EXPERT REPORT OF DR. LOREN C. SCOTT

by

Loren C. Scott & Associates, Inc.



Rebuttal Report to the Expert Reports of: Charles F. Mason, Diane E. Austin, & Donald. F. Boesch

In re: Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico
MDL 2179
U.S. District Court for the Eastern District of Louisiana

September 12, 2014

Confidential pursuant to PTO #13

Loren C. Scott

Date

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INTRODUCTION

My name is Loren C. Scott. I am a Professor Emeritus of Economics at Louisiana State University. I have been retained by BP Exploration & Production Inc. ("BPXP") to review and analyze the impact on the Gulf Coast and United States economies of: (1) spending by BPXP following the *Deepwater Horizon* oil spill; and (2) capital and operational expenditures by BPXP that are unrelated to the *Deepwater Horizon* spill. That report was submitted on August 15, 2014. I have been asked to evaluate the reports of three expert witnesses retained by the U.S. Department of Justice in this case. Those reports were submitted by Dr. Charles F. Mason, Dr. Diane E. Austin and Dr. Donald F. Boesch.

QUALIFICATIONS

I am the President of Loren C. Scott & Associates, Inc., an economic consulting firm that was established in 1981. I am a Professor Emeritus at Louisiana State University, where I have taught Economics since I started my career in 1969. I served as the Freeport McMoran Endowed Chair of Economics and the Director of the Division of Economic Development and Forecasting. Prior to that, I was awarded the Thomas J. Singletary Business Partnership Professorship. Over the 13-year period from 1983-96, I served as the chairman of the LSU Economics Department. During that time, the Department's ranking among the 3,000 economics departments in the U.S. rose from 101st to 38th. I have been contributing articles and technical papers to economics journals, books, and business reviews since 1970. I serve on the 32-member National Business Economic Issues Council (NBEIC), which meets quarterly to discuss issues of state, national, and international interest. I serve as an energy specialist on the NBEIC. I have been appointed to the Economic Advisory Board of the U.S. Council on Competitiveness--a group made up of the CEOs of the Fortune 100, top university presidents and presidents of three major unions. I have been interviewed on CNBC, MSNBC, and Bloomberg, in addition to several local TV stations,

and my work has been cited in such publications as the Wall Street Journal, the Los Angeles Times, the New York Times, USA Today, and the Financial Times, to name a few. As part of my work, I regularly keep up with the economies of 10 states in the south-southeast ranging from the Louisiana-Arkansas area to the Carolinas-Georgia-Florida area for First National Bankshares.

I have been the co-author of the Louisiana Economic Outlook issued annually every year since 1984, an effort which requires me to keep abreast of economic trends in the state and to maintain contact with major industries, businesses, economic developers, and governmental entities throughout Louisiana. I have been the economic consultant to Louisiana's Judicial Compensation Commission since 1995. I served on Governor Roemer's Task Force on Minority Set-Asides (1989-90), and on three groups for Governor Foster -- Economic Development Transition Team (1996), Economic Modeling & Diversification Task Force (1997), and Interagency Work Group on Labor Market Information (Fall 1997).

I am being compensated for my work on this matter at my ordinary rates of \$750 an hour, and my compensation is not contingent upon the outcome of the case or the opinions that I offer. My curriculum vitae and list of previous testimony can be found in Appendix A to my August 15, 2014 report. The materials I have considered in forming my analysis and opinions in this report are listed in Appendix C.

EXECUTIVE SUMMARY OF OPINIONS

In Part One, I analyze the report of Dr. Charles Mason. In his report, Mason proffers an unreliable estimate of economic harm caused by the *Deepwater Horizon* spill based on a simplistic and flawed assumption that claims payments provide an accurate measure of actual harm. This approach is unscientific and unreliable, because it reflects an assumption as opposed to a conclusion based on expert methodology. Mason's assumption is not supported by economic data, claims payments are not accurate measures of actual damages, and Mason fails to

consider BPXP's mitigation of economic harm, in particular the mitigating effects of the claims payments. Second, Mason's opinions are based on flawed analyses and present an inaccurate representation of BPXP's role in the Gulf Coast economy. Mason understates BPXP's role based on inaccurate comparisons that do not properly account for the role of royalties, and his use of market share is an incomplete and inappropriate metric for measuring BPXP's economic impact on the Gulf Coast economy. Further, his opinions show BPXP's decreased -- although still significant -- positive impact since the spill.

In Part Two, I analyze the portion of Dr. Diane Austin's report that addresses the effects of the *Deepwater Horizon* spill on the Gulf Coast region's economic and material well-being. Austin's report is based on an ethnographic approach that is not appropriate or reliable in this context because of its fundamental reliance on anecdote. Further, her use of the ethnographic approach is flawed. There is no information about the qualifications of the researchers used, no apparent randomization in the study, no apparent attempt to create a representative sample, no evidence of clear, consistent questioning across the sample, and no evidence of control for bias. Austin also selectively ignores findings of her own study, published previously by the U.S. Bureau of Ocean Energy Management, when they do not support her conclusions in the expert report submitted for this litigation.

In Part Three, I analyze the portion of Dr. Donald Boesch's report that addresses the spill's economic impact on fisheries in the Gulf of Mexico. Boesch relies on outdated estimates from 2011 and 2012, rather than relying on updated data, and characterizes projections from those studies as fact. Had Boesch looked at more up-to-date data, as I did in my first report, he could not have reached the same conclusions as he did.

PART ONE: Dr. Charles F. Mason Report

Charles F. Mason, PhD. (hereafter, Mason) submitted a report on August 15, 2014 entitled "In Re: Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico On April 20, 2010" MDL 2179. In this report Mason addresses two primary issues: (1) the extent of economic harm caused by the spill, and (2) the role of BPXP in the Gulf Coast economy. Mason's analyses of both issues suffer from serious methodological flaws and are not economically or scientifically reliable.

I. Mason Does Not Present an Accurate Measure of Economic Harm from the Deepwater Horizon Spill.

In the second section of his report--pages 29-44--Mason argues for using BPXP's claims payments as a measure of the economic harm from the spill. It is my opinion that this is an unscientific and unreliable approach for estimating economic harm from the spill. Mason's use of claims payments to approximate economic harm reflects an unreliable assumption, not a conclusion based on economic analysis or reliable empirical data. Claims data are an unreliable indicator of actual losses for at least three reasons:

(1) There are tools and economic data available to estimate the harm from the spill that are more accurate, and economists typically analyze such data to evaluate the impact of an event rather than relying on assumptions, particularly assumptions based on indirect and unreliable information. Instead, Mason assumes that claims payments equal an estimate of the amount of actual economic harm resulting from the oil spill, and that assumption reflects fundamental misunderstandings of the

¹ Charles F. Mason, PhD "In Re: Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico On April 20, 2010" MDL 2179, August 15, 2014. ("Mason").

- claims payments made by the Gulf Coast Claims Facility (GCCF) and the Court Supervised Settlement Program ("Settlement Program").
- (2) Claims or settlement payments may not present an accurate measure of actual economic loss for a number of reasons, and as such they are an unreliable proxy for estimating economic harm to the Gulf Coast.
 - (a) A settlement in litigation is an unreliable proxy for the harm caused by a settling party. There are many considerations parties to a settlement take into account when deciding to settle and negotiating how much to pay that are not related, or are only partly related, to the actual harm that may have been caused. This includes not only highly structured, complex settlements such as the Economic & Property Damages (E&PD) Settlement but also the simpler, more immediate claims paid by the BP Claims Program in the summer of 2010.
 - (b) In the case of the *Deepwater Horizon* spill, most claimants by design have been paid a multiple of calculated compensation amounts, based on prenegotiated or pre-determined fixed multipliers that are not specific to evidence of harm provided by claimants and were intended in part to address potential liability for punitive damages and other uncertainties, which means that the claims payments result in an exaggerated estimate of claimants' actual harm resulting from the spill.
 - (c) Claims payments may exceed actual loss, and include compensation for some losses that are not related to the *Deepwater Horizon* spill. The nature of litigation settlements in general, and the particulars of the context in which this litigation was settled, render use of the E&PD Settlement claim payments as a

proxy for harm highly speculative. Payments have been made under the settlement using a methodology that the District Court and the Settlement Program have acknowledged result in payments to claimants that do not have injuries caused by the spill. These circumstances highlight why it is inappropriate to use such payments as support for an economic estimate that should be supported instead by reliable scientific methods.

(3) Mason ignores the claims payments' mitigation of harm, which should be taken into account to accurately assess harm due to the spill.

A. Mason's Opinion is Not Supported by Economic Data.

First, Mason's analysis is flawed because he assumes that claims payments can be used to approximate economic harm and fails to evaluate available economic data that provide more reliable and direct measures of the impact (or lack thereof) of such an event on the economy. Such data are available and can be analyzed to draw more economically-reliable conclusions about the extent or lack of economic harm related to the *Deepwater Horizon* spill. Mason chose not use this data-based approach and instead chose to draw a conclusion based on assumptions.

For example, if Mason believes that tourism expenditures in, say Alabama, were harmed by the spill, he could have gathered historical data on tourism expenditures or hotel revenue (perhaps RevPAR data) and directly analyze that data.

A wide variety of data are available that can be used to make more reliable assessments about whether or not the *Deepwater Horizon* spill caused economic harm and the scale and extent of any such harm. I took this approach in my opening report in which I examined reliable sources of data that were available to Mason and the United States. The actual economic data

supports the opinions set forth in my report.² My analysis shows that in major industries important to the Gulf Coast economy, there were no net negative impacts in many places, and where there were negative effects, recovery took place quickly, at least partly as a result of BPXP's mitigation efforts.³ For example, the data shows that in many counties and parishes of the Gulf Coast states, the hotel industry did not experience losses in 2010, and where it was negatively affected by the spill, hotel occupancy and revenue recovered quickly by the fall of 2010 and continued strong growth in 2011, 2012, and 2013.⁴ I showed that BPXP's grants to support the promotion of tourism--\$87 million in the summer of 2010 and another \$91 million for 2011-2013--had a significant effect on the tourism promotion budgets of the Gulf Coast states and tourism-focused counties and beach areas.⁵ Using publicly available data, I also showed that, while there were decreases in seafood harvests in the summer of 2010, commercial fishing returned rather quickly to near or at pre-spill levels, with the 2011 values of commercial landings largely exceeding the 2007-2009 pre-spill annual average.⁶

Independent analyses of the actual data have reached similar conclusions. For example, the National Bureau of Economic Research and the Harvard Kennedy School of Government recently published an economist's study of the labor market impacts of the *Deepwater Horizon* spill.⁷ That study analyzed actual data and estimated the net effects of the spill and the

² Scott Report at 5-42.

³ Id.

⁴ Id. at 21-39.

⁵ Id. at 21-22; see 2012-2013 Survey of State Tourism Budgets, U.S. Travel Association, Appendix F; 30(b)(6) Deposition Transcript of Harry Luton, p. 107:23-108:2; 108:19-108:24; 169:8-13.

⁶ Scott at 39-41 citing NOAA Commercial Landings Data.

⁷ See Aldy, Joseph E., The Labor Market Impacts of the 2010 Deepwater Horizon Oil Spill and Offshore Oil Drilling Moratorium, National Bureau of Economic Research Working Paper 20409 available at http://www.nber.org/papers/w20409 (August 2014) or at

government's drilling moratorium on Gulf Coast employment and wages.⁸ The study's author, Dr. Aldy, found that, "despite predictions of major job losses in Louisiana," the state's coastal parishes experienced a net increase in employment and wages following the spill.⁹ In the Florida Panhandle coastal counties, which were more affected by the spill than other Florida Gulf Coast counties, the study found that there were no net employment effects.¹⁰ He finds that in all of Florida's Gulf Coast counties, employment declined from May to July but then grew immediately after the capping of the well on July 15, although sensitivity analyses presented by Dr. Aldy indicate that reasonable and defensible changes in statistical specification of his regression model indicates that the estimated effects for the Florida non-Panhandle counties are often not statistically significant.¹¹ The study concluded that Alabama coastal counties experienced a 1.3% increase in employment and a 4%-6% increase in wages, indicating no harmful net employment effects from the spill or moratorium. In sum, Dr. Aldy concluded that, "[i]n statistical analysis based on 2010 data, I find that the net employment effect of the spill, spill

http://www hks harvard.edu/var/ezp site/storage/fckeditor/file/RPP 2014 16 Aldy.pdf. It is my understanding that "in 2009-2010, Aldy served as the Special Assistant to the President for Energy and Environment, reporting through both the National Economic Council and the Office of Energy and Climate Change at the White House." http://www.hks.harvard.edu/about/faculty-staff-directory/joseph-aldy.

⁸ The Aldy study used county/parish level data from the Quarterly Census of Employment and Wages.

⁹ Id.

¹⁰ Id. at 3 ("In particular, the coastal counties of Texas, Mississippi, and the Florida Panhandle all experienced net job impacts that cannot be statistically distinguished from zero.")

¹¹ Id. at 3. The study finds that non-Panhandle coastal counties experienced a decrease in employment but Panhandle counties did not. However, the incorporation of additional data on employment from 2008-09 generally reduces the estimated size and eliminates the statistical significance of these estimated effects in many specifications. Given that the Panhandle counties were closest to the spill and oil did not reach the shore past the Panhandle, I consider the finding regarding non-Panhandle counties to be less useful in understanding the effects of the spill.

response, and moratorium is a fairly precise zero for most parts of the Gulf Coast during 2010."12

In his expert report containing conclusions about alleged harm to the economy, Mason relies on an unreliable assumption, instead of analysis of any economic data, ¹³ but in his normal academic work done outside of the litigation context, he typically has drawn conclusions about economic outcomes by seeking to understand *actual* market data, where, as here, that data is available:

- "To evaluate the impact of pipeline capacity constraints upon spot price differentials, we collected data on spot prices at the two trading hubs, scheduled deliveries over the pipeline route that connects the two hubs, and the physical capacities of the pipelines ... The implication is that capacity constraints (and the associated congestion) can be excessively costly to natural gas market participants." Matthew E. Oliver, Charles F. Mason and David Finnoff (2014) "Natural Gas Expansion and the Cost of Congestion," IAEE Energy Forum, 1st quarter 2014 at p. 32.
- "In section 2, we discuss examples of non-renewable resource cartels and the relevant literature on collusion in repeated and dynamic games. We use this discussion to motivate factors that should be related to membership in a non-renewable resource cartel ... In Section 3, we use data on oil producing countries to see whether the predictions discussed in Section 2 are consistent with observed behavior." Charles F. Mason and Stephen Polasky (2005) "What motivates membership in non-renewable resource cartels?" Resource and Energy Economics 27:321-42 at 322-23.

Mason offers no explanation in his expert report as to why he failed to do the same kind of analysis here and instead elected to ignore available, objective data and rely entirely on the faulty assumption that economic harm resulting from the spill can be approximated by claims payments.

¹² Id. at 3 (emphasis added). This includes coastal counties in Texas, Mississippi and the Florida Panhandle.

¹³ Mason uses the claims payment "data" but can only proffer claims payments as estimates of harm by making significant assumptions and ignoring a number of facts, which are discussed elsewhere in this report.

B. Claims or Settlement Payments Are Not an Accurate Measure of Damages.

Mason's use of claims data as a proxy for "harm" is flawed because claims or settlement payments do not necessarily reflect actual damages or impacts. This appears to be the case for the GCCF and E&PD Settlement Program payments, but is even more clearly the case with the latter.

1. Claims Payments Are the Result of BPXP Settling Legal Liability.

A party may choose to settle a claim for any number of reasons. The amount that a settling party may elect to pay to resolve or avoid a lawsuit does not necessarily reflect an accurate or precise measure of the other party's actual harm or damages. Claims or settlement payments may be more or less than the amount of any actual harm or damages.

