comprising representatives from business, agriculture, and labor. He was previously Research Fellow at the U.S. Business and Industry Council, a Washington think tank founded in 1933 ) The Fiscal Cliff and the Trade Deficit, HUFFINGTON POST 21 Nov 2012 <http://www.huffingtonpost.com/ian-fletcher/fiscal-cliff-trade-deficit_b_2169250.html>

For one thing, when America runs a trade deficit, we have to either borrow money from foreigners or sell off existing assets to them to cover the gap. And a lot of that borrowing and asset selling takes the form of federal debt instruments like T-bills. So our appetite for foreign credit to buy imports is related to our appetite for foreign credit to finance our government. For another thing, the reason the fiscal cliff could tip us back into recession is that it would suddenly reduce so-called aggregate demand. That's the economy's total demand for goods and services. But a trade deficit does the same thing, because it means that demand for goods and services is being satisfied by foreign producers, not American ones. So output, jobs, and industries suffer the same way.

5. More dangerous foreign drilling

Link: Dangerous substitutions. Oil consumed in the US, if it doesn’t come from domestic drilling, will be imported from other countries with weaker environmental protections

Prof. Tyler Priest 2013. (associate professor of history and geography at the University of Iowa) April 2013 “Should the U.S. Expand Offshore Oil Drilling?” WALL STREET JOURNAL <http://online.wsj.com/article/SB10001424127887324020504578398610851042612.html>

Americans must find ways to reduce oil consumption. But we will still require lots of oil for a long time. If that oil doesn't come from the Arctic or other parts of the outer shelf, it will very likely come from places with weaker environmental and labor protections than we have in the U.S. Given these realities, we should not abandon the quest to determine the extent of our offshore oil resources and how much can be recovered in a responsible manner.

Example: Russia is expanding Arctic offshore drilling

NEW YORK TIMES 2012. (Clifford Krauss, journalist) 16 Apr 2012 “Exxon and Russia’s Oil Company in Deal for Joint Projects” <http://www.nytimes.com/2012/04/17/business/energy-environment/exxon-and-russian-oil-company-agree-to-joint-projects.html?_r=0>

“Today Rosneft and Exxon Mobil enter offshore projects of unprecedented scale,” said Eduard Y. Khudainatov, Rosneft’s president. “In so doing, we lay the foundation for a long-term growth of the Russian oil and gas industry.” The deal has been in the making for months, but Exxon Mobil, which is based in Irving, Tex., had warned that it could not complete major investments in Russia’s Arctic without first receiving assurances of a fair, long-term taxation regime. Mr. Putin appeared to try to put that concern to rest last week when he announced the canceling of high taxes on exports from new offshore fields for five to 15 years, depending on the scale of the project. By creating what he called “globally competitive conditions,” Mr. Putin was looking to attract investment in Russian oil and gas projects from Exxon Mobil, Total of France and Statoil of Norway to ensure the continued production of roughly 10 million barrels of oil a day as domestic consumption climbed.

Link: Russia has poor environmental standards and lots of oil pollution

Dr. David Lewis Feldman, Ivan Blokov 2012. (Feldman – PhD in political science; Professor and Chair, Department of Planning, Policy and Design, School of Social Ecology, University of California, Irvine. Blokov – campaign director of Greenpeace Russia) “The Politics of Environmental Policy in Russia” <http://books.google.com/books?id=nvOoP2gkguQC&pg=PA33&lpg=PA33&dq=Russia+environmental+standards+oil&source=bl&ots=XFVNt6zKE8&sig=r6fyCwig9wDm7jcjBsjwxjo-iI0&hl=en&sa=X&ei=JdvBUdjiO5Te8wTziYDIBw&ved=0CGsQ6AEwBw#v=onepage&q=Russia%20environmental%20standards%20oil&f=false>

The oil and gas extraction industries – by far Russia’s largest and most important industrial sector – not only contribute to air pollution problems, but are also significant sources of toxic pollution of water and soils. Environmental standards are weak, enforcement is notoriously poor, and small-scale accidents, pipeline leakage and tanker spills have contaminated many areas of Russia.

Impact: Turn Affirmative’s harms – risk of oil spills goes up when drilling is shifted to countries with fewer environmental safeguards than the US has.

6. Oil tanker risks

Link: No offshore drilling means more oil imported in tankers, which have their own risks

Nicolas Loris 2012. (master's degree in economics from George Mason University ) Oil Rig Explosion Shouldn’t Lead to More Drilling Bans 19 Nov 2012 <http://blog.heritage.org/2012/11/19/oil-rig-explosion-shouldnt-lead-to-more-drilling-bans-2/>

Any activity—whether it’s crossing the street, flying in a plane, or driving a car—has risk. In fact, in this past national election, a voter was statistically much more at risk of getting in a car crash on the way to the polling place than actually affecting the outcome of the election. With regard to energy, my colleague David Kreutzer calculated in 2010 that wind energy actually had higher workplace mortality than oil or coal on a per-megawatt-hour basis. Furthermore, if the U.S. stopped drilling offshore, even more oil would need to be imported, which would require more tankers coming to the U.S. from overseas, which in turn involves its own risks and costs.

