

Subcommittee on Energy and Mineral Resources  
Paul Gosar, Chairman  
Hearing Memorandum

May 12, 2017

To: All Subcommittee on Energy and Mineral Resources Members

From: Majority Committee Staff – Kate Juelis  
Subcommittee on Energy and Mineral Resources (x5-9297)

Hearing: Oversight hearing entitled “*Reviewing Recent State Successes with the Rigs to Reefs Program.*”

---

The Subcommittee hearing will take place on **May 17, 2017, at 10:00AM, in 1324 Longworth House Office Building.** This hearing will focus on the decommissioning of offshore rigs and their conversion into reefs.

**Policy Overview:**

- Offshore platforms provide habitat to a vibrant collection of marine life. The Rigs to Reefs program sustains these ecosystems by converting decommissioned offshore rigs into reefs.
- The last Committee activity involving the Rigs to Reefs program was held on September 17, 2003, and discussed the potential benefits of the Rigs to Reefs program as an alternative to the complete removal and scrapping of an entire decommissioned rig structure.
- In recent years, changing political headwinds, increasing costs of decommissioning, and destructive storms in the Gulf of Mexico have directly affected the program’s administration.
- The Rigs to Reefs program remains a viable solution to address the challenges of decommissioning offshore rigs, as both States and Federal entities adhere to strict guidelines to ensure both environmental and regulatory concerns are appropriately addressed. This hearing will evaluate the efficacy of the program, and identify ways to optimize program management.

**Invited Witnesses (in alphabetical order):**

*Mr. David Bump*  
Vice President, Drilling, Completions and Facilities  
W&T Offshore, Inc.  
Houston, Texas

*Mr. Frank Rusco*  
Director, Natural Resources and Environment Team  
U.S. Government Accountability Office  
Washington, D.C.

*Mr. J. Dale Shively, M.S.,*  
Artificial Reef Program Leader  
Texas Parks and Wildlife Department  
Austin, Texas

*Mr. Greg Stunz, Ph.D.*  
Endowed Chair, Fisheries and Ocean Health,  
Director, Center for Sportfish Science and Conservation, and Professor of Marine Biology  
Harte Research Institute for Gulf of Mexico Studies,  
Texas A&M University-Corpus Christi  
Corpus Christi, Texas

## **Background:**

The Rigs to Reefs program facilitates the harmonious relationship between both man-made and natural worlds, giving rise to productive habitats for thousands of marine species off American coasts. Soon after an offshore rig is constructed, marine life begins to collect on the stationary rig jacket. Within six months, the underwater structure hosts a vibrant community including invertebrates, fish, sea turtles, and mammals.<sup>1</sup> As the average life cycle of an offshore rig in the Gulf of Mexico spans several decades, these structures become an integral part of the offshore environment. Both oil and gas operators and coastal fishing communities have long been aware of the bountiful marine ecosystem off these rigs, and have strongly supported the mission of the Rigs to Reefs program.

## ***Permitting Process***

The “National Artificial Reefs Plan” establishes the relationship between the federal government and state management of the “Rigs to Reefs” program. The National Oceanic and Atmospheric Administration (“NOAA”) is responsible for the Rigs to Reefs program at the Federal level through coordination and the assessment of risks associated with the siting, donation, and maintenance of artificial reefs.<sup>2</sup> State Artificial Reef Programs take the lead in implementing the National Artificial Reef Program.<sup>3</sup> Reefing relies on collaboration with coastal states to permit and effect the title donation of rig components deemed suitable for use as an artificial reef.<sup>4</sup>

Per the Outer Continental Shelf Lands Act (“OCSLA”) and its implementing regulations, operators are required to completely remove all offshore drilling equipment on federal offshore lands and to clear the seabed of any remaining obstructions.<sup>5</sup> Operators have one year from the

---

<sup>1</sup> “Rigs to Reefs” <http://www.api.org/oil-and-natural-gas/environment/clean-water/oil-spill-prevention-and-response/rigs-to-reefs>

<sup>2</sup> BOEM – Decommissioning and Rigs to Reefs in the Gulf of Mexico Frequently Asked Questions, p 5.