Most of the claims payments cited by Mason were paid pursuant to the GCCF and the E&PD Settlement, both of which were mechanisms for BPXP to settle claims that it might otherwise face in court during protracted litigation. For E&PD Settlement and GCCF Quick Payment and Final Payment claimants, the payments were conditioned on the claimants' release of the BP parties from further claims or litigation. In particular, the E&PD Settlement was a long-negotiated settlement to which BP parties and the Plaintiffs' Steering Committee agreed more than two years ago. I have seen no evidence that the BP parties admitted liability when making those payments or agreed that the amount of the payment equaled the amount of actual damages or harm. On the contrary, the E&PD Settlement states that "BP has concluded that, in light of the costs, risks, burden, and delay of litigation, Settlement in this complex litigation is

¹⁴ As Mason explains, the GCCF had multiple types of payments. Mason at 31. Claimants receiving a Quick Payment or Final Payment signed releases settling their claim, while Emergency Advance Payments and interim payments did not.

appropriate."¹⁵ As pointed out on page 2 of the E&PD Settlement both plaintiffs and the BP parties believed that (1) the complexity, expense and likely duration of the litigation, (2) the stage of the litigation and amount of discovery completed, (3) the potential for Plaintiffs or the BP parties prevailing on the merits, and (4) the range of possible recovery and certainty of damages, all argued in favor of the settlement agreement.¹⁶ By signing this agreement the BP parties were not admitting that the claims represented actual harm. This is expressly pointed out in Section 12 of the agreement, and the company states the resolution of disputed claims is for settlement purposes only.¹⁷ Companies settling liability do so for many reasons, many of which may not be based on findings of actual harm.

In the E&PD Settlement in particular, BPXP provided benefits that it was not legally obligated to provide and which go beyond actual losses caused by the spill, such as payment of Risk Transfer Premiums (RTPs), paying any share of damages caused by other defendants, and establishing a \$57 million tourism and seafood promotional fund. Although Mason attempts to support his position by pointing to the pre-negotiated compensation formulas of the E&PD Settlement as reliable methods of damages computation, his report ignores the basic fact that these were formulas constructed in the course of settlement that were based on assumptions that may or may not have held true in the years since. Moreover, in the course of basing his ultimate conclusions on assumptions, he ignores particular facts about the claims processes. His equation

¹⁵ E&PD Settlement at 2. The E&PD Settlement reinforces this lack of admission throughout the agreement. See, e.g., E&PD Settlement at 93 ("Business Claimant or Business Economic Loss Claimant shall mean an Entity...which or who is an Economic Class Member *claiming* Economic Damage *allegedly* arising out of, due to, resulting from, or relating in any way to, directly or indirectly, the Deepwater Horizon Incident." (emphasis added)

¹⁶ Id. at 2.

¹⁷ Id. at 76.

¹⁸ Order and Reasons Granting Final Approval of the E&PD Settlement Agreement, December 21, 2012, at 61.

of claims payments with economic harm is an unreliable assumption and should not be relied upon to measure economic harm from an event such as the *Deepwater Horizon* spill.

2. Claims Payments Include Multiples of Calculated Compensation Amounts.

In this case, claimants in most instances were awarded a claim payment that was a multiple of the calculated compensation amount. Under the E&PD Settlement Agreement many parties were paid a multiple of their calculated compensation award amount as a premium defined as payment for a number of potential legal claims such as claims for punitive damages and possible future (but unknown and uncertain) harm. The possibility of harm in the future does not mean it actually occurred. In fact, my prior report showed that, contrary to initial expectations during the summer of 2010, the tourism industry had rebounded to pre-spill levels by the end of 2010 and some areas of the Gulf Coast did not experience declines in 2010 at all. Similarly, my prior report showed that claimants under the Seafood Compensation Program typically received compensation equal to many years of revenue, although fishing revenue for nearly all species rebounded to pre-spill levels by 2011-2012.

In the E&PD Settlement almost all claimants in the class received payments that included the calculated compensation amount *plus* an RTP.²¹ The RTP is defined in the Agreement as an amount meant to cover claims for punitive damages and uncertain potential future injuries.²²

¹⁹ Scott at 21-41.

²⁰ Scott at 18-19.

²¹ See E&PD Settlement Agreement, Exhibit 15. Only the following categories of claims did not receive an RTP: Failed Businesses, Failed Start-Up Businesses, Festival Vendors without sufficient documentation of earnings from festival sales, Vessels of Opportunity Charter Payment, Vessel Physical Damage, and Real Property Sales, as well as certain claims for physical damage compensation. Id.

²² "RTP (risk transfer premium) shall mean the amount paid to a Claimant for any and all alleged damage, including potential future injuries, damages or losses not currently known, which may later manifest themselves or develop, arising out of, due to, resulting from, or relating in any way to the Deepwater Horizon Incident, and any other type or category of damages claimed, including claims for punitive damages." E&PD Settlement Agreement at 107.

The RTP is an amount calculated by multiplying the RTP factor, for example 3.0, by the "Compensation Amount" calculated under a claimant's particular economic or property loss framework.²³ The RTP and Compensation Amount are then added together to determine the Final Claimant Compensation payment.²⁴ This means that a claimant entitled under the E&PD Settlement to an RTP of 3.0 will get a payment of <u>four</u> times the amount calculated under the Settlement's formula as the claimant's base level compensation for its calculated reduction in post-spill variable profits. The amount of RTPs applied by type of claim is described in two areas of the settlement agreement. Exhibit 10 shows the RTPs across various sectors of the seafood industry.²⁵ Exhibit 15 documents the RTPs across the other claim types.²⁶

Thus, the RTP amount of a claim payment by definition does not represent actual economic harm caused by the *Deepwater Horizon* spill but is an amount negotiated by the parties as part of the premium claimants agreed to get for settling and releasing the BP parties and to account for claims for potential punitive damages and potential future losses that may not happen.²⁷ In its Order granting final approval of the E&PD Settlement, the Court noted this point, explaining that many of the damage categories are augmented by RTPs, which compensate class members for "potential future loss, as well as pre-judgment interest, any risk of oil

²³ Id.; see e.g., E&PD Settlement Agreement, Exhibit 8B at 14-17.

²⁴ E&PD Settlement Agreement, Exhibit 8B at 14-17.

²⁵ See E&PD Settlement Agreement, Exhibit 10.

²⁶ See E&PD Settlement Agreement, Exhibit 15.

²⁷ Mason quoted BP expert James Henley, who also explained that, "the RTP payments are meant to compensate class members for potential future loss, as well as pre-judgment interest, any risk of oil returning, and any claims for consequential damages, inconvenience, aggravation, the lost value of money, compensation for emotional distress, liquidation of legal disputes about punitive damages, and other factors, some or all of which may never occur." 8/13/12 Declaration of James L. Henley [Rec. Doc. No. 7114-10] at 5 (emphasis added). He further explained that, "In addition to compensation for lost profits during the Compensation Period, as explained above, including a growth factor, claimants also receive an RTP multiplier that compensates them for, among other things, any potential risk of future losses (which may or may not occur). Id. at 24-25 (emphasis added).

returning, any claims for consequential damages, inconvenience, aggravation, the lost value of money, compensation for emotional distress, liquidation of legal disputes about punitive damages, and other factors."²⁸ The Court also pointed out that under the E&PD Settlement, class members would be made whole and "in many cases perhaps more than whole, especially as to claimants eligible to claim multiples of their losses via RTPs."²⁹

Mason's Table 16 includes payment totals for the categories of E&PD Settlement payments. According to the table, business economic loss claimants and seafood program claimants are the two categories paid the most so far under the E&PD Settlement. The RTPs for these categories range from 0.25 for certain business economic loss claimants to 8.75 for certain Seafood Compensation Program claimants.³⁰ However, significant subcategories of business claimants, including all business claimants in the tourism and seafood distribution industries and in areas closest to the coast, receive an RTP between 2.00 and 3.00, meaning that their compensation is 3 to 4 times the calculations of the base compensation made by the Settlement Program.³¹ Coastal Real Property claimants received an RTP of 2.5, meaning that of the \$134.9 million that Mason cites in Table 16, only approximately \$38.5 million is the amount calculated by the E&PD Settlement formula as the compensation amount.³² The remainder is the RTP paid to cover what the parties to the agreement expressly stated in writing was not meant to represent estimated damages. (These figures do not account for payments previously made to these

²⁸ Order and Reasons Granting Final Approval of the E&PD Settlement Agreement, December 21, 2012, at 7-8.

²⁹ Id. at 86.

³⁰ See E&PD Settlement Agreement, Exhibit 10 and Exhibit 15.

³¹ See E&PD Settlement Agreement, Exhibit 15.

³² The amount paid also includes accounting support payments, which also contribute modestly to the gap between a claimant's compensation and damage.

claimants by the GCCF, and thus may understate the gap between total compensation received by the claimant and the claimant's damage.) Similarly, Wetlands Real Property claimants also received an RTP of 2.5, meaning that, of the \$115 million paid, only approximately \$32.9 million is the total of compensation amounts that were calculated under the E&PD Settlement's frameworks. The remainder is principally accounted for by RTP. For the claimants in the Business Economic Loss and Seafood Compensation Program categories, which have been paid the most, some claimants were entitled to RTPs of up to 3.0 for some business claimants and up to 8.75 for seafood claimants.

In other words, of the almost \$4 billion paid under the E&PD Settlement, a significant share of the total payments reflects RTP premiums paid as part of the negotiated settlement and is not meant to represent actual harm caused by the spill. The RTP multiplier was fixed by the parties' E&PD Settlement agreement and does not vary based upon any specific proof of future harm. Thus these payments to claimants cannot be used as a reliable estimate of actual economic harm resulting from the spill. Therefore, even if Mason's contention that the base compensation amounts (before RTP is added) calculated by the E&PD Settlement frameworks were accepted as representing actual economic harm caused by the *Deepwater Horizon* spill and not any number of other external factors, his estimate is still significantly overstated.

Similarly, the GCCF also paid multiples of the calculated compensation estimates. As Mason points out, the GCCF applied a "Future Recovery Factor" based on a multiple of the claimant's estimated 2010 loss.³³ GCCF claimants that received full final payments received a future recovery factor of one or more, meaning they were paid at least twice the amount that the GCCF calculated may have been loss caused by the spill. Overall, GCCF made payments to

³³ Mason at 33.

claimants of \$6.2 billion, so as much as half of that total (\$3.1 billion) may have reflected the multiple paid for "future" recovery. This does not represent actual documented economic harm but a premium to cover harm that may or may not ever occur.

Given the availability of so much data that demonstrates a very fast recovery (or no economic harm at all) of two of the major industries in the Gulf Coast--tourism and commercial fishing--it is very possible that many claimants experienced no further or ongoing harm after receiving their multiplied payment of compensation.³⁴ The fact that Mason does not evaluate available data prevents him from supporting his assumption that claims payments can be equated to economic harm.

This holds true for claims payments made to those in the commercial fishing industry. I addressed the issue of potential and actual economic harm versus claims payments and mitigation spending as it applied to the fishing industry on pages 17-22 of my August 15, 2014 report. Overall, participants in the commercial seafood industry were compensated by amounts that exceeded potential spill-related losses, as a result of VoO spending and the Seafood Compensation Program of the E&PD Settlement, but also GCCF payments and other spill-related response spending.

First, VoO payments were primarily directed at vessels used in the fishing industry in Louisiana, Mississippi, Alabama, and Florida. When compared to the total annual value of commercial fishing in these four states, it is clear that the money paid by BPXP to vessel owners and boat captains, who in turn paid deckhands, fisherman, and others to work on the vessels, was significant and exceeded the annual revenue of the commercial fishing industry in these states.

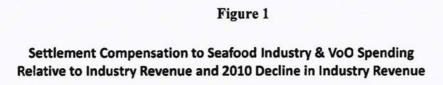
³⁴ See Scott Report at 21-41.

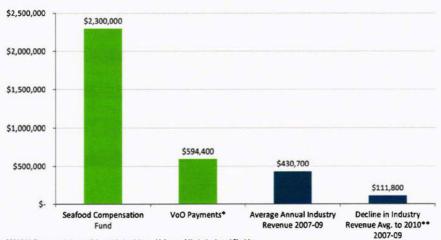
The \$594.4 million paid out in 2010 by BPXP for the VoO program in Louisiana, Alabama, Mississippi, and Florida is alone higher than these states' entire annual seafood industry revenue. According to publicly available NOAA commercial landings data, the 2007-09 average annual seafood industry revenue for these four states was \$430.7 million. BPXP's 2010 VoO payments in the four states were 38% higher than this average total annual revenue. The same public landings data shows that the industry's revenues declined in 2010 by approximately \$111.8 million from the 2007-09 average. (By using the average over 2007-09 I have in fact over-estimated the 2010 decline relative to 2009, because the revenues from the Gulf catch was actually lower in 2009 than the 2007-09 average.) BPXP's VoO spending in 2010 alone was more than five times this documented loss of revenue. See Figure 1.

Second, fishermen were compensated by BPXP through its claims program, the GCCF, and the E&PD Settlement's Seafood Compensation Program. As I noted in my August 15, 2014 report and discussed above, in the E&PD Settlement, BPXP agreed to compensate commercial fishing claimants up to 8.75 times the calculated base compensation amount. As a result, a seafood industry participant—whether vessel owner, vessel captain, deckhand, oyster leaseholder, or holder of Individual Fishing Quota licenses—received from the Seafood Compensation Program multiple times their potential estimated 2010 losses (see Figure 1).

³⁵ NOAA Commercial Landings Data, excluding Menhaden.

³⁶ E&PD Settlement Agreement, Exhibit 10.





*2010 VoO payments to participants in Louisiana, Alabama, Mississippi, and Florida
**Reflects difference between (i) average 2007-09 revenue, and (ii) 2010 volume valued at average price in 2007-09.

Notes: Based on Gulf landings in Florida, Alabama, Mississippi, and Louisiana, Industry revenue excludes menhaden Source: DWH Settlement Agreement, NOAA Commercial Landing Data.

If this participant also had taken part in the VoO program and received VoO payments, none of their VoO earnings were deducted from their settlement payments, meaning that the claimant benefited twice from both the high rate of settlement compensation as compared to actual 2010 losses and VoO earnings in 2010.³⁷ In addition, seafood claimants are eligible for Round 2 distributions for any funds remaining from the \$2.3 billion Seafood Compensation Program.³⁸ These Round 2 payments are in addition to the Round 1 payments described above.

As shown in the bar to the far left in Figure 1, the economic effect of the E&PD Settlement can be seen in the scale of the settlement's Seafood Compensation Program compared

³⁷ See E&PD Settlement Agreement, p. 29, sec. 5.2.2 ("Within the Seafood Compensation Program, no previous compensation paid to the Claimant by the BP Parties or another Charterer in connection with the VoO Program shall be considered . . ."); see also E&PD Settlement Agreement, Exhibit 10, at 3. Note that VoO earnings did partially offset other non-Seafood-related claims under the settlement. See, e.g., Sections 38.164 and 38.166 of the E&PD Settlement Agreement. For those fishermen who were paid claims from BP's claims program prior to the GCCF or through the GCCF, VoO earnings were not deducted from claims payments. See Deposition Transcript of Harry Luton, p. 92:1-21.

³⁸ E&PD Settlement Agreement, Exhibit 10.

to the value of output of the Gulf of Mexico seafood industry. The Seafood Compensation Program guarantees that eligible seafood industry claimants will share in a fixed \$2.3 billion fund.³⁹ As shown in Figure 1, this \$2.3 billion is 5.3 times the commercial seafood industry's average annual revenue in 2007-2009 and roughly 20.5 times the documented decline in commercial fishing revenue in 2010. The decline in revenue substantially exceeds the industry's decline in profits, which makes the \$2.3 billion settlement fund even larger in comparison to industry participants' losses. Considering the settlement fund's and VoO spending together, commercial fishing industry participants were paid more than 6.7 times the industry's total annual average revenue in 2007-2009 and almost 26 times the decline in industry revenue relative to the 2007-09 average.⁴⁰

3. Claims Payments Do Not Always Represent Actual Losses.

The multipliers and other mechanisms for payments described above reflect the fundamental principle that claims and settlement payments do not always represent actual losses. Claims payment data is a poor indicator of actual losses for another reason: a settled claim does not necessarily equal an actual loss for the purpose of measuring economic harm caused by the spill because the E&PD Settlement Program does not conduct an assessment of causation.⁴¹

³⁹ E&PD Settlement Agreement at 108 (defining Seafood Compensation Program Amount as \$2.3 billion).

⁴⁰ This is consistent with the finding that claims payments and response spending, including VoO, mitigated and minimized economic effects of the spill. 30(b)(6) Deposition Transcript of Harry Luton, p. 76:20-77:12; 77:25-78:17; 79:14-80:15; see also Offshore Oil and Deepwater Horizon: Social Effects on Gulf Coast Communities Volume I, Dep. Exh. 11922, p. 13; Offshore Oil and Deepwater Horizon: Social Effects on Gulf Coast Communities Volume II, Dep. Exh. 11923, p. 205, 208.