Link: Tankers risk oil spills

Peter O'Neil 2013. (journalist) FINANCIAL POST, “Oil spills are rare and getting rarer – but any risk is too much for some” 29 May 2013 <http://business.financialpost.com/2013/05/29/oil-spills-are-rare-and-getting-rarer-but-any-risk-is-too-much-for-some/?__lsa=9505-e806> (“Enbridge” is a Canadian oil company)

Det Norske Veritas, a Norwegian company hired by Enbridge to assess risk, concluded there is an 18-per-cent likelihood of a tanker spill incident – minor or major — over a 50-year span. For a spill greater than 31,000 barrels, the odds slide to 8.7 per cent — the equivalent of playing Russian roulette once every 50 years, with a single bullet in a 12-chamber revolver. For an Exxon Valdez-grade spill of 250,000 or more barrels, the odds tumble to just 0.3 per cent over 50 years.

Impact: Turn AFF oil spill harms. The risk shifts to tankers instead of offshore drilling platforms

NEGATIVE: OLIVINE

NEGATIVE PHILOSOPHY / OVERVIEW

Geoengineering is not a good idea: We can’t engineer what we don’t understand

Prof. Clive Hamilton 2013. (professor of public ethics at Charles Sturt University) 26 May 2013 NEW YORK TIMES, Geoengineering: Our Last Hope, or a False Promise? <http://www.nytimes.com/2013/05/27/opinion/geoengineering-our-last-hope-or-a-false-promise.html?pagewanted=all&_r=0>

So the battle lines are being drawn over the future of the planet. While the Pentagon “weaponeer” and geoengineering enthusiast Lowell Wood, an astrophysicist, has proclaimed, “We’ve engineered every other environment we live in — why not the planet?” a more humble climate scientist, Ronald G. Prinn of the Massachusetts Institute of Technology, has asked, “How can you engineer a system you don’t understand?”

HARMS

Plant life is flourishing around the globe due to higher CO2 levels

American Geophysical Union press release 2013. (nonprofit organization of geophysicists, consisting of over 61,000 members from over 146 countries) 31 May 2013 **Elevated carbon dioxide making arid regions greener** <http://wattsupwiththat.com/2013/05/31/agu-says-co2-is-plant-food/>

Scientists have long suspected that a flourishing of green foliage around the globe, observed since the early 1980s in satellite data, springs at least in part from the increasing concentration of carbon dioxide in Earth’s atmosphere. Now, a study of arid regions around the globe finds that a carbon dioxide “fertilization effect” has, indeed, caused a gradual greening from 1982 to 2010.

CO2 is good for plants, animals and humans

Dr. Arthur B. Robinson, Dr. Noah E. Robinson, Dr. Willie Soon 2007. (Arthur – PhD in biochemistry from Univ of Calif-San Diego; president and research professor of the Oregon Institute of Science and Medicine. Noah – PhD; professor of chemistry at Oregon Institute of Science & Medicine. Soon - Ph.D., Aerospace Engineering, Univ of Southern California; physicist at the Harvard-Smithsonian Center for Astrophysics.) Environmental Effects of Increased Atmospheric Carbon Dioxide, Oregon Institute of Science and Medicine, JOURNAL OF AMERICAN PHYSICIANS AND SURGEONS, Vol. 12 <http://www.oism.org/pproject/GWReview_OISM600.pdf>

Human use of coal, oil, and natural gas has not harmfully warmed the Earth, and the extrapolation of current trends shows that it will not do so in the foreseeable future. The CO2 produced does, however, accelerate the growth rates of plants and also permits plants to grow in drier regions. Animal life, which depends upon plants, also flourishes, and the diversity of plant and animal life is increased. Human activities are producing part of the rise in CO2 in the atmosphere. Mankind is moving the carbon in coal, oil, and natural gas from below ground to the atmosphere, where it is available for conversion into living things. We are living in an increasingly lush environment of plants and animals as a result of this CO2 increase. Our children will therefore enjoy an Earth with far more plant and animal life than that with which we now are blessed.