<sup>3</sup> [http://sero.nmfs.noaa.gov/habitat\\_conservation/documents/gulf\\_decommissioning\\_and\\_rigs\\_to\\_reefs\\_faqs\\_final.pdf](http://sero.nmfs.noaa.gov/habitat_conservation/documents/gulf_decommissioning_and_rigs_to_reefs_faqs_final.pdf)

<sup>4</sup> <https://www.bsee.gov/what-we-do/environmental-focuses/rigs-to-reefs>

<sup>5</sup> [http://sero.nmfs.noaa.gov/habitat\\_conservation/documents/gulf\\_decommissioning\\_and\\_rigs\\_to\\_reefs\\_faqs\\_final.pdf](http://sero.nmfs.noaa.gov/habitat_conservation/documents/gulf_decommissioning_and_rigs_to_reefs_faqs_final.pdf); 30 CFR 250.1725.

date of lease termination to remove all equipment. All platform equipment is then towed to shore and scrapped, or donated to a state to serve as an artificial reef structure.

Coastal states oversee the implementation of offshore and nearshore artificial reefing sites to promote and support marine life, commercial fishing, and recreational tourism. All five Gulf states, Texas, Louisiana, Mississippi, Alabama, and Florida, accept donations of decommissioned oil and gas rig components.<sup>6</sup>

The rig donation process begins with an operator's decision to donate a decommissioned rig. Each state's artificial reef program then reviews and evaluates each donation application.<sup>7</sup> States take the lead in designating locations for artificial reef sites along their respective coasts. State agencies consider numerous factors, including the economic impact, location of navigation routes, and the effect on recreational activities when evaluating a new reef site. States work alongside NOAA to gain a regional perspective on the designation of a new reef location. States often use inclusion and exclusion mapping of appropriate areas to determine acceptable rig placement, and will hold public hearings to provide notice and gain feedback on proposed sites.<sup>8</sup>

Reefing rigs in place often allows for the greatest benefit to both marine life and overall cost savings. Marine species may have developed an intricate ecosystem on the existing site, and removing and towing the jacket components to a new location will adversely affect their survival. Additionally, operators save on jacket removal and towing expenses if allowed to donate the rig in the location it stands. A full analysis of reef site designation is required to reef the rig in place. For example, Louisiana's Department of Wildlife and Fisheries developed "Special Artificial Reef Sites" permits to allow an operator to decommission and reef the rig components in place.<sup>9</sup> The accepting state determines the ultimate location for the reefed components.

Additionally, the state and operator negotiate the terms of the donation by calculating the cost of decommissioning and complete removal, versus the cost to reef the rig. Half of the operator's cost savings of reefing the rig, as opposed to complete removal are donated to the state's artificial reef program. With the donation, the state program maintains the artificial reef site by flagging and securing the structure.<sup>10</sup>

During the initial phase of the donation process, the state works with the United States Army Corps of Engineers ("USACE") to obtain a permit ensuring placement of the rig on the sea floor and suitability for the proposed reef site.<sup>11</sup> Pursuant to Section 10 of the Rivers and Harbors Act of 1899, USACE is responsible for preventing obstructions to navigation by artificial underwater objects.<sup>12</sup>

While the state obtains the USACE permit, the operator must seek a removal permit from the Bureau of Safety and Environmental Enforcement ("BSEE"). BSEE ensures the structures of the

---

<sup>6</sup> <https://www.bsee.gov/what-we-do/environmental-focuses/rigs-to-reefs>

<sup>7</sup> Dale Shively, Rigs to Reefs Program Administration (April 21, 2017)