⁴¹ I am aware that following implementation of the E&PD Settlement, there have been questions raised about whether or not the Settlement Agreement permits claimants to be paid for losses that are not related to the spill and what is required by the agreement for the processing of claims. I have not considered and do not have a position on whether the respective positions of the parties or Claims Administrator are right or wrong. I believe I have a general understanding from the court decisions of what the courts have found and decided, and I have examined the Agreement and available evidence in order to understand whether the payments that have been made historically can be considered a reliable estimate of economic harm. As a result, my discussion of the Agreement's provisions are based on how I understand those provisions have, in practice, been administered by the Claims Administrator of the

The E&PD Settlement accounts for just over \$3.9 billion of the claims payments Mason uses in his report. As the E&PD Settlement has been construed by the Claims Administrator and the federal courts to date, however, there are claimants that are not being required to establish that their injuries were caused by the spill in order to receive a payment. The Claims Administrator has acknowledged as much, stating that the Settlement Program has made payments "for losses that a reasonable observer might conclude were not in any way related to the Oil Spill." The federal courts have also acknowledged this point. In particular, the District Court has ruled (in an order that I understand was affirmed by the Court of Appeals) that "whether a business economic loss is 'as a result of'" the oil spill must be "determined exclusively and conclusively by Exhibit 4B."

The E&PD Settlement Agreement is clear that for certain claimants alleging economic loss, Exhibit 4B's test for "causation" (based on examining revenue patterns) is not considered when determining a claims payment.⁴⁵ Such business claimants include all businesses in Zone A

Court-Supervised Settlement Program and how the District Court and Fifth Circuit Court of Appeals have ruled the E&PD Settlement should be administered.

⁴² Mason at 35-36.

⁴³ Br. of Appellees Claims Administrator and Deepwater Horizon Court Supervised Settlement Program at 16, In re Deepwater Horizon, Nos. 13-30315 & 13-30329 (5th Cir. May 24, 2013).

⁴⁴ Order & Reasons - Responding to Remand of Business Economic Loss Issues, Rec. Doc. 12055, at 18. I also note that when the District Court approved the settlement, it wrote that "[c]ausation is presumed for claimants who work in certain geographies and/or industries, whereas other claimants must demonstrate that their loss was due to the spill, in which case multiple causation options are available." 12/21/12 Order (Rec. Doc. 8138) at 12.

⁴⁵ E&PD Settlement Agreement, Exhibit 4B, section I and 8A at 12-13, 21-22, 32-33; see also December 21, 2012 Order at 87 (providing that "a claimant's zone location does not preclude recovery; it only determines whether he will receive an enhanced opportunity for recovery, including...a presumption of causation that eliminates the claimant's obligation to establish causation"). As I understand the decision of the Fifth Circuit Court of Appeals, it determined that the Agreement does not require claimants to submit evidence of causation, merely a certification that the losses are due to the spill, and substitutes proof of loss for proof of causation. March 3, 2014 5th Cir. No. 13-30315 at at 9 ("[Exhibit 4B] provides for the use of proof of loss as a substitute for proof of causation. Exhibit 4B exempts claimants located within certain geographic regions and in certain industries from presenting any evidence of causation.") & 11. The Fifth Circuit explained that this was "a contractual concession by BP to limit the issue of factual causation in the processing of claims." Id. at 11. I also rely on the explanation provided by a representative

(with certain exceptions); landing sites, certain commercial wholesale or retail dealers; certain primary and secondary seafood processors in Zones A, B, and C; all tourism businesses in Zones A or B; and all charter fishing businesses in Zones A, B, or C.⁴⁶ For individuals, such claimants include those who worked for an employer in Zone A; worked for a tourism business located in Zones A or B; worked for primary seafood industry businesses in all zones and secondary seafood industry businesses in Zones A, B, or C; or worked for charter fishing businesses in Zones A, B, or C.⁴⁷ These individuals and businesses represent a significant number of the categories of economic loss claimants.

Mason suggests that "even where causation was presumed" the requirement that claimants show an economic loss somehow supports his conclusion that those payments can be

of the Settlement Program that processes the claims under the E&PD Settlement, who explained in July 2014 that the Program has applied the objective formulae of Exhibit 4B and has not conducted subjective analyses or a "minitrial" for each claim to determine "what loss is attributable to the spill versus not…" Panel Meeting Transcript, July 9, 2014 at 96-104.

Business Claimants for Which There is No Causation Requirement

- 1) If you are a business in Zone A, you are not required to provide any evidence of causation unless you fall into one of the exceptions agreed to by the parties, and listed in footnote (1).
- 2) If you are a "Landing Site," or "Commercial Wholesale or Retail Dealer A," or "Primary Seafood Processor," as set forth in "Seafood Distribution Chain Definitions," you are not required to provide any evidence of causation.
- 3) If you are in Zone A, B or C and you are a "Commercial or Wholesale or Retail Dealer B," or a "Secondary Seafood Processor," or a "Seafood Wholesaler or Distributor," or a "Seafood Retailer," as set forth in "Seafood Distribution Chain Definition," you are not required to provide any evidence of causation.
- 4) If you are in Zone A or Zone B, and you meet the "Tourism Definition," you are not required to provide any evidence of causation.
- 5) If you are in Zone A, B or C, and you meet the "Charter Fishing Definition" you are not required to provide any evidence of causation.

Footnote 1 excludes start-up and failed businesses; entities, individuals or claims not included in the Economic Class definition; and claims covered by the Seafood Program. Id.

⁴⁶ Exhibit 4B of the E&PD Settlement Agreement states:

⁴⁷ E&PD Settlement Agreement, Exhibit 8A at 12-13, 21-22, 32-33.

considered a measure of economic harm caused by the spill.⁴⁸ This is incorrect, because it is apparent from an economic standpoint that economic losses can be caused by a wide variety of macroeconomic and microeconomic factors that have nothing to do with the spill. Mason cites a statement made in a declaration filed by the parties in support of the E&PD Settlement's approval, but it does not support Mason's inference.⁴⁹ He also quotes a BP community outreach manager to support his argument that paid E&PD Settlement claims means there must have been an economic loss, but the testimony he quotes concerned an August 2010 document about BPXP's claims program, not the E&PD Settlement, and the employee later clarified that she did not know the criteria for evaluation of claims.⁵⁰ Neither of these sources support Mason's conclusion.

In addition, even for claimants that are required by Exhibit 4B to demonstrate causation through one of multiple tests, these causation tests rely for the most part on revenue or profit patterns that still may not reflect actual economic harm caused by the *Deepwater Horizon* spill.⁵¹
As just one example, when a business meets the Exhibit 4B test, all revenue and profit declines

⁴⁸ Mason at 34-35.

⁴⁹ Mason quotes a declaration by James H. Henley, Jr., but Mr. Henley's statement merely says that claimants that are not required to meet the causation test of Exhibit 4B must still show that they experienced an economic loss in a certain time period after the spill, and if they did not experience a loss, they would not receive a payment. See Supplemental Declaration of James Henley at 2-3.

⁵⁰ Ms. Iris Cross was not making a statement about E&PD Settlement payments. First, when Ms. Cross made the statement quoted by Dr. Mason, she was answering questions about Exhibit 12324, a document dated August 2, 2010 and clearly not related to the E&PD Settlement. Deposition of Iris Cross at 108:3-110:5. Second, contrary to the quote included by Dr. Mason, Ms. Cross clarified later in her deposition that neither she nor her teams operated the claims centers or processed any of the claims. Deposition of Iris Cross at 221. She stated that she *did not know the criteria* that were used to determine whether claims would be paid, explaining that she was not a claims adjustor. Id. Instead, she referred people to the claims centers. Id.

⁵¹ See E&PD Settlement Agreement, Exhibit 4B.

during the compensation period are presumed to be caused by the spill.⁵² Indeed, the Claims Administrator has emphasized that as long as Exhibit 4B is satisfied, he will "not consider alternative causes of loss," and will compensate claimants "without regard to whether such losses resulted or may have resulted from a cause other than the Deepwater Horizon oil spill." Thus, even the calculated compensation amount may overstate the economic harm that resulted from the spill, even before the RTP is added.

A classic case would be what happened to the largest employer in Jackson County, Mississippi (and in Mississippi in general) in the neighborhood of the spill.⁵⁵ As seen in Figure 2, Huntington Ingalls Shipyard laid off 3,619 people between 2009 and 2012--a huge layoff totally unrelated to the spill, but rather due to defense cutbacks at a shipyard that primarily fabricates ships for the Navy.⁵⁶ The resumption in employment growth starting in 2013 was to handle an increasing workload from the Navy.⁵⁷

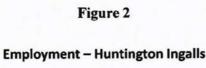
⁵² Id. As the Claims Administrator has explained, once Exhibit 4B is satisfied, "all revenue and variable profit declines during the Compensation Period are presumed to be caused entirely by the spill." Claims Administrator Patrick Juneau and the Settlement Program's Response to BP's Petition for Rehearing En Banc at 10, *In re Deepwater Horizon*, Nos. 13-30315, 13-30329, 13-31220 & 13-31316 (5th Cir. March 26, 2014) (quoting Proposed Findings of Fact and Conclusions of Law, ¶ 116, 124, 126; R. at 8559-62).

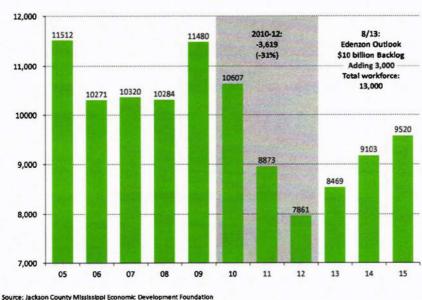
⁵³ Claims Administrator Patrick Juneau and the Settlement Program's Response to BP's Petition for Rehearing En Banc at 5, 8, *In re Deepwater Horizon*, Nos. 13-30315, 13-30329, 13-31220 & 13-31316 (5th Cir. March 26, 2014) (emphases in original).

⁵⁴ See Id.; see also 5th Cir. Decision, March 3, 2014, at 12.

⁵⁵ I understand that the E&PD Settlement contains certain restrictions on class eligibility and exclusions, either of which may exclude this particular company from participating in the settlement. Regardless of whether this company could qualify for a claims payment under the E&PD Agreement, my point is simply that this is an example of a company that could potentially meet the settlement's revenue tests despite its declines being caused by factors other than the spill, calling into question Mason's assumption that claims payments based on such tests are a reliable estimate of economic harm.

Karen Nelson, "More Layoffs Hit Ingalls Shipyards, http://obbankusa.com/News/Layoffs/more layoffs hit ingalls shipyard html, Austin Wright and Leigh Munsil, Politico, "The Incredible Shrinking Defense Industry" August 25, 2013, www.politico.com/story/2014/08/defense-industry-shrinking-110321.html. Bloomberg Businessweek: "Huntington Ingalls Joins Lockheed Girding for





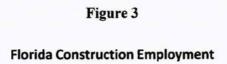
Even if some additional harm were caused by the spill, which I do not believe to be the case, the shipyard's decline would be at least partly caused by these factors external to the spill, yet as applied by the Claims Administrator the E&PD Settlement's formulas would generously attribute the entire decline--for purposes of calculating a compensation amount--to the spill. When claims payments are used by Mason as a proxy for harm, he does not account for this and necessarily overstates the amount of harm.

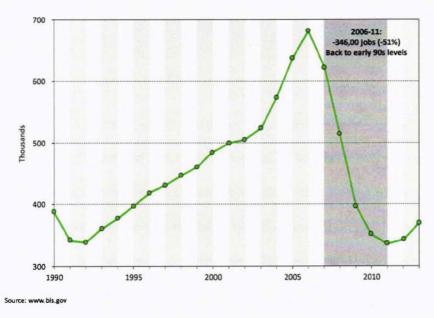
A second example is that of construction employment in the State of Florida, which is illustrated in Figure 3. Losses related to declines in construction revenue or employment cannot be attributed to the spill, given that the industry's decline started long before the spill, in 2006. But shortly after the spill, the industry started to recover. Thus, many construction businesses in

Defense Cut", June 13, 2012. http://jetdiversity.com/news/bloomberg-businessweek-huntington-ingalls-joins-lockheed-girding-for-defense-cut/

⁵⁷ http://hamptonroads.com/2013/09/huntington-ingalls-close-Gulfport-shipyard-2014.

Florida could possibly satisfy the revenue test (decline followed by recovery) in the E&PD Settlement as construed by the Claims Administrator, but for reasons totally unrelated to the spill. How much of the poor performance in any economic indicators in Florida were due to the massive collapse in the construction market rather than the spill? Mason does not address the role of these other economic trends and external factors, nor does he use any available data to support his assumptions.





Mason concedes that the difference between the benchmark period and post-spill income or profits "may include elements that are due to external factors..." and is "a somewhat uncertain estimate of loss." He nevertheless concludes that it "capture[s] differences in income or profits

⁵⁸ Because of a huge over-build of condos, apartments, and second homes leading up to 2007, there was a crash in this market that caused a loss of 346,000 jobs in this sector (-51%), taking construction employment in that state back to levels not experienced since the early 1990s.

⁵⁹ Mason at 40, 42.

that are due to the oil spill. Each individual claim can therefore be viewed as an estimate of that individual claimant's loss." This is an assumption, not a reliable conclusion based on economic analysis. The difference between the benchmark period and the post-spill income or profits would capture differences in income or profits that are due to the spill (if any) but would also include differences due to all other factors or causes, which Mason does not investigate. The Claims Administrator has explained that in implementing the E&PD Settlement, the Settlement Program does not determine for each claimant whether its losses are entirely due to the spill, or how much was caused by the spill and how much by other factors. While this may make the implementation of the E&PD Settlement easier, it calls into question Mason's assumption for the purposes of estimating harm in the context of this penalty trial.

While Mason further concedes that viewing each individual claim as an estimate of actual loss "might be *either* an under- or an over-estimate of damages," he nevertheless concludes that "[a]ggregating the claims paid that were calculated using this method provides a rough estimate of damages to claimants caused by the oil spill."⁶²

This is an unreliable and unsubstantiated assumption without any statistical or tested support. Mason appears to have no basis to know one way or the other whether aggregating the claims payments provides a rough estimate (vs. a gross overestimate) of actual damages, because he does not know how many claims payments overestimate actual damages (or are paid to

⁶⁰ Id. at 40 (emphasis added).

⁶¹ Order & Reasons - Responding to Remand of Business Economic Loss Issues, Rec. Doc. 12055, December 24, 2013 at 9-10, quoting October 10, 2012 Claims Administrator Policy; Panel Meeting Transcript, July 9, 2014 at 96-104 (A Settlement Program administrator made the point that the Program does not make a subjective determination of the causal factors of a business' loss beyond the objective calculation prescribed the settlement's formula.)

⁶² Mason at 40.

claimants who experienced no loss caused by the spill).⁶³ There is no basis for Mason's assumption that errors balance each other out without providing any explanation for a reliable method to test the conclusion, and without recognizing the reasons that payments often exceed losses.

The fact that there are claimants to the E&PD Settlement that did not experience economic losses related to the *Deepwater Horizon* spill has been recognized by the courts and the Claims Administrator.⁶⁴ In fact, the courts have recognized that the E&PD Settlement Claims Administrator relied on financial data in a way that contributed to many business claimants meeting the various thresholds under the E&PD Settlement when their losses were inflated and/or unrelated to the spill. The District Court concluded that the procedure that the Settlement Program used to calculate compensation for business economic loss claimants may have resulted in "some claimants receiv[ing] compensation without having sustained an actual loss" thereby having the effect of overstating estimated damages.⁶⁵ The District Court reversed the Settlement Program's interpretation of the E&PD Settlement's business economic loss framework as a result, but only after hundreds of millions of dollars had been paid out to claimants -- sums that Mason relies on to support his conclusions. The Settlement Program's failure to match revenues and corresponding expenses over much of the program's history has contributed to business economic loss claimants receiving awards despite their revenue or profit

⁶³ This is the case for claims filed but not yet paid. Similarly, he does not know how much more money will be paid or whether those payments will be a gross overestimate of actual alleged losses.

⁶⁴ See e.g., Fifth Circuit March 3, 2014 Order at 6-9; December 24, 2013 Order at 2, 7; Br. of Appellees Deepwater Horizon Court Supervised Settlement Program at 16, *In re Deepwater Horizon*, Nos. 13-30315 & 13-30329 (5th Cir. May 24, 2013).