CO2 doesn’t cause warming – no reason to worry about it

Dr. Arthur B. Robinson, Dr. Noah E. Robinson, Dr. Willie Soon 2007. (Arthur – PhD in biochemistry from Univ of Calif-San Diego; president and research professor of the Oregon Institute of Science and Medicine. Noah – PhD; professor of chemistry at Oregon Institute of Science & Medicine. Soon - Ph.D., Aerospace Engineering, Univ of Southern California; physicist at the Harvard-Smithsonian Center for Astrophysics.) Environmental Effects of Increased Atmospheric Carbon Dioxide, Oregon Institute of Science and Medicine, JOURNAL OF AMERICAN PHYSICIANS AND SURGEONS, Vol. 12 <http://www.oism.org/pproject/GWReview_OISM600.pdf>

There are no experimental data to support the hypothesis that increases in human hydrocarbon use or in atmospheric carbon dioxide and other green house gases are causing or can be expected to cause unfavorable changes in global temperatures, weather, or landscape. There is no reason to limit human production of CO2, CH4, and other minor greenhouse gases as has been proposed (82,83,97,123).

Environmental warming is good

Dr. Arthur B. Robinson, Dr. Noah E. Robinson, Dr. Willie Soon 2007. (Arthur – PhD in biochemistry from Univ of Calif-San Diego; president and research professor of the Oregon Institute of Science and Medicine. Noah – PhD; professor of chemistry at Oregon Institute of Science & Medicine. Soon - Ph.D., Aerospace Engineering, Univ of Southern California; physicist at the Harvard-Smithsonian Center for Astrophysics.) Environmental Effects of Increased Atmospheric Carbon Dioxide, Oregon Institute of Science and Medicine, JOURNAL OF AMERICAN PHYSICIANS AND SURGEONS, Vol. 12 <http://www.oism.org/pproject/GWReview_OISM600.pdf>

We also need not worry about environmental calamities even if the current natural warming trend continues. The Earth has been much warmer during the past 3,000 years without catastrophic effects. Warmer weather extends growing seasons and generally improves the habitability of colder regions.

Warming temperatures are part of a natural cycle that started before the industrial age, and warming does not cause any disasters

Dr. Arthur B. Robinson, Dr. Noah E. Robinson, Dr. Willie Soon 2007. (Arthur – PhD in biochemistry from Univ of Calif-San Diego; president and research professor of the Oregon Institute of Science and Medicine. Noah – PhD; professor of chemistry at Oregon Institute of Science & Medicine. Soon - Ph.D., Aerospace Engineering, Univ of Southern California; physicist at the Harvard-Smithsonian Center for Astrophysics.) Environmental Effects of Increased Atmospheric Carbon Dioxide, Oregon Institute of Science and Medicine, JOURNAL OF AMERICAN PHYSICIANS AND SURGEONS, Vol. 12 <http://www.oism.org/pproject/GWReview_OISM600.pdf>

Atmospheric and surface temperatures have been recovering from an unusually cold period. During the time between 200 and 500 years ago, the Earth was experiencing the “Little Ice Age.” It had descended into this relatively cool period from a warm interval about 1,000 years ago known as the “Medieval Climate Optimum.” This is shown in Figure 1 for the Sargasso Sea. During the Medieval Climate Optimum, temperatures were warm enough to al low the colonization of Greenland. These colonies were abandoned after the onset of colder temperatures. For the past 200 to 300 years, Earth temperatures have been grad u ally recovering (26). Sargasso Sea temperatures are now approximately equal to the average for the previous 3,000 years. The historical record does not contain any report of “global warming” catastrophes, even though temperatures have been higher than they are now during much of the last three millennia.

SOLVENCY

Not enough trucks and barges in the world to haul the huge quantities of olivine needed

Suzanne Hangx, Dr. Christopher J. Spiers 2009. (Hangx – master’s degree candidate in geology at Utrecht University, Netherlands. Spiers – PhD; professor in the Faculty of Geosciences, Utrecht University .) Coastal spreading of olivine to control atmospheric CO2 concentrations: A critical analysis of viability, International Journal of Greenhouse Gas Control, published Aug 2009 (brackets added) <http://www.innovationconcepts.eu/res/literatuurGPV/2009hangxspiersolivine.pdf>

The above shows that to offset global CO2 emissions by 30% within a timescale of 15–20 years, by beach weathering alone, requires 5.0 Gt/year, or more of ﬁne (10mm grade) olivine powder to be mined, handled, transported and spread. We have already shown that the CO2 cost of such operations will be of the order of 15% of the CO2 removed from the atmosphere. Assuming that the broader environmental impact is acceptable, the question remains as to whether the transportation of such vast solid masses is feasible. A truck can typically transport 50 t, [tons] while the most commonly used cargo ship, the so-called Handysize, can carry 25 kt [kilotons] on average. Sequestration levels equivalent to an approximate 30% reduction in 1990-level worldwide carbon dioxide emissions (i.e. 6.25 Gt/year) would therefore mean moving 100 million truckloads, or 200,000 shiploads of olivine on a yearly basis, that is 1.9 million truckloads, or 3800 shiploads, on a weekly basis. Given that the entire worldwide ﬂeet of Handysize cargo ships is around 2000 vessels, and assuming a roughly 1-week round trip for each vessel, this means that it would be necessary to roughly double the ﬂeet within a few years, to reach the desired CO2 uptake targets. While this neglects road transport aspects, it nonetheless illustrates the magnitude of the mass transport problem. Though it may be possible to expand the current ﬂeet, the large ship building expenses will bring about a signiﬁcant increase in the costs of the proposed method and will affect the ‘‘cheap’’ character it has been given in the media. Given the current world ﬂeet, we infer that transporting 5.0 Gt [gigatons] of olivine per year is an impractical task and we suggest that the maximum achievable haulage would be between 5 and 10% of this ﬁgure. This implies that the maximum possible CO2 uptake by beach reaction of olivine would be between 1.5 and 2.8% of 1990-level emission rates, neglecting the additional CO2 costs of expanding the transport ﬂeet to cope.