<sup>8</sup> [http://sero.nmfs.noaa.gov/habitat\\_conservation/documents/gulf\\_decommissioning\\_and\\_rigs\\_to\\_reefs\\_faqs\\_final.pdf](http://sero.nmfs.noaa.gov/habitat_conservation/documents/gulf_decommissioning_and_rigs_to_reefs_faqs_final.pdf)

<sup>9</sup> M.J. Kaiser, R.A. Kasprzak / Marine Policy 32 (2008) 956–967 p. 957

<sup>10</sup> [http://sero.nmfs.noaa.gov/habitat\\_conservation/documents/gulf\\_decommissioning\\_and\\_rigs\\_to\\_reefs\\_faqs\\_final.pdf](http://sero.nmfs.noaa.gov/habitat_conservation/documents/gulf_decommissioning_and_rigs_to_reefs_faqs_final.pdf)

<sup>11</sup> <https://www.bsee.gov/what-we-do/environmental-focuses/rigs-to-reefs>

<sup>12</sup> [http://sero.nmfs.noaa.gov/habitat\\_conservation/documents/gulf\\_decommissioning\\_and\\_rigs\\_to\\_reefs\\_faqs\\_final.pdf](http://sero.nmfs.noaa.gov/habitat_conservation/documents/gulf_decommissioning_and_rigs_to_reefs_faqs_final.pdf)

proposed donation meet environmental standards, and are suitable for relocation in the proposed reef site. BSEE, along with the Bureau of Ocean Energy Management (“BOEM”) reviews safety and environmental aspects of each donation proposal, including the structural and chemical integrity of the reefing material, and the future usage of the site for other users on the outer continental shelf.<sup>13</sup> Per National Environmental Policy Act (“NEPA”) requirements, BOEM conducts a site-specific environmental assessment on behalf of BSEE to assess the removal methodology. If the environmental assessment indicates that a “Finding of Significant Impact” is caused by the reefing process, BOEM will perform a full Environmental Impact Statement.<sup>14</sup> Additionally, BSEE may impose further requirements or adjustments to the process to mitigate potential environmental damage.<sup>15</sup> Since 1986, BSEE and its predecessor, the Minerals Management Service, has approved over 515 rigs for the artificial reef program, and has denied six applications.

Next, the accepting state works with the United States Coast Guard (“USCG”) to mark the artificial reef components for the purposes of shipping and commercial fishing activities.

Finally, legal title and liability of the rig are transferred from the operator to the accepting state upon completion of the decommissioning, permitting, and reefing process.

### ***Policy Modifications***

Between 2004 and 2008, a series of devastating hurricanes in the Gulf of Mexico destroyed 181 rig structures and affected 1,673 wells. After plugging the affected wells, operators in the region sought to donate many of the twisted structures to states as reefs. Because of the massive influx of donation applications for the potentially hazardous structures, BSEE imposed a controversial moratorium on the donations outside of existing artificial reef planning areas in 2009.<sup>16</sup>

Soon after in 2010, BSEE issued a Notice to Lessees 2010-G05 (NTL) entitled “Decommissioning Guidance for Wells and Platforms.” Known as the “Idle Iron” policy, this publication established deadlines for the decommissioning and removal of wells that had not been “useful to production.” and was issued to address environmental concerns surrounding many twisted rigs and damaged wells caused by several destructive hurricane seasons in the Gulf. From the date of the NTL, any well and supportive equipment that had not produced for five years had to be removed.