⁶⁵ Order & Reasons - Responding to Remand of Business Economic Loss Issues, at 2, Rec. Doc. 12055, December 24, 2013.

declines having no relation to the spill.⁶⁶ These claims awards have been estimated to be in the hundreds of millions of dollars.⁶⁷

C. Mason Fails to Consider BPXP's Mitigation of Economic Harm.

Finally, as an economist, I find it incomplete and therefore inaccurate and unreliable to adopt a position that economic harm should be measured simply by the amount of claims payments without also recognizing and taking into account the compensatory and mitigating effects of those claims payments and other mitigating actions by BPXP. Harm must be considered in light of compensation and mitigation that results in the minimization of harm or avoidance of future harm. The economic impact of the spill on claimants depends fundamentally on whether compensation has been paid, when it was paid, and the extent of other mitigation efforts. Consideration of harm without taking into account such mitigation efforts could create perverse economic incentives for firms responsible for harm to not to engage in robust mitigation and compensation efforts in the future or to do so more slowly and less aggressively. Mason ignores the effects that such mitigation had in preventing potential harm or compensating harm quickly to prevent harm from continuing.

His method is not reliable because he fails even to consider whether some of the claims payments were made to individuals or businesses who were just starting to experience economic losses, such that many claims payments compensated and mitigated those losses contemporaneous with the losses themselves. By paying claims early, initial losses are compensated, and the possibility for ongoing harm is minimized or avoided. This is in contrast to typical economic damages cases where a party may be compensated only years after a loss

⁶⁶ Supplemental Declaration of Hal Sider at ¶¶8-10 and table 1, ¶¶ 15-17 and n.7, and ¶¶ 20-21.

⁶⁷ Id. at ¶¶20-21.

occurred. BPXP paid claims early and quickly to prevent, mitigate, and minimize such harm, as I demonstrated in my August 15th report.⁶⁸ BPXP's claims program handed out checks of \$5,000 to individuals starting in May 2010, without requiring release of claims against BP or requiring substantial documentation of loss.⁶⁹ The GCCF provided individuals and businesses with "Quick Pay" awards of \$5,000 for individuals and \$25,000 for businesses, many of which would not have qualified for a full \$25,000 payment under a calculation of documented losses.⁷⁰ Almost \$400 million was paid over the course of just the first four months prior to August 23, 2010 when the GCCF began operations. By the end of 2010 alone, BPXP had paid over \$3.7 billion in just Louisiana, Mississippi, Alabama, and Florida, a significant amount of money that quickly mitigated economic losses.⁷¹ Such early, quick, and substantial compensation would have prevented further or ongoing losses, and is a result of BPXP's robust claims program and commitment to establish and fund the GCCF and later agree to the E&PD Settlement only two years after the spill.

At the same time, BPXP established and paid for the VoO program, which contracted over 9,000 vessels and their crews during the spill response, paying VoO participants in Louisiana, Mississippi, Alabama, and Florida over \$594 million.⁷² This mitigated the losses that many fishermen, charter boat owners and captains, and other vessel owners experienced, in many

⁶⁸ Scott at 9-10.

⁶⁹ BOEM Report Vol. 2, Dep. Exh. 11923 at 161 ("[c]laimants could get up to \$5,000 a month through the process, and were not required to waive their right to sue for future damages.")

⁷⁰ BOEM Report Vol. 2, Dep. Exh. 11923 at 166.

⁷¹ Scott at 10-11.

⁷² Scott at 14-16.

cases replacing their income so that they experienced very little actual harm.⁷³ VoO income simply replaced their pre-spill income, and in many cases was much higher.

Mason also fails to account for the fact that BPXP also spent over \$14.1 billion on clean-up and spill response efforts (including VoO) which, in addition to mitigating environmental harm, had the effect of mitigating tourism and employment losses due to the spill and improving employment, wages, tax receipts and other measures in some coastal areas. BPXP's rapid clean-up efforts meant that tourism could recover more quickly in areas that were negatively affected; this mitigated harm by preventing further or ongoing tourism losses. BPXP also granted hundreds of millions of dollars to compensate affected rig workers, promote tourism, study the Gulf Coast, and support research and marketing of Gulf seafood. To

A more scientific approach would take this mitigation into account. In my August 15, 2014 expert report, I cite to BPXP's claims payments as demonstrating an aggressive approach to mitigate and minimize potential and actual harm that may have arisen from the spill.⁷⁶ I found that getting money into people's hands quickly had a positive effect economically, and the data show that to have been the case.⁷⁷

⁷³ Scott at 14-16; see also 30(b)(6) Deposition Transcript of Harry Luton, p. 90:13 - 91:8; see also BOEM Report Vol. 2, Dep. Exh. 11923 at 50 ("Fishermen who worked for VoO for a significant amount of time built up a financial reserve they used to maintain their vessels, do repairs, or pay down debts, helping some return to fishing while others took the rest of 2010 off").

⁷⁴ See Scott at 13-14 and 29-38; Aldy, Joseph E., The Labor Market Impacts of the 2010 Deepwater Horizon Oil Spill and Offshore Oil Drilling Moratorium at 1-3.

⁷⁵ See Scott at 6-9.

⁷⁶ Scott at 5.

⁷⁷ Id. at 5, 9, 16, 19-21; see generally, Aldy.

Conclusion

In conclusion, Mason's reliance on claims payments as a measure of economic harm from the spill is flawed. It is not reliable scientific analysis for Mason to conclude, based on the "sheer magnitude" of the claims payments paid by BPXP, that those payments provide a "rough" estimate of damages caused by the spill. Mason's report does not support this rough estimate with economic data or any reliable scientific basis to find that claims payments were only paid to claimants that experienced losses and that the entire claim payment represented actual harm or loss. He ignores available economic data and evidence that lead to very different conclusions. I find that the evidence points to the contrary: BPXP's claims payments had a mitigating effect on the economic consequences of the spill, including compensating hundreds of thousands of individuals and businesses for alleged estimated harm, potential harm, and, in enough cases to cast doubt on Mason's opinion, harm caused entirely or partly by factors other than the spill.

II. Mason's Opinions About BPXP's Role in the Gulf of Mexico Are Flawed.

In the second part of my analysis of Mason's report, I evaluate Mason's flawed analysis of BPXP's role in the Gulf of Mexico region economy. Mason's use of market share is an incomplete and inappropriate measure of BPXP's economic impact on the Gulf of Mexico region economy. In fact, Mason's economic harm opinions support the conclusion that BPXP has a significant positive impact. Finally, Mason's opinions regarding BPXP's role in the Gulf of Mexico show the company's decreased -- although still significant -- positive impact since the spill.

A. Mason Understates BPXP's Share of Production in the Gulf of Mexico by Using a Flawed Comparison of Public Industry Operator Production Data with BPXP's Net Production Data.

Mason opines that "neither BPXP nor Anadarko has a large share of production in the Gulf of Mexico." He bases this opinion on his calculations of BPXP and Anadarko's respective shares of hydrocarbon production on the Gulf of Mexico (GOM). Specifically, he states that "BPXP contributed 15.36% of oil production over the preceding three years. In terms of combined oil and gas production, measured by barrels of oil equivalent, BPXP's share over the past three complete years was a relatively modest 10.92%."⁷⁹ Mason calculates these percentages based on a comparison of publically available BOEM industry-level operator data for oil and gas production with BPXP's internal production data for oil and gas, not the publically available operator data for BPXP. 80 This methodology is flawed as it assumes that BPXP's data is prepared in the same way that the BOEM data is, when that is not in this case. BOEM production data reflects operator production of hydrocarbons is not identical to a company's production levels.⁸¹ BPXP's production data, however, reflects BPXP's ownership share of its operator and non-operator assets and subtracts out the royalty paid to the United States, which is greater than 10%.82 Therefore, by comparing BPXP's net production data (which excludes royalties) with the BOEM operator industry data (which includes royalties), Mason underestimates BPXP's production share.

⁷⁸ Mason at 14.

⁷⁹ Mason at 14.

⁸⁰ Mason at 9-10.

⁸¹ Mason at 8.

⁸² As reflected in the Department of Interior FY 2013 Agency Financial Report, the average royalty rate for all companies in the Gulf of Mexico is reported as 13.65%. *See* Department of Interior FY 2013 Agency Financial Report at 137.

B. Mason's Use of Market Share Is an Incomplete and Inappropriate Metric for Measuring BPXP's Impact on the Gulf.

Mason opines that "both BPXP and Anadarko are modestly important in the Gulf of Mexico oil and gas industry." In pages 8-28 he bases this opinion of a review of BPXP's share of production, royalty payments, lease holdings, and deepwater presence in the GOM. Mason's primary methodology for determining the "importance" of BPXP as a company is by examining the company's share in Gulf of Mexico exploration/production activities. His analysis completely ignores BPXP's capital and operational expenditures and its employment spending. Mason's failure to consider these important economic indicators yields a flawed analysis and a flawed conclusion.

While Mason discusses other statistics as a means of calculating market share, all of his "conclusions" regarding the "modest importance" of BPXP are tied solely to market "share":

- Mason's "Conclusion" regarding "BPXP's Role in Gulf of Mexico Production": "Neither BPXP nor Anadarko has a large *share* of production in the Gulf of Mexico. BPXP contributed 15.36% of oil production over the preceding three years. In terms of combined oil and gas production, measured by barrels of oil equivalent, BPXP's *share* over the past three complete years was a relatively modest 10.92%." 84
- Mason's "Conclusion" Regarding "BPXP's Role in Gulf of Mexico Royalties": "Neither BPXP nor Anadarko has a large *share* of royalties paid on hydrocarbon production in the Gulf of Mexico. Over the three-year period from 2011 to 2013, average royalties paid by BPXP represented 15.68% of total Gulf of Mexico royalty payments."
- Mason's "Conclusion" Regarding "BPXP's Role in Gulf of Mexico Leasing": "Neither BPXP nor Anadarko has a large *share* of leases in the Gulf of Mexico ... BPXP holds less than 9% of all active leases in the Gulf of Mexico, and won less than 9% of leases awarded during recent lease sales in which it participated. The

⁸³ Mason at 5.

⁸⁴ Mason at 14 (emphasis added).

⁸⁵ Mason at 20 (emphasis added).

monetary amount of its winning bids associated with these lease sales represent less than 11% of the total monetary amount of winning bids."86

• Mason's "Conclusion" Regarding "BPXP's Role in Gulf of Mexico Deepwater Structures": "Neither BPXP nor Anadarko has a large *share* of deepwater structures in the Gulf of Mexico. BPXP has only 10.07% of subsea boreholes, and 8.16% of permanent platforms. Anadarko has only 14.29% of permanent platforms and 13.09% of subsea boreholes." 87

The attempted point of Mason's analysis is that BPXP is not all that important a company as measured by the market share metric; however, the problem with his analysis is that market share alone is an inadequate metric for measuring the positive impact that a company has on the economy. For example, Wal-Mart—one of the largest companies in the world—controlled only 13.4% of the retail market in the U.S. in 2010 according to Credit Suisse. By Mason's measure, would Wal-Mart be considered "unimportant" to the national economy? By way of a further example, Bank of America has the largest deposit holdings of any bank in the U.S. Its market share in the U.S. in 2013 was 10.9%—virtually the same as BPXP's share of production in the GOM. PM Morgan Chase was the largest bank/thrift in the U.S. in 2013 in terms of assets yet its market share of assets was only 17.6%. Surely these financial institutions cannot be considered unimportant to the economy simply because of market share percentages in the teens. With respect to oil production in the United States, by Mason's logic, oil production in the Gulf of Mexico is only modestly important to the US economy because it only represents

⁸⁶ Mason at 26 (emphasis added).

⁸⁷ Mason at 29 (emphasis added).

⁸⁸ John Melloy, Wal-Mart Effect Over? First Market Share Loss in Decade, http://www.cnbc.com/id/41892621

⁸⁹ http://cardhub.com/edu/bank-market-share-by-deposits/

⁹⁰ Id.

approximately 23% of the total US oil production from 2009 to 2013.⁹¹ That is clearly not the case. Market share is simply an incomplete metric for determining the impact of a firm, or its importance to the economy.

When Mason applies his market share analysis to BPXP's Gulf Coast activities, his conclusions are equally unavailing. For example, in Table 2 of his report Mason documents BPXP's oil and natural gas production over 2011-13 in amounts and in barrels of oil equivalence (BOE). He then calculates BPXP's share of total production in the GOM. Over 2011-13 he finds BPXP's share of oil production was 15.36%, natural gas production was 3.44% and in BOE the company's share was 10.92%. Mason's conclusion from reviewing these numbers is "BPXP did not play a large role in Gulf of Mexico hydrocarbon production over the past three years." Mason arrived at a similar conclusion after reviewing BPXP's relative role in royalty payments, lease holdings, and deepwater presence in the GOM—all of which paint an incomplete picture of BPXP's role in the gulf and its impact on the economy.

Another indicator of the weakness of using market share as a sole measure of the importance of a firm to the economy is that in my experience relatively little importance is given to this metric when state and/or local economic development departments are (1) trying to recruit a firm to an area, and (2) trying to determine the incentive package to give to a firm to entice the firm to locate in its region. In Appendix A of this report I attach a "Project Data Form" that a prospective company fills out in order to secure incentives from the Baton Rouge Area Chamber. A similar form for the State of Louisiana can be found in Appendix B.

⁹¹ Energy Information Administration crude oil production, http://www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbbl_a.htm.

⁹² Mason at 11.

In a review of these forms not one single question addresses the issue of market share held by the firm, which forms the entire basis of Mason's analysis in pages 8-28. What the questions do address are: (1) what are the company's expected capital expenditures?, (2) how many people will the company employ in both building and operating the facility?, and (3) how much will be spent operating the facility once it is constructed? In other words, how much new money will you be injecting into the region.

This is precisely the metric I used in my report submitted on August 15, 2014. On page 4 of my report I summarized my findings as follows: "In Part Two, I review BPXP's non-Deepwater Horizon-related operational and capital expenditures and the company's important role in exploration/development activity in the Gulf of Mexico. For the period 2009-2013, capital spending by BPXP was over \$13.2 billion and operational spending was over \$8.8 billion. These expenditures include \$2.1 billion in employee spending and \$16.4 billion on compensation to vendors. In at least three decades of conducting economic impact studies I have rarely encountered a firm that invested and expended this much money into a region's economy. BPXP's regional investments and expenditures also benefit the U.S. economy through its bonus, rental and royalty payments to the U.S. Department of the Interior ("DOI") for its leaseholds in the Gulf. Over the period 2009-2013, BPXP paid over \$5.4 billion in royalty, rental and bonus payments to DOI."

I also used certain "market share" metrics in my August 15 Report. Unlike in Mr. Mason's report, these metrics were not the sole basis of my conclusions regarding the significant positive economic impact from BPXP's operations. Rather, in Part Two of my report, Sections II-V, I used non-market-share approaches: (1) "quantify the effect of BPXP's production and investment activities in terms of capital expenditures and operational expenditures"; (2) "discuss

the thousands of employees and vendors supported by BPXP's expenditures"; and (3) "discuss BPXP's spending on royalty, bonus and rental payments to government entities." None of these sections of my August 15 Report discuss "market share." In Part Two, Section VI of my August 15 Report, I also discuss "the very important role that BPXP plays relative to its peers as measured by lease holdings, rig activity, production, and the company's investments in safety and technology." *Id.* Part Two, Section VI of my August 15 Report includes certain "market share" metrics, ⁹⁴ but only for the purpose of illustrating the role that BPXP "plays relative to its peers," with respect to these measures, not for the purpose of quantifying the significant positive impact of BPXP on the Gulf Coast Region economy, as discussed in the prior Sections of my report.

My August 15 Report demonstrates how much money BPXP injected into the regional and U.S. economies and that, in my experience, BPXP was one of the largest I had ever encountered in my decades of (1) conducting impact studies of various firms, and (2) reviewing industrial announcements of several states in the southeast U.S. If a new firm with BPXP's capital and operational expenditures announced it had chosen Alabama for its site, the news would be on the front page of the newspaper, above the fold.

C. Mason's Claims On "Severe Economic Harm" Underscore BPXP's Significant Positive Impact on the Gulf of Mexico Region.

Mason's claims regarding "severe economic harm" also demonstrate the magnitude of BPXP's positive economic impact. By Mason's reasoning, if \$10 billion in claims payments represents "severe economic harm," then BPXP's over \$22.0 billion of capital and operational expenditures injected into the economy represents a very significant positive economic impact.

⁹³ Scott at 45.

⁹⁴ Scott at 54-61.