Slow dissolution: 8000 years for a micron size particle of olivine to dissolve

Dr. Jennie C. Stephens & Dr. David W. Keith 2008. ( Stephens – PhD; assoc. professor of Environmental Science and Policy Program, Department of International Development, Community, and Environment, Clark University. Keith – PhD; professor in Department of Chemical and Petroleum Engineering, University of Calgary) Assessing geochemical carbon management , CLIMATIC CHANGE Published online: 24 June 2008 (a micron is one millionth of a meter) <http://wordpress.clarku.edu/jstephens/files/2012/04/Stephens-Keith-2008.pdf>

Silicate mineral dissolution is extremely slow particularly at the conditions of temperature and pressure of ocean surface water. Pretreating the mineral fragments to increase their solubility in seawater could increase the dissolution. One approach would be to simply grind up minerals and disperse them to dissolve in the surface oceans. Within this approach, calcium carbonate would not dissolve due to its supersaturation, magnesium carbonates are close to saturation and have slow dissolution kinetics, while sodium carbonates dissolve rapidly. Based upon published dissolution rates derived from laboratory experiments (Pokrovsky and Schott 2000) it would take more than 8,000 years for a micron size particle of olivine to dissolve in the surface ocean.

Olivine reduction of CO2 would be measured in centuries and millennia time scales

Dr. Peter Köhler PhD, Jesse F Abrams, Christoph Völker, Judith Hauck and Dieter A Wolf-Gladrow 2013. (research scientists at Alfred Wegener Institute for Polar & Marine Research, Bremerhaven, Germany) ENVIRONMENTAL RESEARCH LETTERS Vol 8 No 1, published 23 Jan 2013 Geoengineering impact of open ocean dissolution of olivine on atmospheric CO2, surface ocean pH and marine biology (brackets added) <http://iopscience.iop.org/1748-9326/8/1/014009/article>

The sequestration of CO2 by olivine dissolution is restricted in our study to the immediate effects caused by alkalinity enhancement and ocean fertilization by addition of silicic acid. The transition of CO2 from the atmosphere to the ocean pools is thus envisaged which might play a role on centennial to millennial timescales. On even longer timescales approaches which guarantee a deposition of C[arbon] as part of the sediment on the ocean floor might need to be taken into consideration, e.g. using calcium silicates which might precipitate in the form of calcite (Lackner 2002, 2003).

Olivine has little practical value: Would take 700-2100 years to take effect

Suzanne Hangx, Dr. Christopher J. Spiers 2009. (Hangx – master’s degree candidate in geology at Utrecht University, Netherlands. Spiers – PhD; professor in the Faculty of Geosciences, Utrecht University .) Coastal spreading of olivine to control atmospheric CO2 concentrations: A critical analysis of viability, International Journal of Greenhouse Gas Control, published Aug 2009 (brackets added) <http://www.innovationconcepts.eu/res/literatuurGPV/2009hangxspiersolivine.pdf>

The feasibility of the concept depends on the rate of olivine dissolution, the sequestration capacity of the dominant reaction, and its CO2 footprint. Kinetics calculations show that offsetting 30% of worldwide 1990 CO2 emissions by beach weathering means distributing of 5.0 Gt [gigatons] of olivine per year. For mean seawater temperatures of 15–25 8C, olivine sand (300mm grain size) takes 700–2100 years to reach the necessary steady state sequestration rate and is therefore of little practical value.

