The Louisiana Shrimp Association is a nonprofit organization formed by commercial shrimpers throughout the State of Louisiana. Membership consists of commercial shrimp fisherman, wholesale and retail seafood dealers, statewide merchants, and individuals concerned about issues related to domestic seafood and shrimp production as well as the preservation of the culture and heritage of the traditional Louisiana shrimper.

I. Proposed New TED Regulations Will Have Huge Adverse Economic Consequences for Gulf of Mexico Coastal Communities:

Short Term Adverse Economic Effect in the Gulf of Mexico Will Be Dramatic

According to Table 1 at p. viii of the NOAA Environmental Impact Statement (EIS), the Average 1st Year Revenue Loss would range between $9.4 million to $44 million without considering that NOAA admits that it is a “high probability” that more than 50% of part-time shrimper vessels “will stop operation due to TED costs.” Under NOAA’s Preferred Alternative #3, the loss of gross revenue in the first year is more than 122% on average, simply based on loss of shrimp landings
and TED costs in this first year. EIS, Table 1 at p. viii; EIS at 164. This is because a relatively large number of vessels earn relatively small average annual gross revenues, and thus the costs associated with purchasing TEDs are relatively large for those vessels. EIS at 164. **NOAA admits that this outcome is not economically sustainable and would likely cause “average” vessels to stop operating.** EIS at 164.

**Long Term Impact: NOAA Admits “High Probability” That Large Numbers of Small Shrimping Businesses “Will Stop Operating Due to TED Costs,” But Does Not Even Attempt to Estimate the Massive Economic Adverse Consequences That Coastal Communities Will Likely Suffer Long Term**

NOAA admits that implementation of any of the Alternative TED proposed regulations would result in **“High probability that many (i.e., 50% or more) part-time vessels will stop operating due to TED costs.”** The economic losses that will result when 50% or more of the part-times vessels “will stop operating due to TED costs” has not been assessed by NOAA in its **“TOTAL ADVERSE EFFECT” (see Footnotes 1 & 2 to Table 1, p. viii of the EIS).**

According to EIS, Table 1, p. viii, approximately 70% of the shrimper fleet is part-time, and will be adversely affected by any one the proposed new Alternative TED regulations. The expected level of reduction would probably result in a 50% or more decline in the affected shrimping fleet in the Gulf of Mexico, literally hundreds or even thousands of vessels.

The economic annual impact, which NOAA admits is highly probable, would include, but not be limited, to: 1) loss of earnings by vessel owners, captains and crew; 2) loss of subsistence for coastal families that consume shrimp and other bycatch fish; 3) significant loss of vessel value and/or shrimping operations or other related businesses; 4) loss of governmental tax base and funding; 5) and a significant adverse ripple economic impact upon coastal communities.

**The fact that NOAA has purposely failed to even attempt to estimate the broader adverse economic and community impact that the likely cessation of operation of over 50% of the part-time shrimping fleet due to TED costs is clear**
evidence that NOAA is derelict in its responsibility to fully assess the economic impact of the newly proposed TED regulations under the Regulatory Flexibility Act. ² ³

One way to estimate the long term impact of the proposed regulations in Louisiana alone would be to assess the proposed impact on Louisiana’s total Annual Income derived from shrimping, $1.3 billion, as well as the 15,000 jobs annually according to the Louisiana Seafood Board. ⁴

A loss of just 30-50% annual gross revenue due to the massive decline in part-time shrimping vessels predicted by NOAA as a result of the new TED requirements, if projected upon the entire gross annual shrimp income, would result in a $390-650 million direct economic loss and, potentially, a permanent loss of 4,500-7,500 jobs. While affected part-time shrimping vessels would not have the same adverse economic losses annually, because the losses would be permanent as a result of proposed Alternative TED regulations, the catastrophic economic ripple effect sustained by coastal communities would significantly impact the entire shrimp income in the State of Louisiana

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² NOAA has also failed to estimate the number of “Full-Time” shrimping vessels that also “will stop operating due to TED costs.” This is a clear violation of the Regulatory Flexibility Act in as much as even the “Full-Time” shrimping vessels are admittedly small businesses within the meaning of the RFA. (81 Fed. Reg. 91100).
³ NOAA’s entire long term economic losses for its preferred Alternative regulation #3 in EIS, p. 163-64, is flawed because NOAA did not take into account the “high probability” that more than 50% of the part-time vessels would “stop operating due to TED costs.” The 3.4% long term effect used by NOAA in the computation only takes into account “shrimp loss resulting from required TED use and would be an annual effect.” EIS, p. viii, p. 163.
⁴ http://www.louisianaseafood.com/industry
II. NOAA Admits that Current Regulatory Shrimping Practices Have Resulted in Historically High Turtle Populations:

In its Environmental Impact Statement, NOAA repeatedly states that current turtle populations are at historically high levels.

For example, at p. 45, Figure 3, Green Sea Turtle nesting in Florida beaches has increased from less than 1,000 in 1989 to nearly 30,000 in 2015.