Many operators and states have been frustrated by the heavy regulatory burdens placed on the offshore decommissioning process. Operators found themselves under incredible technical and financial pressure to quickly remove equipment during the decommissioning process. Furthermore, all marine life on decommissioned rigs was torn from the sea floor and scrapped. In response to these frustrations, BSEE issued an Interim Policy Document 2013-07 in 2013, which lifted the moratorium, and removed inefficiencies of the Idle Iron policy and provided clarity to both donors and state operators regarding the permitting process.<sup>17</sup> These policy

---

<sup>13</sup> [http://sero.nmfs.noaa.gov/habitat\\_conservation/documents/gulf\\_decommissioning\\_and\\_rigs\\_to\\_reefs\\_faqs\\_final.pdf](http://sero.nmfs.noaa.gov/habitat_conservation/documents/gulf_decommissioning_and_rigs_to_reefs_faqs_final.pdf)

<sup>14</sup> Lee Tilton, BOEM Office of Congressional Affairs (May 11, 2017)

<sup>15</sup> [http://sero.nmfs.noaa.gov/habitat\\_conservation/documents/gulf\\_decommissioning\\_and\\_rigs\\_to\\_reefs\\_faqs\\_final.pdf](http://sero.nmfs.noaa.gov/habitat_conservation/documents/gulf_decommissioning_and_rigs_to_reefs_faqs_final.pdf)

<sup>16</sup> <http://www.sciencedirect.com/science/article/pii/S0308597X14002346>

<sup>17</sup> NOIA, Idle Iron and Rigs to Reefs Program Document

modifications were very welcome by both potential donors and the state artificial reef programs, yet concerns remain regarding the new artificial reef site approval processes.

### ***Improvements to the Rigs to Reefs Program Administration***

While the program provides all stakeholders with a unique, communally beneficial alternative to removal and scrapping, there are ways to streamline the process and ensure the continued success of reef environments along our coastline.

As the offshore industry's technical capabilities develop, wells continue to move further from state shores and the continental shelf into deeper waters in the Gulf of Mexico. Many shallow water wells serve as the foundation of marine communities and are approaching the end of their productive life. By streamlining the permitting processes at both the federal and state level and considering the reefing of additional rig components, federal and state agencies can alleviate confusion and liability concerns that discourage operator donations.

For many potential donors, a common preclusion to donation is the permitting process and associated liability. Typically, the donation process takes about six to nine months, but may take considerably longer due to unanticipated delays between agencies.<sup>18</sup> Lack of communication between federal agencies appears to be a paramount challenge.<sup>19</sup> When the decommissioned equipment is located within a National Marine Sanctuary and actively supports a marine environment, regulatory delays and red tape have prevented donation by adding unnecessary levels of review. This regulatory uncertainty and delay has caused some potential donors of viable rig equipment to reconsider or cancel their donations due to the open ended liability. As such, some operators believe they are better off scrapping the components to cut off liability sooner rather than later.<sup>20</sup>

W&T Offshore, Inc., an offshore operator based in Houston, Texas, provides a unique look into the regulatory morass operators face when considering a donation. The rig jacket W&T is attempting to donate supports an eight inch thick layer of marine life, and is home to hundreds of species. To donate this particular rig, USACE required the company to obtain a "Letter of Authorization" from the United States Fish and Wildlife Service ("USFWS"), an unprecedented step in the donation process for this company. All the while, the company has received several Incidents of Noncompliance ("INC") notifications from BSEE for failure to remove the rigs in time. Due to this arduous permitting scheme, W&T may be forced to scrap the rig and its ecosystem.<sup>21</sup> By resolving discrepancies in the permitting process, operator liability and exposure will be reduced.

Presently, rig jackets are the primary material accepted into the artificial reef programs. Topside platforms, umbilicals, and casons are typically excluded from artificial reef sites, as these components directly handle various hydrocarbons and chemicals, and increase the instance of chemical contamination. Many of these components would make excellent, prolific habitats if thoroughly flushed, inspected, and reefed. Indeed, state artificial reef programs already accept a

---

<sup>18</sup> Dale Shively, Rigs to Reefs Program Administration (April 21, 2017)

<sup>19</sup> Marsh Armitage, W&T Offshore, Inc.- Rigs to Reefs Program (May 2, 2017)

<sup>20</sup> Randall Luthi, NOIA Rig Abandonment and Rigs to Reefs Program (April 19, 2017)

<sup>21</sup> Marsh Armitage, W&T Offshore, Inc.- Rigs to Reefs Program (May 2, 2017)

wide variety of industrial equipment, including ships and scrapped concrete culverts, into reefing programs without the Federal permitting and reef maintenance contribution requirements.<sup>22</sup> By examining each rig and additional components on a case by case basis, donations may be more attractive to operators and will provide increased marine habitat.<sup>23</sup> The mission of the program would be greatly enhanced if agencies considered additional rig equipment for inclusion into the program.