In his section on economic harm (which also has serious methodological issues, as addressed above) Mason concludes that the "sheer magnitude" of BPXP's payment of \$10 billion in claims supports an opinion that the *Deepwater Horizon* spill led to "extremely severe economic harm." Mason associates \$10 billion paid over the 4 ½ year period of 2010 through June 2014 with extremely "severe economic harm." As set forth in my opening report, for the period 2009-2013, capital spending by BPXP was over \$13.2 billion and operational spending was over \$8.8 billion, for a total of \$22 billion. Therefore, if \$10 billion in claims payments represents "severe economic harm," then over \$22.0 billion injected into the economy over approximately the same time periods represents a very significant positive economic impact.

D. Mason's Report Provides Further Evidence that BPXP's Positive Economic Impact has Decreased Since the *Deepwater Horizon* Incident. However, BPXP's Positive Impact Remains Highly Significant.

Even if Mason's methodology were reliable, it would at best provide further evidence that BPXP's positive economic impact has decreased in light of the liabilities imposed on BPXP by the *Deepwater Horizon* incident. For example, Mason states:

- "[BPXP's] share of oil production *eroded* from a high of 17.32% in 2011 to a low of 13.55% in 2013. BPXP's average share of gas production over the three-year period was 3.44%. Its share *fell* from a high of 3.64% in 2011 to a low of 3.23% in 2013. In terms of combined output, BPXP's average share over the three-year period was 10.92%; its share shrank from a high of 11.80% in 2011 to a low of 10.06% in 2013."
- "BPXP's sale of some its Gulf of Mexico production assets after the Macondo incident was an important contributing factor to the reduction of BPXP's share of Gulf of Mexico oil and gas production between 2011 and 2013. See Exhibits 12406, 12412, 12420. While year-on-year industry production in the Gulf of

⁹⁵ Mason at 44.

⁹⁶ Mason at 5.

⁹⁷ Mason at 10 (emphasis added).

Mexico also *fell*, BPXP's sale of production assets would accelerate their production decline above and beyond the general industry trend."98

• "In the fourth column of Table 6, I show the ratio of BPXP's royalty payment to combined industry Gulf of Mexico industry royalty payments for each of the three years. This ratio *declined* over the past three years, from a high of 18.09% in 2011 to a low of 13.31% in 2013; this mirrors the *decrease* in BPXP's production during this time frame."

In my August 15 report, I observed that "BPXP's production in the Gulf of Mexico has decreased somewhat relative to others (from 24% for 2009-2013 to 15% for 2013 alone)." I also observed that, from 2009 to 2013, "BPXP made over \$1 billion in royalty, rental, and bonus payments per year, except for 2013 when the amount was \$805 million."

However, notwithstanding the decrease in BPXP's positive impact since the incident, BPXP's positive contribution is still significant. In 2013 alone, "BPXP spent over \$5.5 billion on capital and operational expenditures, including \$483 million on employment and \$4.3 billion on vendors, as well as over \$799 million in royalty payments." ¹⁰²

PART TWO: Diane Austin Report

Austin is an anthropologist who purports to offer opinions concerning the "sociocultural" effects of the *Deepwater Horizon* spill on the economic and material well-being of the Gulf Coast population. Austin's report is based on gathering qualitative data by talking to people and attending meetings and events. This is a technique generally known as ethnography. I find that for the purpose of assessing the effects of the *Deepwater Horizon* spill on Gulf Coast residents'

⁹⁸ Mason at 10 n.8 (emphasis added).

⁹⁹ Mason at 18 (emphasis added).

¹⁰⁰ Scott at 58.

¹⁰¹ Scott at 54.

¹⁰² Scott at 61.

economic and material well-being, the ethnographic approach is not appropriate or reliable in drawing conclusions that apply to the Gulf Coast population. I also find that the particular approach used by Austin and her research team was flawed and cannot reliably support Austin's opinions.

Austin describes her ethnographic approach as a technique where the researcher(s) gets embedded in the community and attends events, family gatherings, etc., and tries to get a feel for what people are thinking and feeling. Researchers are supposed to use a system of triangulation to attempt to speak with a group of people across gender, race, age lines to try to control for bias. They develop a matrix of occupations and locations to generate a purposive sample (not to be confused with a random sample) of persons with whom to meet.

Austin's report is based on the study she and a research team she led conducted between 2010-2012, under contract for the U.S. Bureau of Ocean Energy Management (BOEM).¹⁰³ The results of this study were published in June 2014 by BOEM (referred to here as the "BOEM Report").¹⁰⁴ Austin's opinions are based exclusively on this study, and she cites extensively throughout her expert report to the BOEM Report.

I. Austin's Conclusions Cannot Be Reached by the Ethnographic Approach Because of its Inherent Limitations.

There has been a great deal of debate in the literature over the efficacy of the ethnographic methodology. An article by Dr. Elizabeth C. Hirschman in 1986 in the Journal of Marketing Research compared ethnography to the standard methodology originating in the

¹⁰³ Diane E. Austin, "Sociocultural Effects of Deepwater Horizon Disaster in the U.S. Gulf of Mexico", August 15, 2014, at 3-4.

¹⁰⁴ Offshore Oil and Deepwater Horizon: Social Effects on Gulf Coast Communities Volumes I and II, Dep. Exhs. 11922 and 11923.

physical sciences.¹⁰⁵ Hirschman describes some key fundamentals of the ethnographic research technique that point to its flaws when used to draw conclusions about an entire region's population in a penalty trial such as this:

- The claims of an orienting strategy are directives; they are statements about values, not statements about facts. Such prescriptive arguments are largely non-empirical, and conflicts between them are often unresolvable... Put differently, most of the claims of an orienting strategy cannot be validated as either true or false; instead they are accepted or rejected a priori without (the possibility of) recourse to conclusive empirical argument. 106
- Because phenomena are engaged in a process of continuous creation, it is meaningless to designate one set of phenomenal aspects as "causes" and another set as "effects".
- Within the humanistic inquiry method one is concerned not with the generalizability of a particular finding (across populations, time, or conditions), but rather with the transferability of one manifestation of the phenomenon to a second manifestation of the phenomenon, recognizing implicitly that no two societal contexts are ever identical. 108

In other words, while the ethnographic approach may allow for the collection of particular, anecdotal information that is difficult to obtain using other techniques, making general inferences from interviewing just a few people to draw conclusions about the experiences of "many" (which Austin does repeatedly) is fraught with statistical and methodological problems. The approach does not permit the researcher to validate claims as true or false.

To illustrate the problems with Austin's opinions about the spill's supposed effects on economic and material well-being, contrast the ethnography approach with the standard and

¹⁰⁵ Elizabeth C. Hirschman, "Humanistic Inquiry in Marketing Research: Philosophy, Method, and Criteria", Journal of Marketing Research, August 1986, at 237-249.

¹⁰⁶ Id. at 238 (emphasis added).

¹⁰⁷ Id.

¹⁰⁸ Id. at 245 (emphasis added).

widely-accepted approach used in the physical and social sciences. ¹⁰⁹ In order to determine the attitudes, feelings or thinking of a group of people, the standard scientific survey methodology starts with (1) an **unbiased**, **clear questionnaire** that has been carefully developed and pretested, and (2) administers it to a statistically determined **random sample** of the population that is (3) a sufficiently **large enough random sample** of people so that scientifically derived confidence intervals can be estimated as to the thoughts or attitudes of the population as a whole. The questionnaire would be (4) administered by **trained administrators** who record the responses without interjecting their own biases into the answers. ¹¹⁰ The results have to be tabulated and analyzed by a person with the requisite technical skills to generate population response estimates from how the random sample responded. To ensure reliability and inspire confidence in the results, all data should be available to other scientists who should be able to replicate the findings.

¹⁰⁹ See, e.g., Reference Manual on Scientific Evidence (3rd Ed.), Federal Judicial Center and National Research Council, 2011, at 372:

To illustrate the value of a survey, it is useful to compare the information that can be obtained from a competently done survey with the information obtained by other means. A survey is presented by a survey expert who testifies about the responses of a substantial number of individuals who have been selected according to an explicit sampling plan and asked the same set of questions by interviewers who were not told who sponsored the survey or what answers were predicted or preferred.

A party using a nonsurvey method generally identifies several witnesses who testify about their own characteristics, experiences, or impressions. Although the party has no obligation to select these witnesses in any particular way or to report on how they were chosen, the party is not likely to select witnesses whose attributes conflict with the party's interests.

Although surveys are not the only means of demonstrating particular facts, presenting the results of a well-done survey through the testimony of an expert is an efficient way to inform the trier of fact about a large and representative group of potential witnesses. In some cases, courts have described surveys as the most direct form of evidence that can be offered. Indeed, several courts have drawn negative inferences from the absence of a survey, taking the position that failure to undertake a survey may strongly suggest that a properly done survey would not support the plaintiff's position.

¹¹⁰ The questionnaire could be administered in writing or verbally in the course of an interview.

This methodology is also applied in survey research, which is superior to less systematic approaches to data collections, such as Austin's when used to draw any meaningful conclusions about an event's effects on a region's or community's population. There may be a use for the ethnographic approach in other settings, but for the purpose of evaluating the effects of the spill on the people and communities of the Gulf Coast, it is too unreliable methodologically.

II. Austin's Conclusions Are Unreliable Because Her Ethnographic Study Methodology and Implementation Were Flawed.

Austin's ethnographic study, and the conclusions and opinions she draws, are flawed in several respects. There are several methodological and statistical issues that must be carefully addressed if one is to make statements about the general population based on interviews with a subset of the population. Austin's study fails in each instance. Her conclusions are unreliable because (1) the study's researchers were not unbiased, qualified, and may not have been properly trained to conduct a study scientifically; (2) Austin's study sample was not scientifically random; (3) Austin's study sample was not representative of the Gulf Coast population; (4) Austin's study failed to use the same structured, clear questions across the study sample and instead relied on casual, conversational "iterative" questioning; (5) Austin's study did not control or account for respondent bias or misperception, which necessarily would affect the type of anecdotal responses on which her conclusions rely. Let me address each in some detail.

Reference Manual on Scientific Evidence (3rd Ed.), Federal Judicial Center and National Research Council, 2011, at 362 ("When properly designed, executed, and described, surveys (1) economically present the characteristics of a large group of respondents or other units and (2) permit an assessment of the extent to which the measured respondents or other units are likely to adequately represent a relevant group of individuals or other units.")

A. The Study's Researchers Were Not Unbiased and May Not Have Been Qualified or Properly Trained.

First, the interviewers must be qualified, trained and unbiased. In her report Austin states: "I will use BARA researchers to refer to a team of 13 university-based researchers (including myself) and 6 community researchers who investigated the effects of the disaster between April 20, 2010 and January 31, 2012." Austin does not define "university-based" nor does she present information about their qualifications. Her description is consistent with the inference that many researchers were undergraduate students with little experience at conducting such a study and assessing bias in research questions and respondents' answers. Similarly, Austin does not define the term "community researcher" and does not describe their qualifications. She does not describe whether her university-based or community researchers were trained in scientifically collecting data via the interview approach. She does not explain what distinguished these researchers from a common journalist who reports what they hear. Austin provides no explanation of any efforts taken to ensure that--at least on a net basis--these researchers would conduct unbiased interviews or how the inherent biases of the researchers and interviewers were controlled.

Instead, her descriptions of some of her researchers suggest that many of the study's researchers were not unbiased or qualified. One of Austin's community researchers "had family members and lifelong friends who worked in various occupations in the parish, including oil and gas, churches, and parish government."

In another instance, the researcher had "embedded"

¹¹² Reference Manual on Scientific Evidence at 375, 409.

¹¹³ Austin at 4, n. 2.

¹¹⁴ BOEM Report Vol. 1, Dep. Exh. 11922 at 18.

relationships with the Croatian and Creole communities" prior to the BOEM study. Another had previously been a participant and subject of a BARA study on the oil and gas industry's impacts on her tribe. Being a member of the community one is studying raises questions of subjective bias, the randomness and representativeness of the sample interviewed, and the interpretation of the results. In all of these cases, I am not suggesting that the researchers conducted themselves with anything but the most professional regard for the study's integrity, but without using objective, scientific techniques to ensure a random, representative, and unbiased sample that is asked the same clear questions by well-trained, qualified researchers, the results are not reliable for the purpose for which Austin uses them in her report, and they cannot be extrapolated to the larger population.

From the descriptions provided in Austin's report and the descriptions of the conversations Austin and her team had with people in the five communities studied, ¹¹⁷ I have significant concerns as a social scientist that Austin's study was not conducted by researchers with sufficient qualifications and training following careful, widely-accepted procedures to ensure that inherent bias was accounted for and controlled and the responses could be considered representative, even considering the question from the perspective of the type of ethnographic study that was intended. ¹¹⁸

¹¹⁵ Id.

¹¹⁶ Id.

¹¹⁷ See Austin generally; Austin Code Reports, US_PP_AUS000408 - US_PP_AUS002803.

¹¹⁸ See Reference Manual on Scientific Evidence at 409:

A properly defined population or universe, a representative sample, and clear and precise questions can be depended on to produce trustworthy survey results only if "sound interview procedures were followed by competent interviewers." Properly trained interviewers receive detailed written instructions on everything they are to say to respondents, any stimulus materials they are to use in the survey, and how they are to complete the interview form. These instructions should be made available to the opposing party and to the trier of fact.

B. Austin's Study Sample was Not Random.

A second critical statistical issue in generalizing from a small set of people interviewed to what the population as a whole is experiencing is that the people interviewed must be a random sample. There is a whole statistical science built around the proper choice of a random sample. There is no indication in Austin report that her team made an effort to choose a random sample of people to interview or that they used proper probability sampling techniques to allow for Austin to assess the accuracy of her final assessments. She indicates there was purposive sampling, but that is not random sampling, which is a key reason why her results are not generalizable. How did they choose the people to interview at the cultural events? How did they know whether or not the people willing to be interviewed were dominated by malcontents-or, alternatively, hyper-optimists?

Avoidance of bias in answers can only be addressed by interviewing a properly chosen random sample of people (and then analyzing the results in an objective manner, which is another concern when anecdotal interview answers are the basis for generalizations about effects on an entire society). Austin indicates that her team conducted many casual drop-in conversations but provided no explanation of how she ensured that such "drop in" discussions

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Interviewers require training to ensure that they are able to follow directions in administering the survey questions. Some training in general interviewing techniques is required for most interviews (e.g., practice in pausing to give the respondent enough time to answer and practice in resisting invitations to express the interviewer's beliefs or opinions). Although procedures vary, there is evidence that interviewer performance suffers with less than a day of training in general interviewing skills and techniques for new interviewers.

Reference Manual on Scientific Evidence at 380 ("Identification of a survey population must be followed by selection of a sample that accurately represents that population. The use of probability sampling techniques maximizes both the representativeness of the survey results and the ability to assess the accuracy of estimates obtained from the survey.")

took place with a sufficiently random sample. Conducting such interviews in an ad hoc way could skew the sample if, for example, a disproportionate number of people available to speak with the BARA researchers were unemployed or working in stores or businesses that were slow, such that her sample does not include a sufficient number of people who were employed, working in businesses that had no time to engage in discussion with a "drop-in" researcher, or otherwise not motivated to speak to ethnographers. Similarly, Austin provides no explanation of how she ensured a random sample of the larger population when Austin's researchers spoke to people at festivals or community events.

Similarly, Austin does not explain what is meant when she says that they chose "knowledgeable participants" for interviews and how it was determined that such participants were "knowledgeable." Does that mean unknowledgeable people--obviously a part of the population--were not sampled at all? She does not explain whether she and her team considered and controlled for the biases and motives of "knowledgeable participants," and if so, how they were compared with responses from others? Without probability-based or random sampling, it is impossible to reliably extrapolate with any confidence from the responses of a few to the experiences of the larger target population. The selection of respondents cannot be said to be entirely objective or unbiased. 122

¹²⁰ US_PP_AUS000403 at 1.

¹²¹ Reference Manual on Scientific Evidence at 380 ("Probability sampling offers two important advantages over other types of sampling. First, the sample can provide an unbiased estimate that summarizes the responses of all persons in the population from which the sample was drawn; that is, the expected value of the sample estimate is the population value being estimated. Second, the researcher can calculate a confidence interval that describes explicitly how reliable the sample estimate of the population is likely to be.")

¹²² Id at 387-88.