![Figure 3. Green sea turtle nesting at Florida index beaches since 1989.](image)

At p. 54, Figure 4, Kemp Ridley Turtle nests have largely increased from approximately 1,000 in 1978 to 15,000-20,000 in 2011-15, despite NOAA’s admission that the BP Oil spill “resulted in large losses to the Kemp Ridley
population across various age classes, and likely had an important population-level effect on the species.” EIS, p. 57

At p.62, Figure 5, Leatherback Turtles increased from approximately 50 in 1989 to over 600 before the BP Oil Spill in 2010.

Figure 4. Kemp’s ridley nest totals from Mexican beaches (Gladys Porter Zoo nesting database 2015).

Figure 5. Leatherback sea turtle nesting at Florida index beaches since 1989.
On pages 71-75 of the EIS, NOAA lists numerous Sources of Turtle mortality, all of which are unrelated to shrimping activities, except for a brief mentioning of “fishery interactions” at p. 72.

NOAA’s own data clearly shows that turtle populations have thrived under the current regulatory practices which allow skimmer shrimping vessels to operate without TEDs.

Indeed, following the BP Oil Spill, shrimp skimmer trawlers were falsely accused of causing increased turtle strandings, despite the clear evidence that said increase began shortly after the BP Oil Spill, and remain high due to the continued presence of oil in the Gulf of Mexico even today. In response to this “speculation,” NOAA conducted an extensive observation effort in the Gulf of Mexico on skimmer shrimping operations in the Summer of 2012.

NOAA determined that, despite 24 small juvenile turtle interactions with shrimping skimmer trawling vessels during these two months, “[a]ll sea turtles were released alive.” (EIS at 56). NOAA concluded that it was the BP Oil Spill, not shrimp skimmer trawling, which had resulted in “large losses” of turtles and “likely had an important population-level effect on the species.” (EIS at p. 57).

III.  NOAA Grossly Overestimates Any Turtle Mortality Attributable To Skimmer Shrimping Operations

NOAA admits that there are many sources of sea turtle mortality. Natural causes for turtle mortality include preying birds, marine wildlife or animals, tropical storms or hurricanes, including effects of sand accretion, rainfall, and wave action from these storms. (EIS at p. 71). Human activity affecting sea turtle mortality includes oil & gas exploration, coastal development and transportation, marine pollution, underwater explosions, dredging operations, entanglement in debris, marina and dock construction, operations and boat collisions. (EIS at p. 73). Lastly, incidental fishing operations, including dredge fishing, commercial and recreational line fishing, large and small gillnet fishing and entanglement in buoy lines or cages of lobster and crab traps have all been known to affect turtle mortality. (EIS at p. 75).
Despite the many causes identified with regard to sea turtle mortality, the proposed Alternative TED regulations are directed primarily at shrimp skimmer boats, which largely operate out of the State of Louisiana.

NOAA conducted surveys of skimmer boat operations during three shrimping seasons, 2012, 2013 & 2014. The results are summarized in Table 6 of a NOAA Technical Memo. As stated previously, there were 24 interactions with sea turtles in 2012, and all turtles were released alive. In the 2013 skimmer boat observational study there were a total of 8 turtle interactions, 1 turtle was previously dead and the remaining 7 were released alive. In the 2014 skimmer boat observational study, of the 10 total turtle interactions, 1 turtle was previously dead, 3 turtles were found dead, and 6 turtles were released alive. It should be noted that these 3 mortalities were also found to have had no external injuries and there was no determination as to the cause of death.

Using the total skimmer observational data for all 3 years, based on a total of 3 mortalities during the entire 3 year study, which involved 2,382 recorded hours of net effort to shrimp and the alleged three turtle deaths, all based on data from Table 6, noted above, considering that NOAA claims that total seasonal net effort time in the Gulf of Mexico for skimmer vessels is 539,394 hours (EIS, Table 35, p.136) and given that the proposed new Alternative TED regulations would affect 5,660 vessels in the Gulf of Mexico (81 Fed. Reg. 91100), the average skimmer vessel would likely see one (1) turtle mortality, cause of death unknown, and approximately once every eight (8) annual shrimping years.

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6 Three (3) turtle mortalities of unknown cause in 2,382 hours of skimmer net effort time is 794 hours per mortality. Dividing total hours of skimmer shrimping effort in season, 539,394 hours, by hours per mortality results in the total expected annual turtle mortality of 679. However, there are 5,660 vessels in the Gulf of Mexico affected by the proposed Alternative TED regulations and therefore, the average vessel affected would have to work approximately 8.34 years to see one (1) mortality, of unknown cause, in its skimmer nets.