The Schuiling model would take 700 years to dissolve all the olivine

Suzanne Hangx, Dr. Christopher J. Spiers 2009. (Hangx – master’s degree candidate in geology at Utrecht University, Netherlands. Spiers – PhD; professor in the Faculty of Geosciences, Utrecht University .) Coastal spreading of olivine to control atmospheric CO2 concentrations: A critical analysis of viability, International Journal of Greenhouse Gas Control, published Aug 2009 (in this context, “µm” means micron, which is one millionth of a meter) <http://www.innovationconcepts.eu/res/literatuurGPV/2009hangxspiersolivine.pdf>

Reaction times (deﬁned here as the time to dissolve 50–100%) of granular olivine are long even at grain sizes smaller than 300 **µ**m. At 25 8C for example (Fig. 2a), olivine sand (grain size 300 **µ**m), of the type proposed by Schuiling via the Dutch media, would take approximately 145 years to dissolve by half and 700 years to dissolve completely. Given the range of olivine dissolution rates at these conditions, the stated reaction times are only averages, since 50% dissolution of 300 **µ**m grain size olivine may take between 75 and 1240 years, while complete dissolution may take between 370 and 6010 years. Decreasing the grain size strongly decreases reaction time, but will also require more energy for the grinding process. The corresponding times taken to trap 10, 25, 50 and 100% of the maximum amount of CO2 that can be sequestered per tonne of olivine, through reaction (3) at 25 8C, are also visible in Fig. 2 and are listed in Table 1. Note that at 15 8C (Fig. 2b), reaction times are about three times longer, as a result of the decrease in olivine dissolution rate. Thus on Western European coasts, 50% dissolution of sand grade olivine (300mm) will take on average about 450 years (225–3720 years). Clearly, grain size reduction to values<10 **µ**m is needed to accelerate the dissolution rate of olivine to levels that can contribute signiﬁcantly to CO2 sequestration in the next 15 years (Fig. 2, Table 1).

Crushing and transportation of the olivine would produce CO2 emissions, offsetting 15%-30% of the benefits

Suzanne Hangx, Dr. Christopher J. Spiers 2009. (Hangx – master’s degree candidate in geology at Utrecht University, Netherlands. Spiers – PhD; professor in the Faculty of Geosciences, Utrecht University .) Coastal spreading of olivine to control atmospheric CO2 concentrations: A critical analysis of viability, International Journal of Greenhouse Gas Control, published Aug 2009 (**in this context, “µm” means micron**, which is one millionth of a meter) <http://www.innovationconcepts.eu/res/literatuurGPV/2009hangxspiersolivine.pdf>

For ﬁnal grain sizes larger than approximately 40 **µm**, carbon dioxide sequestration efﬁciency is reduced by less than 2% (<20 kg/tonne CO2 sequestered). However, at a ﬁnal grain size of 10 **µm**, CO2 emissions as a result of mining, crushing and grinding constitute between 5 and 11% of the total amount of sequestered CO2. The calculations presented so far do not include energy consumption associated with transport from the mine to the location of deposition. In general, the means of transportation may include ships, trains and trucks. A British study on CO2 emissions from freight transport (McKinnon, 2006) has shown that CO2 emissions per tonne of transported material are 30 g/km for inland or coastal ships, 20 g/km for trains, and 138 g/km for trucks. This will result in an additional efﬁciency reduction of 1.6–11.0 kg CO2/100 km/tonne CO2 sequestered or of 0.1–1% (Table 2). Hence, for an 1000–4000 km boat haul to import crushed olivine from the nearest sources in Norway, Greenland or Turkey to Western Europe, an additional CO2 output of at least 24–96 kg CO2/tone CO2 sequestered would be generated. This all means that the efﬁciency reduction of olivine beach sequestration would be around 10–20% for locations that are remote from the olivine sources (like Western Europe) and up to 10% for locations near source (e.g. coast of Turkey). Since most olivine-rich rocks are ~60% olivine, more realistic ﬁgures are probably 15–30% and up to 15%, respectively. In addition, CO2 costs associated with building the extra production and transport facilities needed to mine and move large amounts of olivine will reduce sequestration efﬁciency further still, but this needs more research.

Beach spreading of olivine is not practical in cool areas of the Northern hemisphere

In tropical areas, it might offset global emissions by only 0.1-1%

Suzanne Hangx, Dr. Christopher J. Spiers 2009. (Hangx – master’s degree candidate in geology at Utrecht University, Netherlands. Spiers – PhD; professor in the Faculty of Geosciences, Utrecht University .) Coastal spreading of olivine to control atmospheric CO2 concentrations: A critical analysis of viability, International Journal of Greenhouse Gas Control, published Aug 2009 <http://www.innovationconcepts.eu/res/literatuurGPV/2009hangxspiersolivine.pdf>

It is our conclusion that beach reaction is not a practical option for Northern hemisphere countries with mean coastal seawater temperatures of 15C or less. On the other hand, given suitable emissions trading regulations, coastal weathering of olivine in hot, (sub)tropical areas, close to sites where olivine can be mined, could perhaps contribute to offsetting global emissions at the 0.1–1% level. Such areas offer improved possibilities and costs, which may warrant further investigation from a niche market perspective. Clearly, coastal weathering of olivine cannot offer a stand-alone solution for CO2 control and cannot replace CO2 mitigation technologies, such as CO2 capture and storage (CCS).