C. Austin's Study Sample was Not Representative.

A third key statistical issue is the size and representativeness of the random sample, if one is making inferences about the general population from the interviews of a small subset of that population. The sample must be representative, if it is to be reliable in supporting conclusions about the larger population. 123 If there are 2,000 fishermen operating off the Louisiana coast and you want to make inferences about how they feel, what they are thinking, or how they believe they have been affected, then one obviously cannot determine this with a high degree of confidence by interviewing just 5 fishermen. Austin's opinions are not based on a representative sample of the Gulf Coast communities or population. As I will show below, Austin repeatedly uses the term "many" to describe how a group of people believe they were affected, without telling us how many people her team interviewed in order to come up with "many" or how many people out of that sample gave such a response. There are statistical tools to determine how many people must be interviewed in order to conclude what the population believes with varying degrees of confidence. 124 Austin does not reveal how many people were interviewed, and she never places confidence intervals around her assertions (which is actually not possible using the ethnographic approach because she did not select a random sample by probability methods), which is a common practice among, for example, social scientists and pollsters. Austin's field notes include reports from conversations with respondents PP466, PP467, and PP468, which describes these three interviewees as lawyers that were "just getting started in the area" and were "trying to get around and be present at community meetings and

¹²³ Id at 380.

¹²⁴ Id at 380.

introduce themselves to members of the community."¹²⁵ This is hardly a representative sampling of members of the affected communities to be including in the study's data set conversations with lawyers who are new to the area seeking plaintiffs from among the population. This introduces an obvious bias as well, given the incentives such plaintiff's lawyers have.

D. Austin's Study Failed to Use Structured, Clear Questioning Consistently Across the Study Sample.

Fourth, in order to make generalizations about the population from conversations with a smaller subset of the population, one has to address the questions that will be asked. There must be some structure to the questions or else the interviewer becomes little different from a journalist. If one wanted to determine how much money visitors to an LSU football game spend in the area, there is no way to interview all 90,000+ people at the game. You would need to train some interviewers, develop a random method for interviewing some, be sure to interview enough people out of the 90,000 and ask them all the same question in the same way. Then one can infer from the responses of the sample what the fans as a whole do (with varying degrees of confidence based on sample size).

There is no indication in Austin's report that the interviewers had a structured set of questions to ask each person interviewed. Were efforts made and were interviewers trained to ensure that questions were clearly understood? If a person was asked "length of residence" did they reply "96 feet 8 inches"? If asked "church preference" did they respond "red brick" or "Methodist"? Developing questions that are clear, precise, and have been field-tested first is

¹²⁵ US_PP_AUS000408 at US_PP_AUS000422.

¹²⁶ Reference Manual on Scientific Evidence at 387-88 ("Even questions that appear clear can convey unexpected meanings and ambiguities to potential respondents" that threatens the validity of the survey by systematically distorting responses by misleading respondents in a certain direction.)

important in making a solid step from sample-to-population.¹²⁷ It is also important to ensure that the **questions developed do not have a built-in bias or inadvertently suggest the answer**.¹²⁸ Asking "How badly has the oil spill affected you?" injects subjective bias into the question that biases the answer. This is a basic tenet of credible social science research.¹²⁹ We cannot test the validity of Austin's questions.¹³⁰ We also do not know if Austin's researchers were sufficiently trained to ask questions in an unbiased manner.

In Austin's report she refers to "semi-structured (emphasis added) drop-in conversations" at local businesses. ¹³¹ In the study's description of its data file, "Field Notes" contain notes from "drop-in, meeting and event, and general observational notes." Austin distinguishes these "casual interactions" with "generally more formal interactions" but also notes that while they were "guided conversations" questions were "asked in an iterative fashion to maintain the flow of the conversation." These descriptions confirm that questions were not standardized among respondents throughout the study, either geographically or over time from 2010 to 2012. There is no documented way to confirm that the researchers asked similar questions in similar ways in the same order, without bias, during these casual drop-in conversations and interviews.

¹²⁷ Id.

¹²⁸ Id at 387-88, 410-411.

¹²⁹ See, e.g., Reference Manual on Scientific Evidence at 372, 387-88, 410-411, 415.

¹³⁰ The field and interview notes occasionally describe questions that the interviewer asked, but it is sporadic and the researcher's notes about the question asked do not always seem precise. See Austin Code Reports, US_PP_AUS000408 - US_PP_AUS002803 (e.g., US_PP_AUS000460 at US_PP_AUS000468 ("I ask [interview subject] if he ever thinks about leaving . . ."); US_PP_AUS000495 at US_PP_AUS00496 ("I asked about the general economy in [IDENTIFIABLE - St. Mary Parish city] [sic] . . .")).

¹³¹ Austin at 7 (emphasis added).

¹³² US PP AUS000403 at 1.

¹³³ US_PP_AUS000403 at 2 (emphasis added).

E. Austin's Conclusions Are Unreliable Due to Respondent Bias and Misperception.

There is another general problem with Austin's approach to gathering responses. **People** may say one thing, when reality is something different altogether. This problem is exacerbated when the researcher is embedded with the respondents instead of being objectively detached under standard, widely used economic methodology. Being embedded means being closer to the respondent, which means they may say what the questioner wants to hear. An illustrative case of this is in Austin's comments on tourism. Note the following from her report:

• "Tourism-related businesses that normally take reservations experienced very high cancellation rates following the oil spill and a heavy loss of business during 2010." 135

Austin and her team were "told" (by how many people?) there was a heavy loss of hotel business during 2010. What actually occurred is covered in pages 21-38 of my report. In looking at the RevPAR hotel data across the Louisiana, Mississippi, Alabama, and Florida Panhandle coasts and comparing RevPAR in 2010 to 2009 the results were: (1) Louisiana central and east coasts – up 15% (New Orleans was up 17%); Mississippi coast- up 12%; Alabama coastal counties – up 21% (Orange Beach and Gulf Shores were down 13%); Florida Panhandle – down 0.4%. Only in the Orange Beach/Gulf Shores region could the phrase "heavy losses" be applied, but as I point out in my report, even by September 2010, RevPAR had already

¹³⁴ See, e.g., Reference Manual on Scientific Evidence at 387-88; 410-411.

¹³⁵ Austin at 35.

¹³⁶ I do not discount that individuals told Austin and her research team about their views of their particular individual experiences, and that in the case of some of the respondents, their perception of their experience may have been accurate and they may have been affected in the way they described (although as described throughout this report, I have serious concerns with the methodology used to elicit and analyze the responses), but as an economist and social scientist, I do not accept that those particular anecdotes can be generalized to talk about larger social or economic effects, without a more objective and systematic data collection methodology and analysis, none of which were done in the BARA study and BOEM Report that are the bases of Austin's report.

¹³⁷ Scott at 21-38.

increased to higher than 2009 level. In Louisiana, Mississippi and the Alabama coastal counties as a whole, the experience in the tourism business was exactly the opposite of what Austin's conclusions, based on interviews, described as reality. What's more, the BOEM Report upon which Austin's report draws repeatedly points out that the economic data it references to analyze tourism "does not clearly distinguish between business that is and is not tied to tourism." ¹³⁸

A second area in her report where perception and reality diverged was in her assessment of participation in the VoO program. On page 29 of her report she states the following:

• The anticipated short-term nature of the cleanup work, and the concern that their vessels nevertheless would be obligated to the VOO program for long periods of time and unable to return to fishing, led *many* (emphasis added) companies and vessel owners to forego participation in the program. 139

Note the injudicious and imprecise use of the word "many" in this quote. How many is "many"? How many vessel owners did her team speak with to come to this conclusion? Austin does not quantify how many chose not to participate for the reasons she cites. Instead she states in conclusory fashion that an unknown "many" chose not to participate. She later includes as a negative effect of the program that there were local fishermen who wanted to participate in VoO but could not. She provides no reliable basis to generalize either of these observations by a few interviewees to the commercial fishing industry as a whole. All we are left with are disparate observations that some unknown number of fishermen chose not to participate because of concerns about the program and some unknown number wanted to participate but could not. 141

¹³⁸ BOEM Report Vol. 2, Dep. Exh. 11923 at 79.

¹³⁹ Austin at 29.

¹⁴⁰ Austin at 30.

¹⁴¹ See, e.g., the field note for PP484, in which the respondent appears to have told the researcher that the "fishermen in the VOO program have been paid very well and it is difficult to tell who has actually been impacted and who is trying to profit." US PP AUS000408 at US PP AUS000423.

When we look at actual evidence and data, however, we know that more than 9,000 vessels were contracted by BPXP for the VoO program.¹⁴² The data on VoO payments in Figure 1 show that VoO payments exceeded the 2007-09 average revenues of the entire commercial fishing industry by 38%. Austin acknowledged that the VoO program helped fishermen and vessel owners who participated.¹⁴³

Austin's analysis of the fishing industry is similarly flawed. Austin calls harm to commercial seafood industry "the most obvious economic damage" from the spill. But her analysis ends in January 2012, two and a half years ago. 144 And her claims that the perception of oil affecting seafood was a problem make no mention of the fact that BPXP spent many millions of dollars on seafood promotion and testing to mitigate any harm. Austin also claims that closure and reopening of fisheries after the spill led to confusion among fishermen. While she acknowledges that most of this closure activity took place during the early part of the spill response, that understates just how quickly Federal fishing waters reopened after the spill, with 99.6% of the Gulf Exclusive Economic Zone being open for fishing by November 15, 2010. Austin also claims that by mid-July, more than 50 percent of near-shore Louisiana waters were closed to fishing by the state. But before the end of 2010, almost all of these waters were reopened again. 148

¹⁴² Scott at 14.

¹⁴³ Austin at 30.

¹⁴⁴ Austin at 27, 3.

¹⁴⁵ Scott at 7-8.

¹⁴⁶ Austin at 27-28.

http://sero.nmfs.noaa.gov/deepwater_horizon/size_percent_closure/index.html.

http://www.wlf.louisiana.gov/news/32945 (by September 24, 2010, 95% of waters are reopened); http://www.wlf.louisiana.gov/news/33281 (by October 28, 2010, 98.5% of waters are reopened).

Even when perceptions are accurate, Austin does not always report the nuances that are important to explaining those perceptions. For example, Austin's report mentions the recession that started before the incident, but she does not acknowledge in her report for litigation (as the BOEM report does) that "neither residents nor the researchers could readily separate the effects of the disaster from the effects of other events" like "the worst recession the region had experienced in decades and followed years of unusual economic activity tied to post-hurricane rebuilding." The effect that the recession and post-hurricane activity had on Gulf residents in 2010 can hardly be overstated, yet Austin tries to attribute every ill to the incident itself. A more robust and scientific approach to analysis would not make this same mistake.

III. Austin's Conclusions Are Unreliable For The Purpose of Assessing Effects of the Spill on the Gulf Coast.

The statistical issues discussed above are vital when evaluating Austin's numerous assertions of the extent of harm caused by the spill to economic and material well-being in the Gulf Coast. As an example, this is especially so with her injudicious use of the word "many":

- "The potential for being laid off remained high, contributing to ongoing stress and a reluctance of many workers to speak out about the disaster or its effects. And, divers, mechanics, and service company employees had few options for making up their lower or lost wages." How many of her purposive sample voiced this reluctance? Was it 5 people or 50 or 500? How did she decide what was "many" versus "some" or "few"? There is no way to tell absent data on her sample.
- "Citing a shortage of vessels, concerns about lost income, and the shift of regulators' attention during the summer of 2010, many operators suspended or reduced their efforts to decommission wells and platforms in the Gulf, which exacerbated the economic effects on companies specializing in explosives, fabrication yards, barge companies, commercial divers, and others that rely on the fairly predictable flow of work associated with decommissioning of platforms no longer in use in the Gulf." How did Austin chose the word "many"? Where

¹⁴⁹ BOEM Report Vol. 1, Dep. Exh. 11922 at 15.

¹⁵⁰ Austin at 31 (emphasis added).

¹⁵¹ Id. at 32 (emphasis added).

are the data to support this assertion? What portion of decommissioners chose to suspend operations?

- "Many of the workers who were struggling the most were known only to proprietors of loan companies and pawn shops." Where are the data to support this? How many people responded in this way? 5? 25? 500? How was the word "many" chosen? How does the number of respondents to which Austin refers compare to a baseline of the population or to the number of respondents who responded that they were not struggling?
- "However, throughout 2011 many individuals and groups experienced serious harms that went uncompensated." What data are there to support the word "many"? How many people did she interview to conclude this? How can confidence be placed in this statement without knowing how many is "many"?
- "Thus fabrication and shipbuilding facilities were frequently more constrained in their ability to respond to and mitigate effects of the disaster and thus many of them were seriously harmed as a result." How many is many? Where are the data to support the use of this word?
- "While some people and businesses were able to get help or file for compensation, many who had already been out of work or had not yet recovered from Hurricanes Katrina and Rita were unable to qualify for any compensation." "Many" implies "a lot", but what portion of Austin's purposive sample fell in this group? Where are the data to support the use of the word "many"?
- "The anticipated short-term nature of the cleanup work, and the concern that their vessels nevertheless would be obligated to the VOO program for long periods of time and unable to return to fishing, led many companies and vessel owners to forego participation in the program." How many of the total fleet decided to not participate in VoO? What proportion? Austin makes it sound like this was a large part of the fleet that gave up a guaranteed fee of \$3,000 a day plus \$200 a day per deckhand, with no uncertainty about volume of fish catch or the price of the catch, and guaranteed work during a fishing ban. Exactly how many is "many"? How did the "many" who expressed "concern" to Austin's research team would, under pre-spill circumstances, not be concerned about the uncertainty

¹⁵² Id. at 34 (emphasis added).

¹⁵³ Id. at 34 (emphasis added).

¹⁵⁴ Id. at 37 (emphasis added).

¹⁵⁵ Id. at 46 (emphasis added).

¹⁵⁶ Id. at 29 (emphasis added).

of catching fish on any given day, comparison to the guaranteed \$3,000 per day fee under VoO?

The point is that the word "many" is used frequently throughout Austin's report without any solid statistical grounds provided for using that word. It leaves the impression that she is reporting results that for "a lot" of the Gulf Coast population, with no statistical support for such a finding.

The federal government does **not** use this ethnographic technique in estimating key economic variables that direct major policy decisions or are used to evaluate the impact of events or trends. Federal fiscal and monetary policies are influenced heavily by the unemployment rate. The Bureau of Labor Statistics does not measure this key variable by sending out a small group of researchers to ask an unstructured number of citizens how they feel about their present employment situation. Instead, the BLS uses the standard, generally-accepted approach with a well-structured questionnaire and a rigorously developed random sampling technique. Here is what the BLS says about the technique used:

- There are about 60,000 eligible households in the sample for this survey. This translates into approximately 110,000 individuals each month, a large sample compared to public opinion surveys, which usually cover fewer than 2,000 people. The CPS sample is selected so as to be representative of the entire population of the United States. In order to select the sample, all of the counties and independent cities in the country first are grouped into approximately 2,000 geographic areas (sampling units). The Census Bureau then designs and selects a sample of about 800 of these geographic areas to represent each state and the District of Columbia. The sample is a state-based design and reflects urban and rural areas, different types of industrial and farming areas, and the major geographic divisions of each state. (For a detailed explanation of CPS sampling methodology, see Chapter 1 of the BLS <u>Handbook of Methods</u>.)¹⁵⁷
- Every month, one-fourth of the households in the sample are changed, so that no household is interviewed for more than 4 consecutive months. After a household is interviewed for 4 consecutive months, it leaves the sample for 8 months, and then is again interviewed for the same 4 calendar months a year later, before

¹⁵⁷ http://www.bls.gov/cps/cps_htgm.htm

leaving the sample for good. As a result, approximately 75 percent of the sample remains the same from month to month and 50 percent remains the same from year to year. This procedure strengthens the reliability of estimates of month-to-month and year-to-year change in the data.¹⁵⁸

Each month, highly trained and experienced Census Bureau employees contact the 60,000 eligible sample households and ask about the labor force activities (jobholding and job seeking) or non-labor force status of the members of these households during the survey reference week (usually the week that includes the 12th of the month). These are live interviews conducted either in person or over the phone. During the first interview of a household, the Census Bureau interviewer prepares a roster of the household members, including key personal characteristics such as age, sex, race, Hispanic ethnicity, marital status, educational attainment, veteran status, and so on. The information is collected using a computerized questionnaire. 159

Monetary and fiscal policies are also influenced by the inflation rate, but this key variable is not determined by asking people at festivals or in "semi-structured drop in conversations" what is happening to the cost of the goods and services they buy. A notorious example of the danger of such an approach is the inaccuracy with which consumers will complain that the price of gasoline has consistently gone up because, when asked, people "feel" that gas has gotten more expensive over the past decades, when by objective measures, the inflation-adjusted price of gasoline has remained virtually constant since 1980. Between 1980 and 2013, the nominal price of unleaded regular gasoline did increase from \$1.25 per gallon to around \$3.50. However, when adjusted for inflation using the consumer price index the real price in 1980 was \$1.52 and in 2013 it was \$1.51.