The higher mortality rates reported by NOAA in the EIS is not based on actual mortality observed, but on a subsequent re-analysis of “notes” regarding turtles actually released alive, creating an arbitrary mortality scale for turtles released alive. The fallacy of this analysis is two-fold: 1) None of the turtles reportedly captured by skimmer trawls from 2011-14 had evidence of any external injuries. See Exhibit No. 1, attached to this Comment. 2) NOAA then assumes that all of the ill effects to turtles, based on an unscientific reanalysis of “notes” were then somehow due to skimmer nets, even though all of this data was collected after the BP Oil Spill, and NOAA admits that the BP Oil Spill had a major impact on turtle health and mortality or any ill health could be due to predators, or anyone of many other natural or human related health risks to turtles.
V. NOAA Observational Data Demonstrates That Vessels Equipped with TEDs Have Substantially Higher Sea Turtle Mortality

Incredibly, the entire purpose of the proposed Alternative TED regulations is to require that hundreds, and perhaps even thousands, of skimmer vessels purchase and install TEDs. Yet, NOAA’s own observational data between 2012 and 2014 demonstrate a much higher turtle mortality rate for vessels equipped with TEDs. From 2012 to 2014, NOAA observers monitored a total of 23 interactions with turtles with shrimping vessels equipped with TEDs, these TED related turtle interactions resulted in 9 reported dead turtles, 2 turtles whose condition was “unknown” at time of release, and 12 turtles released alive. (see NOAA Shrimp Trawl Observation Program 2011-2016 Sea Turtle Interactions, Attached to this Comment as Exhibit No. 1). The skimmer vessels, as reported above, had only 3 turtle deaths reported in 42 total turtle interactions. Thus, according to NOAA’s own observational data, vessels equipped with TEDs had three (3) times the turtle mortality rate compared to skimmer vessels. Instead of reducing turtle mortality, NOAA’s own observational data suggests that the proposed Alternative TED regulations, switching skimmer shrimping vessels to TEDs, is not only economically unfeasible, it may substantially increase turtle mortality. Further, NOAA admits that these TEDs could even be a life-threatening safety issue to the fishermen themselves:

\[ \text{7 The 3 times mortality rate compares just the total deaths reported on skimmer vessels, three (3), with nine (9) reported for TED vessels. However, because there were fewer TED vessels reporting more turtle deaths than skimmer vessels, the actual per vessel rate of reported turtle deaths is much higher, approx. 39% for TED vessels vs. 7% for skimmer vessels, a 5 fold increase for TED vessels. (A highlighted version of all Shrimp Trawl Observer Data, 2011-16, is attached as Exhibit 1 to this comment and consistently shows the higher mortality rate for vessels using TEDs.)} \]

\[ \text{8 In addition to the health of turtles, experienced shrimpers have expressed repeated concerns that application of TEDs to smaller vessels, particularly given the potential dangers with mandatory use of TEDs for smaller vessels, with fewer crew, in volatile, shallow, or debris-entangled waters common in the Gulf of Mexico, may create safety hazards for fishermen that have never been assessed by NOAA. In fact, LSA is unaware of any real life testing of the narrower webbed TEDs in shallow waters, in fast currents or in difficult weather conditions with smaller vessels.} \]
Safety at sea could be an issue, particularly under Alternatives 3, 5, 6, and 7, which include small vessels. Small vessels have limited deck space and could be operated by a single individual. Possible issues related to TED use, such as a TED clogged by debris or net entanglement in the motor due to a lengthened net to accommodate the TED extension, could contribute to an issue with safety at sea, such as a man overboard. (See EIS at 205)

CONCLUSION

The Louisiana Shrimp Association respectfully submits that, based on NOAA’s own data, any one of the proposed Alternative TED regulations No. 2-7 will have a devastating adverse economic impact on families that have traditionally harvested shrimp from coastal Louisiana waters, with massive adverse economic and social impacts on the State of Louisiana and its coastal communities. Since the 1980’s, skimmer vessels have peacefully harvested shrimp while sea turtle population levels have increased to new historic levels despite recent natural and oil-related disasters in the Gulf of Mexico. NOAA admits that it is a “high probability” that any one of the Alternative TED regulations No. 2-7 the result will be that most, and potentially all, of the part-time shrimp vessels “will stop operating due to TED costs.” Under the Regulatory Flexibility Act, NOAA must “minimize the significant economic impact on small entities consistent with the stated objectives of applicable statutes, including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected...” Section 604(a)(6).

NOAA admits that all shrimping businesses likely affected by Alternative TED regulations No. 2-7 are small businesses within the meaning of the RFA. 81 Fed Reg 91100. The only Alternative TED regulation proposed that would in fact minimize the admitted “significant economic impact on small entities” is Alternative No. 1, which would allow shrimp skimmer vessels to operate under the current regulatory scheme. This makes logical sense based on NOAA’s own observational data that clearly does not support the notion that converting
hundreds or even thousands of vessels, mostly part-time shrimpers, to TED nets will somehow reduce turtle mortality, given NOAA’s observational data regarding turtle mortality when TEDs are used. Further, NOAA admits that mandatory use of TEDs in smaller vessels presents a significant safety issue for shrimping crews.

Accordingly, Louisiana Shrimp Association maintains that Alternative No.1, maintaining current regulatory practices over skimmer vessels, is the only choice that will clearly avoid the unsustainable adverse economic consequences for our coastal shrimping operations in the Gulf of Mexico and provide for continued expansion of turtle populations.

Sincerely yours,

Acy Cooper, President
Louisiana Shrimper Association
1/23/2017

Acy Cooper Jr. – President        Ronnie Anderson- Vice President
Douglas Olander- 2nd Vice President    Thomas Olander-Chairman
Marla Cooper-Secretary            Jane Pizani – Treasurer