DISADVANTAGES

1. Phytoplankton Risk

Link: Olivine could lead to substantial input of iron into the ocean

Dr. Peter Köhler PhD, Jesse F Abrams, Christoph Völker, Judith Hauck and Dieter A Wolf-Gladrow 2013. (research scientists at Alfred Wegener Institute for Polar & Marine Research, Bremerhaven, Germany) ENVIRONMENTAL RESEARCH LETTERS Vol 8 No 1, published 23 Jan 2013 Geoengineering impact of open ocean dissolution of olivine on atmospheric CO2, surface ocean pH and marine biology (brackets added) <http://iopscience.iop.org/1748-9326/8/1/014009/article>

Olivine dissolution might also lead to a substantial input of iron into the ocean. Its impact on the marine biology might be a subject for future studies. Back-of-the-envelope calculations reveal that an annual dissolution of 3 Pg [petagrams] of olivine with a Mg:Fe [magnesium to iron] ratio of 9:1 is connected with an annual input of 0.2 Pg [petagrams] Fe [iron]. This is an order of magnitude larger than the natural iron input connected with dust deposition (Mahowald et al 2005).

Link: Iron changes the phytoplankton, with potentially highly damaging impacts on marine ecosystems

Dr. Michelle Allsopp, Dr. David Santillo and Dr. Paul Johnston 2007. (Allsopp - PhD in biomedicine from Univ of Exeter and Postgraduate Medical School of the Royal Devon and Exeter Hospital. Santillo - PhD from Univ of London on nutrient uptake by oceanic plankton. Johnston - principal scientist at the Greenpeace Research Laboratories; PhD from Univ of London on the aquatic toxicity of selenium) A scientific critique of oceanic iron fertilization as a climate change mitigation strategy Sept 2007 (brackets added) <http://www.greenpeace.to/publications/iron_fertilisation_critique.pdf>

It is evident from mesoscale iron enrichment studies that, after iron addition to HNLC [high-nutrient, low chlorophyll] waters, the phytoplankton community commonly changes from one dominated by smaller phytoplanktonic species to one dominated by diatoms. This is of great concern from an ecological viewpoint because phytoplankton form the base of the marine food chain. Any changes in the phytoplankton community will have unknown and poorly predictable, but potentially highly damaging, impacts on marine ecosystems.

Impact: Fisheries damaged.

Dr. Michelle Allsopp, Dr. David Santillo and Dr. Paul Johnston 2007. (Allsopp - PhD in biomedicine from Univ of Exeter and Postgraduate Medical School of the Royal Devon and Exeter Hospital. Santillo - PhD from Univ of London on nutrient uptake by oceanic plankton. Johnston - PhD from Univ of London on the aquatic toxicity of selenium) A scientific critique of oceanic iron fertilization as a climate change mitigation strategy Sept 2007 <http://www.greenpeace.to/publications/iron_fertilisation_critique.pdf>

Iron fertilization results in other essential nutrients, such as nitrates, phosphates ad silicates, being used up as the phytoplankton bloom progresses. Consequently, this could result in a reduction of these nutrients down-current from an iron- fertilized area. In turn, a lack of nutrients would cause a negative impact on phytoplankton down-current resulting in a reduction in overall biological productivity. This would be likely to have a knock-on negative impact on all other marine life because phytoplankton underpin the marine food web. Indeed, because of this phenomenon, modelling studies have predicted that commercial-scale iron fertilization of the oceans could have a significant detrimental impact on important fisheries.

Impact: If anything happens to phytoplankton, it’s Game Over. Half the earth’s oxygen and most other life in the ocean depends on them.

Woods Hole Oceanographic Institution 2013. “Phytoplankton” <http://www.whoi.edu/main/topic/phytoplankton>

Phytoplankton are some of Earth's most critical organisms and so it is vital study and understand them. They generate about half the atmosphere's oxygen, as much per year as all land plants. Phytoplankton also form the base of virtually every ocean food web. In short, they make most other ocean life possible.

2. Hypoxia – loss of oxygen in ocean waters

Link: Olivine adds iron to the oceans. See DA1 Link above.

Link: Iron reduces oxygen levels in subsurface waters

Dr. Michelle Allsopp, Dr. David Santillo and Dr. Paul Johnston 2007. (Allsopp - PhD in biomedicine from Univ of Exeter and Postgraduate Medical School of the Royal Devon and Exeter Hospital. Santillo - PhD from the University of London in 1993 for research into nutrient uptake by oceanic plankton. Johnston - principal scientist at the Greenpeace Research Laboratories and head of the Science Unit for Greenpeace International; PhD from the University of London in 1984 for research into the aquatic toxicity of selenium) Technical Note 07/2007 A scientific critique of oceanic iron fertilization as a climate change mitigation strategy September 2007 <http://www.greenpeace.to/publications/iron_fertilisation_critique.pdf>

Iron addition and subsequent phytoplankton blooms, associated with increased particulate organic export and remineralization, could reduce oxygen levels in subsurface waters. Low oxygen levels would lead to a negative impact on many marine organisms because they need oxygen to breathe. Indeed, an early modelling study of large-scale iron fertilization predicted that it would lead to significant deep ocean oxygen depletion in one region of the oceans studied.