¹⁵⁸ Id.

¹⁵⁹ Id.

¹⁶⁰ www.eia.gov

 $[\]frac{161}{100}$ www.bls.gov. The CPI deflator for 1980 is 82.4 and for 2013 it is 233.0 where 1982-84 = 100.

Instead of asking an unstructured group of people how they feel about the real price of gasoline, the BLS relies on a random sampling of a market basket of goods and services. This is a description of how the CPI data are collected:

- Each month, BLS data collectors called economic assistants visit or call thousands of retail stores, service establishments, rental units, and doctors' offices, all over the United States, to obtain information on the prices of the thousands of items used to track and measure price changes in the CPI. These economic assistants record the prices of about 80,000 items each month, representing a scientifically selected sample of the prices paid by consumers for goods and services purchased.¹⁶²
- During each call or visit, the economic assistant collects price data on a specific good or service that was precisely defined during an earlier visit. If the selected item is available, the economic assistant records its price. If the selected item is no longer available, or if there have been changes in the quality or quantity (for example, eggs sold in packages of ten when they previously were sold by the dozen) of the good or service since the last time prices were collected, the economic assistant selects a new item or records the quality change in the current item. 163
- The recorded information is sent to the national office of BLS, where commodity specialists who have detailed knowledge about the particular goods or services priced review the data. These specialists check the data for accuracy and consistency and make any necessary corrections or adjustments, which can range from an adjustment for a change in the size or quantity of a packaged item to more complex adjustments based upon statistical analysis of the value of an item's features or quality. Thus, commodity specialists strive to prevent changes in the quality of items from affecting the CPI's measurement of price change.¹⁶⁴

Note the emphasis in each case of reliable random samples, using a large number of responders, administered by highly trained personnel, and interpreted by highly trained people. This is in contrast to Austin's study, which instead uses anecdotal comments from individuals,

¹⁶² http://www.bls.gov/cpi/cpifaq.htm

¹⁶³ Id.

¹⁶⁴ Id.

such as a fisherman's perception of the price that shrimp "should" be selling for. ¹⁶⁵ The fisherman may or may not be correct, but without more analysis and comparison to objective shrimp price data, it is not possible to reliably draw any conclusion about the spill's effect on shrimp prices based on this researcher's field note or even several similar field notes. ¹⁶⁶ Yet it is part of the data set Austin used to make general comments in her report about the economic damage caused by the spill to the commercial fishing industry. She recognizes that the commercial fishing industry was already dealing with "sharply falling prices simultaneous with rising expenses" and that the Gulf shrimp industry had been negatively affected by less expensive imports. ¹⁶⁷

For over 30 years I taught the Managerial Economics class for MBAs and Executive MBAs at Louisiana State University. A key focus of this class was explaining and predicting human behavior. I taught how to predict the sales of various goods and services using techniques such as the interview or questionnaire approach, or time series decomposition and econometrics. Predicting a variable as accurately as possible where a company's or a government's financial soundness is in question requires, in turn, sound scientific methods of forecasting.

The financial soundness of a company, non-profit, or government depends on the ability to forecast human behavior with some degree of statistical soundness. In my professional judgment, on key, important issues one should use the standard, generally-accepted approach to draw the most reliable conclusion, which should be done in this important case. The key point is

¹⁶⁵ US_PP_AUS000408 at US_PP_AUS000422 ("31/35 count shrimp which should sell for \$8.99 are selling for \$3.99 on the market..."

¹⁶⁶ See, e.g., Reference Manual on Scientific Evidence at 387-88; 410-411.

¹⁶⁷ Austin at 12, 14.

that observations cannot be generalized to the larger population or even to "many" without using objective baselines (formed by collecting data over time, against which to compare new data), random and sufficiently large, representative samples, and comparing the findings with other available, objective data.

IV. Austin's Expert Report Is Inappropriately Selective By Failing to Present the Study's Complete Results.

Even if one were to use an ethnographic study in a less critical context to try to explain the effects of an event on the particular individuals who spoke to the researchers, it would be important to take the **full results of that study** into account. Austin simply ignores those parts of her own BARA study (published in the BOEM Report) that do not suit the theories in her expert report. She was the lead researcher and author of the BOEM Report, published by the U.S., but was highly-selective in reporting her study's findings in her expert report for this litigation. For example:

- In her expert report, Austin is critical of the VoO program, stating that many vessel owners chose not to participate in the program. But her study published in the BOEM Report stated that many participants made enough money that they were able to build up a financial reserve that they used to maintain their vessels, do repairs, and pay down debts. 168
- Austin criticizes BPXP's \$100 million Rig Worker Compensation Fund for only spending a "fraction" of the fund on rig workers. But that "fraction" was a substantial sum of money \$11.4 million. Moreover, Austin's observations about the vulnerability of certain workers ignores the fact that the remainder of the Rig Worker Compensation Fund went to the Future of the Gulf Fund, which funded programs like "\$18 million in grants, the bulk of which would go to Catholic Charities Archdiocese of New Orleans to continue its Spirit of Hope Collaborative, a group of 16 nonprofits providing mental-health services and career counseling in fishing communities after the spill."

¹⁶⁸ BOEM Report Vol. 2, Dep. Exh. 11923 at 50; see also Luton Dep., 91:15-22.

¹⁶⁹ BOEM Report Vol. 2, Dep. Exh. 11923 at 25.

¹⁷⁰ BOEM Report Vol. 2, Dep. Exh. 11923 at 25.

• In her expert report, Austin's section on shipbuilding is uniformly negative, arguing that the *Deepwater Horizon* incident negatively affected vessel construction and servicing, caused uncertainty, led to workforce reductions, and "seriously harmed" fabrication and shipbuilding facilities. The fails to even mention that her study concluded and published in the BOEM Report that the spill's effect on shipbuilding was uneven. Curiously, Austin also ignores conclusions in the BOEM report that show improvement in the shipbuilding industry towards the end of Summer 2011, and her analysis in her expert report makes no reference to the opinions of those in the shipbuilding industry (which her researchers collected) that any downturn in their industry had multiple causes. She and her research team reported something entirely different in the BOEM Report, that "some connected to the shipbuilding industry...were openly hostile to the idea that BP and the oil spill bore any continuing responsibility for the generally low state of the industry in 2011." Her expert report does not mention such findings.

Austin purports to discuss the spill's impacts on the tourism industry, but she ignores the BOEM report's recognition that tourism improved rapidly in places, including by 51% in Alabama in 2011 versus 2010.¹⁷⁵ In other words, Austin appears to have been selective in presenting in her expert report for this litigation only the negative conclusions and findings by her and her team in the study on which she relies for her expert opinions, rather than presenting all of the findings which she and her team published in the BOEM Report. It is difficult to distinguish which of her conclusions are reliable and supportable, given the subjective nature of her study methodology and the problems with generalizing her anecdotal findings to the larger population or economy. That she is selective in her expert report highlights the subjective nature

¹⁷¹ Austin at 36-37.

¹⁷² BOEM Report Vol. 2, Dep. Exh. 11923 at 107-108 ("The moratorium and suspension were *not entirely negative* for everyone in the industry. Beyond those companies that had contracts which kept them busy, a few yards which had pre-existing relationships with larger offshore oil service companies benefited from increased work following the moratorium.") (emphasis added).

¹⁷³ BOEM Report Vol. 2, Dep. Exh. 11923 at 111.

¹⁷⁴ BOEM Report Vol. 2, Dep. Exh. 11923 at 111.

¹⁷⁵ BOEM Report Vol. 2, Dep. Exh. 11923 at 94.

of her study and even more so the subjective nature of the conclusions and opinions she draws from the study.

Conclusion

Austin's expert report contains many purported conclusions about the sociocultural effects of the *Deepwater Horizon* spill on the economic and material well-being of Gulf Coast residents, but her ethnographic research methods are not reliable in the context of determining effects of such an event on the Gulf Coast population. Her study did not use a random, representative sample of the population; did not ask the same questions that had been tested as clear and unbiased; and did not reliably control and account for subjective researcher and/or respondent bias and misperception. Her methodology cannot permit her study's individualized and anecdotal findings to be generalized to the larger population with any confidence, despite her repeated attempts to do so throughout her report. Finally, a comparison of her expert report and the results of her study previously published by BOEM shows that in this litigation, she was selective in presenting the results of her study and omitted findings that economic effects were not severe and BPXP's mitigation efforts had substantial positive effects.

PART THREE: Dr. Donald Boesch

Dr. Donald Boesch is an environmental scientist who submitted a report in which he offers opinions regarding the environmental effects of the *Deepwater Horizon* spill. On pages 40 and 41, despite his lack of training or experience as an economist, Boesch makes suggestions about the economic effect of the spill on fisheries in the Gulf. On these two pages he cites his conclusions with his sources:

The economic impacts on Gulf of Mexico fisheries were substantial and are continuing. The evidence of effects on the fisheries of the Gulf, however, was not so subtle. The closures of Federal and state waters to commercial fishing reduced the value of seafood landings by at least \$247 million¹²¹ and the subsequent public aversion to Gulf seafood exacerbated and extended this economic effect despite

an unprecedented level of monitoring of seafood that showed, with very few exceptions, that the seafood was safe to consume. One attempt to model the longer-term impacts on commercial and recreational fisheries and mariculture suggests that the Macondo well blowout could result over a seven-year period in losses in total revenue of \$3.7 billion, with a total economic impact of \$8.7 billion.

Boesch takes a dim and gloomy view of prospects for the recovery of the seafood industry in the Gulf. He appears to rely entirely on the (outdated) studies of others rather than using available, current data. Boesch's conclusions are based solely on three articles published in 2011 and 2012 (see footnotes 121-123 of Boesch's report), which means the seafood data used was from prior to 2012. More problematically, he characterizes *projections* published in 2011 and 2012 as *fact*. His first statement is that the fishing closures in 2010 reduced the value of commercial fishing landings by at least \$247 million. However, his source is an article published in 2011 that does not characterize it as loss but as the "potential minimum annual loss." This was a projection of potential losses, not the actual data.

I found that the total documented loss of commercial fishing industry revenue in 2010 compared to the 2007-2009 average annual revenue was \$111.8 million.¹⁷⁹ My analysis is based

¹⁷⁶ Boesch at 40.

¹⁷⁷ McCrea-Strub A, Kleisner K, Sumaila UR, Swartz W, Watson R, Zeller D, Pauly D (2011) Potential Impact of the Deepwater Horizon Oil Spill on Commercial Fisheries in the Gulf of Mexico. Fisheries 36:332-336.

¹⁷⁸ Boesch himself does not calculate the loss but merely cites a 2011 study for the figure. It is not possible from the study's publication to determine how the \$247 million is calculated. It appears that the authors used a benchmark period that was much earlier than 2010 (possibly 2000-2005), and used a much larger region than is typical when studying the effects of the spill, including possible waters off the coast of Mexico that were not affected by the spill. In my analysis, I directly used NOAA landings data and confined the analysis to fishing waters off the coasts of Louisiana, Mississippi, Alabama, and Florida, those in the vicinity of closed fishing waters. I chose 2007-2009 as a benchmark period because it was continuous with the year in which fishing waters were closed and therefore captures price trends that may have also affected 2010 had that year not been affected by closures. I also excluded menhaden because of the unique nature of production and the market. If I had included menhaden and Texas landings, my estimate of commercial seafood losses would still only total \$129.3 million in 2010.

¹⁷⁹ Scott at 18.

on publicly available data from the National Oceanic and Atmospheric Administration (NOAA).

The NOAA data are managed by the Fisheries Statistics Division and are available online. 180

Boesch's report was submitted in August 2014, which means he had access to the same, up-to-date NOAA data as I used in my analysis. Had he utilized more up-to-date data, he would have discovered that the projections and estimates on which he relied were not confirmed by the actual NOAA landings values.

Even aside from the difference in estimated losses in 2010 (Boesch's \$247 million vs. my \$111.8 million), the data does not support the outdated projections Boesch adopts about longer-term harm. Boesch cites a 2012 article for his claim that the spill "could result" in revenue losses of \$3.7 billion. The article computes "potential losses throughout the fish value chain." One problem with this source and Boesch's conclusion is that we now, in 2014, have actual volume and revenue data and do not need to rely on projections or estimates of "potential" losses from 2011 and 2012. This actual documented data demonstrates that the projections on which Boesch relies turned out to be inaccurate and were not borne out by reality.

The data show that following decreases in seafood harvests in the summer of 2010, commercial fishing catch returned rather quickly to near or above pre-spill levels. As seen in Figures 4 & 5, the experience of the Gulf seafood market in the years since the spill demonstrates recovery for those who rely economically on the industry.

¹⁸⁰ NOAA commercial landings data is available at http://www.st nmfs.noaa.gov/commercial-fisheries/index

Volume of Landings Florida Gulf, Alabama, Mississippi, Louisiana

Figure 4

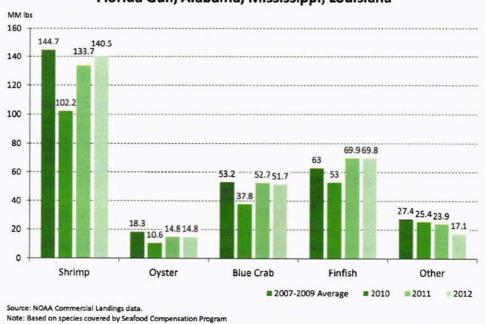


Figure 4 illustrates the volume of landings in the Florida, Alabama, Mississippi, and Louisiana Gulf waters. Data are shown for the 2007-2009 average and for 2010-12. There was a drop in volumes harvested across all species in 2010. In 2010, the shrimp catch fell to 71% of the average 2007-2009 levels, an unsurprising finding given the fishing ban that was in place in mid-2010. By 2011, the volume of shrimp catch was back to 92% of the pre-spill average, and by 2012 it was at 97% of the pre-spill average. A similar pattern is found for oysters and crab. The finfish had fully recovered by 2011.

However, the key issue for the economic well-being of the fishing community is the revenues they received from the various catches. These are illustrated in Figure 5.

Value of Landings
Florida Gulf, Alabama, Mississippi, Louisiana

MM \$
\$250.0

\$225.6
\$220.6
\$220.6

Figure 5

\$250.0 \$200.0 \$150.0 \$100.0 \$83.2 \$71.7 \$71.7 \$52.4 \$52.7 \$41.3 538.1 \$500 Blue Crab Finfish Shrimp Ovster 2007-2009 Average ■ 2010 2011 Source: NOAA Commercial Landings data.

Note: Based on species covered by Seafood Compensation Program

Note that in every category except oysters, by 2011 the value of the landings exceeded the pre-spill average, and even for oysters, the value of landings in 2011 was only 5.2% below the pre-spill average. By 2011, the value of shrimp landings were up 8.9% over pre-spill averages, crab was up 11.4%, and finfish was up 12.4%.

This newer information simply does not substantiate Boesch's claim that the economic impacts on Gulf of Mexico fisheries were substantial and are continuing.

Conclusion

Boesch bases his expert report on outdated studies, without looking at more-recent data that would undermine his conclusions. This latest data indicates that commercial fisheries in the Gulf of Mexico region have largely recovered to near or above pre-spill levels.

CONCLUSION

The opinions that I have expressed in this report are based on my education, training, and experience, and my review of materials in connection with this litigation. I hold these opinions to a reasonable degree of certainty. While I have done my best to review materials in this matter as they have become available, I reserve the right to supplement my opinions based on my review of additional information or reports.

Appendix A



PROJECT DATA FORM

Instructions: Open this document using Adobe Acrobat. Fill out the document, save it to your hard drive, and email it as an attachment to ivasey@brac.org. Opening this file in other programs, such as Preview, may disable the electronically fillable fields.

The information in this document may be shared with Louisiana Economic Development, regional economic development organizations, and/or local economic development organizations as required in order to fulfill the client's needs. Please fill out this form as completely as possible. It is understood that some information may not be available at this time and additional information may need to be added at a later date.