It is also possible to improve the formula used to determine the financial donation amount. Operators and states begin by negotiating the “donation cost” of reefing a rig. When an operator initiates the donation process, it provides the state agency with the cost of reefing the rig (including deconstruction, removal, and towing to the reef site) and the cost of removing the rig entirely (including deconstruction, removal, and towing to shoreside scrapyard). Half of the cost savings of complete removal is then donated to the state’s artificial reef program. State programs have an interest in determining the formula for removal costs, as this ceiling amount directly affects the amount of the donation. Operators point out, however, that the scrap value of the removed equipment is not considered as part of the donation process.<sup>24</sup> Because the scrap value effectively decreases the removal costs, it should be factored into the operator’s economic decision of whether or not to donate the rig.

### *Ecology of the Artificial Reef Sites*

Since the advent of offshore oil and gas production, local fishermen and offshore workers have enjoyed the marine wildlife that proliferated on offshore rigs. In the Gulf of Mexico, species are immediately attracted to the fixed structures, creating a thriving environment on the otherwise featureless, muddy floor. Within six months organisms fix themselves to these components and develop the foundation of a diverse ecosystem.<sup>25</sup>



*Figure I: Giant Sponge on Platform A3889  
Photo credit: Blue Latitudes*

The sheer diversity and complexity of the marine ecosystems growing among the rig structures has impressed marine biologists. Dr.

Greg Stunz of Texas A&M University – Corpus Christi, highlights the advanced nature of these ecosystems. His work demonstrates that the artificial reef components do more than just temporarily attract fish and invertebrate species – these environments actually house thousands

<sup>22</sup> See [http://tpwd.texas.gov/landwater/water/habitats/artificial\\_reef/near-shore-reefing.phtml](http://tpwd.texas.gov/landwater/water/habitats/artificial_reef/near-shore-reefing.phtml)

<sup>23</sup> Dale Shively, Rigs to Reefs Program Administration (April 21, 2017)

<sup>24</sup> Arena Offshore, Rigs to Reefs Program (May 9, 2017)

<sup>25</sup> <http://www.api.org/oil-and-natural-gas/environment/clean-water/oil-spill-prevention-and-response/rigs-to-reefs>

of species throughout their life cycles. At one reef site in the Western Gulf of Mexico, his research team identified 79 distinct species of fish.<sup>26</sup>

The artificial reef environments support extensive diversity of marine life, and attract species throughout the region. This phenomenon incidentally benefits commercial fishing industries, including shrimpers, who trawl up to a quarter mile from reef sites and report higher yields in those areas.<sup>27</sup> Because the reef sites bring so much life to the Gulf and support a variety of local industries and economies, it is imperative that the Rigs to Reefs program remain an effective and efficient means of building America's coastal economies.

### ***Conclusion***

The Rigs to Reefs program demonstrates how local economies, marine environments, and offshore industries can successfully benefit from collaboration off our nation's coasts. This integration makes coastal communities and the nation stronger.

---

<sup>26</sup> Matthew K. Streich et al., A Comparison of Fish Community Structure at Mesophotic Artificial Reefs and Natural Banks in the Western Gulf of Mexico, 9 Marine and Coastal Fisheries 170–189, 170-189 (2017).

<sup>27</sup> <http://www.rig2reefexploration.org/read-me-1/>