Impact: Marine organisms die

Curtis Deutsch , Holger Brix, Taka Ito, Hartmut Frenzel1, LuAnne Thompson 2011. ( Deutsch - Department of Atmospheric and Oceanic Sciences, UCLA. Brix - Department of Atmospheric and Oceanic Sciences, UCLA.. . Ito - Department of Atmospheric Science, Colorado State University. Frenzell - Department of Atmospheric and Oceanic Sciences, UCLA. Thompson - School of Oceanography, University of Washington .) Climate-Forced Variability of Ocean Hypoxia, SCIENCE June 2011 <http://www.sciencemag.org/content/333/6040/336.full> (brackets added)

Numerous biological and physiological processes have O2 thresholds that restrict the activity and habitat of marine organisms, from microbes to macrofauna. Concentrations of dissolved O2 below ~60 μM [micromoles], termed hypoxic, are lethal for more than 50% of marine benthic animals; this proportion increases to more than 90% when O2 falls below ~10 μM [micromoles] (1). Microbial communities also undergo a marked shift under low oxygen conditions. At suboxic concentrations (O2 < 5 μM [micromoles]), anaerobic processes such as denitrification and anaerobic ammonium oxidation become dominant metabolic pathways (2) that account for half of the global fixed nitrogen removal from the ocean, yielding widespread nitrogen limitation of photosynthesis (3).

3. Lower wheat yields

Link: AFF claims they reduce atmospheric CO2

Link: Kansas State University study finds increased atmospheric CO2 is good for wheat – increases yields during times of drought

K-State Research and Extension News 2013. Research Finds That Elevated Carbon Dioxide in Atmosphere Trims Wheat, Sorghum Moisture Needs 25 Mar 2013 <http://www.ksre.k-state.edu/news/story/carbon_dioxide032513.aspx>

“Our experiments have shown that the elevated carbon dioxide that we now have is mitigating the effect that drought has on winter wheat and sorghum and allowing more efficient use of water,” said K-State agronomy professor Mary Beth Kirkham. Kirkham, who has written a book on the subject, “Elevated Carbon Dioxide: Impacts on Soil and Plant Water Relations,” used data going back to 1958. That’s when the first accurate measurements of atmospheric carbon dioxide were made, she said. “Between 1958 and 2011 (the last year for which scientists have complete data), the carbon dioxide concentration has increased from 316 parts per million to 390 ppm,” she said. “Our experiments showed that higher carbon dioxide compensated for reductions in growth of winter wheat due to drought. Wheat that grew under elevated carbon dioxide (2.4 times ambient) and drought yielded as well as wheat that grew under the ambient level carbon dioxide and well-watered conditions.” The research showed that sorghum and winter wheat used water more efficiently as a result of the increased levels of carbon dioxide in the atmosphere, Kirkham said. Because elevated carbon dioxide closes stomata (pores on the leaves through which water escapes), less water is used when carbon dioxide levels are elevated. Evapotranspiration is decreased. Studies done subsequent to the early work confirmed the findings.

Impact: Hunger riots. Wheat yields are critical to developing world nutrition. Shortages lead to hunger riots

International Research Initiative for Wheat Improvement, in an article copyrighted 2013. (also known as the Wheat Initiative, it’s an organization of agriculture science researchers organized in 2011 by the G20) “Objectives” <http://www.wheatinitiative.org/about/objectives>

Wheat is one of the main staple crops in the world and provides 20% of daily protein and calories. It is the second most important food crop in the developing world after rice. In the past decades, wheat production levels did not satisfy demand, triggering price instability and hunger riots. With a world population of 9 billion in 2050, wheat demand is expected to increase by 70%. To meet the demand, annual wheat yield increases must grow from the current level of below 1% to at least 1.7%.

4. Masking DA: Geoengineering will block real solutions

Link: Geoengineering erodes the incentives to cut carbon emissions

Prof. Clive Hamilton 2013. (professor of public ethics at Charles Sturt University) 26 May 2013 NEW YORK TIMES, Geoengineering: Our Last Hope, or a False Promise? <http://www.nytimes.com/2013/05/27/opinion/geoengineering-our-last-hope-or-a-false-promise.html?pagewanted=all&_r=0>

Engineering the climate is intuitively appealing to a powerful strand of Western technological thought that sees no ethical or other obstacle to total domination of nature. And that is why some conservative think tanks that have for years denied or downplayed the science of climate change suddenly support geoengineering, the solution to a problem they once said did not exist. All of which points to perhaps the greatest risk of research into geoengineering — it will erode the incentive to curb emissions. Think about it: no need to take on powerful fossil-fuel companies, no need to tax gasoline or electricity, no need to change our lifestyles.