	Date				
THE RESERVE OF THE PERSON NAMED IN	COMPANY OVERVIEW	7008			
Company					
Address					
City	State Zip code				
Country	Website				
Parent company					
Type of business					
NAICS code	SIC code				
DUNS #/Federal Tax ID #					
	LOUISIANA PRESENCE				
	Baton Rouge area Louisiana				
Existing Baton Rouge area and Louisiana operations					
Number of personnel to be transferred to the Baton Rouge area and Louisiana					
Does your company currently receive any benefits from the state of Louisiana (i.e. incentives, rebates, etc.) or any local government agency in the state.					
	Page 1 of 6				

	CONTA	CT PERSON	
First and last name			
Title		Email	
Telephone number		Fax	
Preferred method of contact	Email Telephone		
	COMPANY FINANCI	ALS (LAST FISCAL YEAR)	
Revenue			
Earnings before interest, tax, de or amortization	preciation,		
Debt/equity ratio			
Total Louisiana spend			
Average employment in Louisia (excluding contractors)	na		
Louisiana taxable purchases			
	DDO IFO	OVERVIEW	and the state of the state of
	PROJEC	OVERVIEW	
Project type			
Market areas to be served			
Transportation methods			
	PROJEC	TIMELINE	
Estimated construction start date			
Start date			
Estimated operation start date			
Estimated operation	SITE REQUI	EMENTS	
Estimated operation start date			
Estimated operation	SITE REQUIF	Number of	
Estimated operation start date Site size:	Site size:	Number of	
Estimated operation start date Site size:	Site size:	Number of	

		Square footage		um ceiling equirement	Floor specifications	
Total under roof		lootage	Height	equitement	specifications.	
Office						
Warehouse						
Manufacturing						
	Sprinkler	HVAC / Air col	nditioning Ove	rhead crane capacity	Loading docks	
Other building requirements						
1888 - 1		UTILI	TY DEMANDS			
Electricity: Appro	ox.	Electricity: Approx. KWH/month				
Gas: Natural gas used/essential/p			Gas: Other specifi cation requirements			
Water: Usage pe (gallons)		Water: Gallons per day required				
Water: Type (e.g. potable, process						
Other: Provide do	etails of					
	D	ROJECT PROJECT	IONI: ENADI OVNAEI	NT DETAIL S		
pro	umber of ofessional	Number of non professional	Professional	Non professional		
ear 1	nployees	employees	payroll	payroll	payroll	
ear 2						
ear 3						
ear 4						
ear 5						

	Number of professional employees	Number of non professional employees	Professional payroll	Non professional payroll	Total payroll
ear 6					
ear 7					
ear 8					
ear 9					
ear 10					
		BOO IFOT BEGIN	TION BURGLAS	- DETAIL O	
		PROJECT PROJEC		E DETAILS	
	Louisiana taxable purchases	Louisian non taxal purchas	ble Nor	n Louisiana urchases	Other (specify):
ear 1					
ear 2					
ear3					
ear 4					
ear 5					
ear 6					
ear 7					
ear 8					
ear 9					
ear 10					
	Note: f	Few items are taxable in Detailed informat http://revenue.louisiar	ion is available at the	following address:	

			CONSTRU	JCTION PHAS	SE .					
	Louisiana purchases and wage expenditures for the construction. Any major items that will not be bought in Louisiana, please include in the far right column.									
	Number of construction workers	Total construction wages	Spend outside Louisiana							
Year 1										
Year 2										
Year 3										
Year 4										
Year 5										
,										
			PROJECT F	INANCIALS	92.60	Fig. 194				
Capital e for projec	expenditures			Currer jobs or	nt permanent n site					
Of w	which is throug ot	h			nt permanent oss state					
Professionaverage v	onal labor wage				nt permanent on site					
Non prof average	fessional labor wage				t permanent cross state					
		PROJI	ECT SOURCES	S AND USAGE	OFFUNDS	PATTER.	-			
Use of fur	nds		Sour	ce of funds and	dollar amount					
	go	Local overnment	Federal government	Other assistan	ce Pri	vate	Total cost			
Land acquisition										
Building acquisition	1									
Building construction	on									
			Pa	ge 5 of 6						

	Source of funds and dollar amount									
	Local government	Federal government	Other assistance	Private	Total cost					
Building enovation										
Capital equipment										
nfrastructure mprovements										
Private fixed assets										
Contingency										
Working capital										
		ADDITIONAL	COMMENTS							

Appendix B



Date	

Company Overview

Company	
Address	
City	
State	
Zip code	
Country	
Website	
Parent Company	

Company Description (Max 500 Characters)

Contact Person

Name	
Title	
Phone	
Fax	
Email	



The State of Louisiana understands that the below numbers are estimates only and none of the numbers below are, at this point in time, binding in any way.

Company Financials (Last Fiscal Year)

Revenue
EBITDA (Earnings Before Interest, Tax, Depreciation, Amortization)
Debt/Equity Ratio
Total Louisiana Spend
Average Employment in Louisiana (Excluding Contractors)
Louisiana Taxable Purchases
Type of Business
NAICS code SIC code
Project Overview
Project type
Construction Start Date Operation Start Date
<u>Parish</u>
Potential Site location Option 1
Potential Site location Option 2
Potential Site location Option 3
Project Description (Max 500 Characters)



Construction Phase

		construct	ion. Any ma	es and wage ajor items that include in th	bought in			
Project Year Year 1 Year 2 Year 3 Year 4 Year 5	Number of Construction workers	Total Construction Wages	Material Purchases in Louisiana	Equipment Purchases in Louisiana	Other Expenditures in Louisiana	Total Capital Expenditure in the State of Louisiana	Spend outside Louisiana	
Capital Exper		oiect			Profession	nal Labor Avera	age Wage	
Of Which is T							Average Wage	
Current Perm	nanent Jobs (On-site			Current Pe	ermanent Payro	oll On-Site	
Current Perm	nanent Jobs (Cross State			Current Pe	ermanent Payr	oil Cross State	

Project Sources and Usage of Funds

Usage of Funds	Source of Funds and Dollar amount							
Use	Local Govt.	Federal Govt.	Other Assistance	Private	Total Cost			
Land Acquisition								
Building Acquisition								
Building Construction								
Building Renovation								
Capital Equipment								
nfrastructure Improvements								
Private Fixed Assets								
Contingency								
Working Capital								



The employment information in this section only refers to <u>net new jobs</u> please fill in the the cumulative number of employees i.e. if you hire 10 employees in Year 1 and 10 in Year 2 please fill in 10 in Year 1 and 20 in Year 2. Pleaser fill in as many years as you are comfortable to commit to.

_	Ongoing Project				Purchases details				
		Empl	oyment de	etails					Other Please Specify
P	Number of Professional Employees	Number of Non Professional Employees	Professional Payroll	Non Professional Payroll	Total Payroll	Louisiana taxable purchases	Louisiana non- Taxable purchases	Non-Louisiana Purchases	
Year 1									
Year 2									
Year 3									
Year 4									
Year 5									
Year 6									
Year 7									
Year 8									
Year 9	==								
Year 10									
_									
Year 11									
Year 12									
Year 13									
Year 14									
Year 15									
Year 16									
Year 17									
Year 18									
Year 19									
Year 20									
_	ial Comi	ments (Ma	x 500 Cha	aracters)		not be taxable revenu	. For specific info e. You will also fi	iana, e.g. most Ra rmation please co nd detailed inform ms/publications/10	ntact the dep. o ation on:

When assessing what grants, tax exemptions, loans or other benefits (collectively "incentives"), offered by the State of Louisiana, that the company might be eligible for, the State will make its best possible judgement based on the information that is provided by the company in this sheet as well as in conversations and other documents. If there are specific circumstances that the company deems important and might have an effect on the decision made by the State on elig bility of incentives, please include those circumstances the above box.

Appendix C - Consideration Materials

Bates Begin	Bates End	Exhibit Number	Date	Document Title / Description
BP-HZN-2179MDL09216157	BP-HZN-2179MDL09216157			1990 - 2012 Commercial Landings
BP-HZN-2179MDL09216160	BP-HZN-2179MDL09216160		00/00/0000	Survey of U.S. State Tourism Office Budgets
:		Dep. Ex. 011922	6/1/2014	Offshore Oil and Deepwater Horizon: Social Effects on the Gulf Coast Communities, Volume I Methodology, Timeline, Context, and Communities (MDL2179-EX-00011922)
		Dep. Ex. 011923	6/1/2014	Offshore Oil and Deepwater Horizon: Social Effects on Gulf Coast Communities, Volume II: Key Economic Sectors, NGOs, and Ethnic Groups
			6/17/2014	Deposition Transcript and Exhibits of Harry Luton
BP-HZN-2179MDL09240810	BP-HZN-2179MDL09241842		5/3/2012	Notice of Filing of the Economic and Property Damages Settlement Agreement as Amended on May 2, 2012 and as Preliminarily Approved by the Court on May 2, 2012 (Rec Doc 6430)
			8/22/2014	Washington Post Article: "Why the job market actually improved after the BP oil spill"
			00/00/2014	Study: "The Labor Market Impacts of the 2010 Deepwater Horizon Oil Spill and Offshore Oil Drilling Moratorium" by Joseph E. Aldy
			08/00/2014	Article: "Labor Market Impacts of the 2010 Deepwater Horizon Oil Spill and Offshore Drilling Momentum" by Joseph E. Aldy
US_PP_MAS001580	US_PP_MAS001591		3/1/2012	Impact of DWH well blowout on Economics of US Gulf Fisheries
US_PP_RC005221	US_PP_RC005226		2/3/2012	Ylitalo et al., Federal Seafood Safety Response to DWH, 2011

Bates Begin	Bates End	Exhibit Number	Date	Document Title / Description
US_PP_DBO006991	US_PP_DBO007170		5/26/2011	NMFS 2011 Fisheries Economics of the US 2009
US_PP_DBO007223	US_PP_DBO007227		7/12/2011	McCrea et al., Potential Impact of DWH Oil
				Spill on Commercial Fisheries
US_PP_AUS000403	US_PP_AUS000404		8/4/2014	Data File Description
US_PP_AUS000405	US_PP_AUS000407		7/8/2014	1B Code Book
US PP AUS000408	US PP AUS000459		8/10/2014	Code Report - Community - Alabama
US_PP_AUS000460	US_PP_AUS000494		8/10/2014	Code Report - Community - Lafourche
US_PP_AUS000495	US_PP_AUS000516		8/11/2014	Code Report - Community - Louisiana Other
US_PP_AUS000517	US_PP_AUS000621		8/11/2014	Code Report - Community - Mississippi
US_PP_AUS000622	US_PP_AUS000629		8/11/2014	Code Report - Community - Mississippi
	d :::'			Other
US_PP_AUS000630	US_PP_AUS000674		8/11/2014	Code Report - Community - Plaquemines St.
				Bernard
US_PP_AUS000675	US_PP_AUS000738		8/11/2014	Code Report - Community - Terrebonne
US_PP_AUS000739	US_PP_AUS001140		8/11/2014	Code Report - Sector - Commercial Fishing
US_PP_AUS001141	US_PP_AUS001215		8/11/2014	Code Report - Sector - Fabrication
				Shipbuilding
US PP AUS001216	US PP AUS001306		8/11/2014	Code Report - Sector- Oil Gas
US_PP_AUS001307	US_PP_AUS001539		8/11/2014	Code Report - Sector- Retail Service
US_PP_AUS001540	US_PP_AUS001709		8/11/2014	Code Report - Sector- Tourism Recreation
US_PP_AUS001710	US_PP_AUS001986		8/11/2014	Code Report - Topic - Claims Grants
US_PP_AUS001987	US_PP_AUS002319		8/11/2014	Code Report - Topic - Cleanup
US PP AUS002320	US PP AUS002550		8/11/2014	Code Report - Topic - Ethnic Groups
US_PP_AUS002551	US_PP_AUS002551		8/11/2014	Code Report - Topic - NGOs
US_PP_AUS002660	US_PP_AUS002761		8/11/2014	Code Report - Topic - Seafood Safety
US PP AUS002762	US PP AUS002803		8/11/2014	Code Report - Topic - Job Training
			00/00/2013	Bank Market Share by Deposits and Assets
				(CardHub.com)
			00/00/0000	U.S. Energy Information Adminstration
MY-1000000000000000000000000000000000000				webpage (eia.gov)
. "			00/00/2014	Oliver et al., Natural Gas Expansion and the
			<u> </u>	Cost of Congestion

Bates Begin	Bates End	Exhibit Number	Date	Document Title / Description
			8/8/2005	Mason & Polasky, What motivates
				membership in non-renewable resource
				cartels?
			8/13/2012	8/13/12 Declaration of James L. Henley
			ľ	[Rec. Doc. No. 7114-10]
			8/25/2010	Karen Nelson, "More Layoffs Hit Ingalls
				Shipyards"
			8/25/2014	Wright & Munsil, "The Incredible Shrinking
				Defense Industry"
			6/13/2012	Rowley, "Huntington Ingalls Joins Lockheed
				Girding for Defense Cut"
			08/00/1986	Hirschman, Humanistic Inquiry in Marketing
	:			Research
			8/15/2014	Diane Austin Round 1 Expert Report (08-15-
				2014)
			00/00/0000	Deepwater Horizon/BP Oil Spill: Size and
	:			Percent Coverage of Fishing Area Closures
				Due to BP Oil Spill
			9/24/2010	LDWF Announces Fishing to Resume in
				State Waters West of Bayou Lafourche
			10/28/2010	LDWF Opens Additional State Waters to
				Shrimp and Finfish Harvest
			06/00/2014	How the Government Measures
				Unemployment
			00/00/0000	U.S. Bureau of Labor Statistics webpage
	:		00/00/0000	Consumer Price Index FAQs
			8/15/2014	Donald Boesch Round 1 Expert Report (08-
				15-2014)
US PP AUS003894	US PP AUS004162		06/00/2014	Offshore Oil and Deepwater Horizon: Social
				Effects on Gulf Coast Communities Volume
	:			I: Methodology, Timeline, Context, and
				Communities
US PP AUS004163	US_PP_AUS004369		06/00/2014	Offshore Oil and Deepwater Horizon: Social
			1	Effects on Gulf Coast Communities Volume
No.			1	II: Key Economic Sectors, NGOs, and Ethnic
			1	Groups

Bates Begin	Bates End	Exhibit Number	Date	Document Title / Description
			10/22/2012	Supplemental Declaration of James L.
	***************************************			Henley, Jr. [Rec. Doc. No. 7731-3]
			12/24/2013	Order & Reasons Responding to Remand of Business Economic Loss Issues [Rec. Doc. No. 12055]
			3/3/2014	Opinion, In the United States Court of Appeals for the Fifth Circuit Court, No. 13- 30315
			12/21/2012	Order and Reasons Granting Final Approval of the E&PD Settlement [Rec Doc 8138]
			7/9/2014	Transcript of the Testimony of the Claims Administration Panel Meeting, Deepwater Horizon Economic & Property Damage Settlement
- · · · · · · · · · · · · · · · · · · ·			4/22/2005	Article: "What motivates membership in non- renewable resource cartels? The case of OPEC" by C. Mason and F. Polasky
			00/00/2014	Article: "Uranium and nuclear power: The role of exploration information in framing public policy" by C. Mason
			00/00/2014	Article: "Natural Gas Expansion and the Cost of Congestion" by M. Oliver, et al.
			3/20/2013	Supplemental Declaration of Hal Sider [Rec Doc 8964-18]
			5/24/2013	Br. of Appellees Deepwater Horizon Court Supervised Settlement Program In re Deepwater Horizon, Nos. 13-30315 & 13- 30329
			9/5/2013	Huntington Ingalls to close Gulfport shipyard in 2014 by J. Army
			00/00/2011	Reference Manual on Scientific Evidence (3rd Ed.), Federal Judicial Center and National Research Council, 2011

Bates Begin	Bates End	Exhibit Number	Date	Document Title / Description
			3/3/2011	Melloy, Wal-Mart Effect Over? First Market
				Share Loss in Decade
				EIA, Crude Oil Production
		- Constitution of the Cons	8/15/2014	Charles F. Mason Round 1 Expert Report (08-15-2014)
The state of the s		augusties .	00/00/0000	Harvard Kennedy School - Joseph Aldy Profile
			3/26/2014	Claims Administrator Patrick Juneau and the Settlement Program's Response to BP's Petition for Rehearing En Banc
			00/00/2013	DOI FY 2013 Agency Financial Report
				June 26, 2014 Deposition of Iris Cross and Exhibits Used at same
				August 15, 2014 Expert Report of Loren C. Scott and Reliance Materials
				All Materials Cited in the September 12, 2014 Expert Rebuttal Report of Loren Scott
				Data from Jackson County Mississippi Economic Development Foundation