Link: Reducing carbon in the USA requires aggressive efforts

National Governors Association 2008. (Founded in 1908, the National Governors Association is the collective voice of the nation's governors and one of Washington, D.C.'s most respected public policy organizations. Its members are the governors of the 50 states, three territories and two commonwealths), 2008, “Securing A Clean Energy Future – The Challenges,” <http://ci.nga.org/cms/home/0708/challenges.html>

There is significant scientific consensus that accumulating greenhouse gas emissions in the earth's atmosphere are causing temperatures to rise, leading to a host of potential-and possibly already occurring-detrimental outcomes for the natural and human environment. The U.S. is responsible for one-quarter of the world's greenhouse gas emissions. The transportation and electricity sectors are the largest sources of U.S. CO2 emissions, accounting for almost 75 percent. With emissions projected to grow into the future, reducing emissions from these sectors will require aggressive, innovative efficiency efforts and greater use of cleaner energy sources.

Impact: Turn the Affirmative’s carbon impacts. They get worse if you vote AFF because the aggressive measures needed to reduce carbon will be less likely to occur when we falsely rely on geoengineering and think we’ve solved the problem.

5. Diversion of resources reduces net benefits. Using money today to solve an insignificant future problem takes resources away from today’s urgent problems

Dr. Indur Goklany 2008. (was a delegate for the United States to the Intergovernmental Panel on Climate Change and to the team negotiating the UN Framework Convention on Climate Change), 5 Feb 2008, “What to Do about Climate Change,” <http://www.cato.org/pub_display.php?pub_id=9125>

Hence, climate change is unlikely to be the world's most important environmental problem of the 21st century. Analysis using both the Stern Review and the fast-track assessment reveals that notwithstanding climate change, for the foreseeable future, human and environmental well-being will be highest under the "richest-but-warmest" scenario and lower for the poorer (lower-carbon) scenarios. The developing world's future wellbeing should exceed present levels by several-fold under each scenario, even exceeding present wellbeing in today's developed world under all but the poorest scenario. Accordingly, equity-based arguments, which hold that present generations should divert scarce resources from today's urgent problems to solve potential problems of tomorrow's wealthier generations, are unpersuasive.

6. Lost opportunities for Adaptation. This disadvantage happens when the Affirmative’s plan focuses our attention and money on “mitigating” (reducing or solving) for climate change, when instead we should be spending that time and attention on “adapting” to climate change -- if and when it happens, let’s accept it and adapt our society to handle it. We will show that adaptation is a better strategy than mitigation, and therefore we miss the benefits of the Adaptation strategy when we follow the Mitigation strategy promoted by the Affirmative team.

Link: Aggressive reduction of greenhouse gases wrongly assumes that mitigation is better than adaptation.

Dr. Indur Goklany 2008. (former delegate for the United States to the Intergovernmental Panel on Climate Change and to the team negotiating the UN Framework Convention on Climate Change) 1 Mar 2007, “Adaptation and sustainable development will yield greater benefits than Kyoto Protocol targets” FRASER INSTITUTE, <https://www.fraserinstitute.org/research-news/news/display.aspx?id=12082>

"Calls for aggressive curtailment of greenhouse gases in the near-term wrongly assume that there is no greater environmental problem in the 21st century than climate change, and that adverse impacts of climate change would be more efficiently and effectively reduced through mitigation rather than adaptation," Goklany said.

Link: Mitigation will distract from Adaptation. Cross-apply “Diversion of resources” in DA5 above.

Impacts: Adaptation is more likely to deliver benefits than mitigation. Impact is lost social benefits from adaptation.

Dr. Indur Goklany 2008. (former delegate for the United States to the Intergovernmental Panel on Climate Change and to the team negotiating the UN Framework Convention on Climate Change) 1 Mar 2007, “Adaptation and sustainable development will yield greater benefits than Kyoto Protocol targets” FRASER INSTITUTE, <https://www.fraserinstitute.org/research-news/news/display.aspx?id=12082>

“Adaptation allows us to selectively capture the positive aspects of climate change while reducing the negative. While the impacts of global warming are uncertain, there is no doubt that malaria, hunger, water stress, and coastal flooding are real and urgent problems here and now,” Goklany said. “Focused adaptation is more likely to deliver benefits than mitigation such as greenhouse gas reductions, and deliver those benefits sooner rather than later.”