September 23, 2019

Mr. Craig Cockrell
HMS Management Division
Office of Sustainable Fisheries, F/SF1
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910

RE: Comments on NOAA-NMFS-2018-0035

Dear Mr. Cockrell:

The Pew Charitable Trusts and The Ocean Foundation appreciate the opportunity to comment on the *Draft Regulatory Amendment to Modify Pelagic Longline Bluefin Tuna Area-Based and Weak Hook Management Measures* (NOAA-NMFS-2018-0035), including the accompanying draft environmental impact analysis (DEIS). We cannot overstate how strongly we oppose NOAA's Preferred Alternative C3, which would reintroduce fishing to the Gulf of Mexico Gear Restricted Areas (GRAs), thus increasing mortality on spawning western Atlantic bluefin tuna at the time of peak spawn and threatening not just the severely depleted western population but also the many U.S. fishermen that are authorized to target bluefin tuna commercially and recreationally. The current preferred alternative is a solution in search of a problem and will introduce unnecessary risk into a fishery that is meeting its management goals. **We strongly urge NOAA Fisheries to adopt *Alternative C1: No Action* for the Gulf GRAs**. Below, we also provide comments on the other preferred alternatives considered in the proposed rule including support for *Alternative A1*, *Preferred Alternative B2*, and *Preferred Alternative D2*.

Spring Gulf of Mexico Gear Restricted Areas: We strongly support Alternative C1: No Action.

Gulf Gear Restricted Areas are successful, Individual Bluefin Quota program alone is insufficient
The Gulf GRAs enacted through Amendment 7 to the Consolidated Atlantic HMS FMP have successfully reduced bluefin tuna mortality in the only major spawning ground for western Atlantic bluefin tuna. Average annual bluefin tuna interactions during the April and May closure months were 82 percent lower in 2015 and 2016 than in 2006 through 2012 before the GRAs were in place (NOAA 2018a). Reducing interactions is a key goal since NMFS electronic tagging studies and observer program data have found that more than half (52 percent) of all bluefin caught on longlines in the Gulf of Mexico are dead at haulback (SEFSC 2018). The NMFS scientists that led the study concluded that time-area closures are the most effective way to avoid interactions. Neither the Individual Bluefin Quota (IBQ) program, nor weak hooks, nor any other existing restriction on longline fishing can completely avoid interactions, thus mortality, as well as the GRAs can.

In 1981, NOAA prohibited the use of longlines in the directed bluefin fishery, specifically due to concerns about increased targeting in the Gulf of Mexico spawning ground (46 FR 8012). After decades of intending the longline fishery to be an incidental fishery, both within and outside the Gulf, NOAA is finally achieving this goal. Longline mortality in the Gulf of Mexico decreased from 41 percent of total longline mortality in 2012 to just 7 percent of total longline mortality in 2017. Longline mortality in the Gulf was a mere 0.6% of total U.S. bluefin mortality in 2017. Only 13 bluefin tuna were landed from the Gulf of Mexico in 2016. This progress is astounding. Similarly, as recently as 2012, the Longline Category exceeded its quota by 218 percent. Since Amendment 7 was fully implemented, the Longline Category has avoided any quota overages.

The waste of bluefin tuna in the longline fishery is also being combatted successfully, with dead discards of bluefin in the Gulf of Mexico amounting to just 7 metric tons (mt) in 2016, down from 69 mt in 2012 (ICCAT 2017). In 2018, there were just 3.6 mt of dead discards in the Gulf. While the draft IBQ three-year review states that, *"The percentage of dead discards in the Gulf of Mexico has increased slightly during the IBQ period,"* that is only because overall dead discards are so much lower (See Figure 3.1) (NOAA 2019a). This statement is incredibly misleading and should not appear in the final three-year review.

The Gulf GRAs are the major contributing factor in this success story. While it is true that the IBQ program is also a contributing factor, the positive impact of the Gulf GRAs must not be understated. Longline catch of bluefin, including landings and discards, declined only 48 percent in the Atlantic compared to 88 percent in the Gulf of Mexico because of Amendment 7 (measured as 2015-2016 average catch compared to the average catch in 2006-2012; ICCAT 2017). Furthermore, April and May used to be the peak months for bluefin landings in the Gulf, but in 2015-17 combined, only 14 fish were landed during those months. There was not the same reduction in catch for the months of February and March, so the IBQ program cannot be credited with this reduction in mortality (Table 6.32, NOAA 2019a). The Gulf GRAs are to credit for this further reduction in mortality and are in no way redundant with the IBQ program. While the IBQ program introduces individual accountability to the management of the longline fishery and caps overall mortality, it is the Gulf GRAs that target protections on, and prevent interactions with, specifically the invaluable Gulf spawners during their peak spawn.

Importance of the Gulf of Mexico

The Gulf of Mexico is the population's primary spawning ground, and every bluefin tuna caught in those waters is a western fish, there to spawn. With increased mixing rates of eastern fish in western Atlantic waters as the eastern stock recovers (e.g., 59 percent eastern fish in the Gulf of St. Lawrence in 2016 compared to 0 percent in 2010; 63 percent eastern fish in the West Atlantic in 2016 compared to 24 percent in 2011; Arrizabalaga, unpublished data), the Gulf is the *only* place where protections can be targeted on western fish. The Gulf of Mexico longline fleet is catching only western fish, compared to the East Coast fleets, for example, whose catch is just 37 percent western (Arrizabalaga, unpublished data).

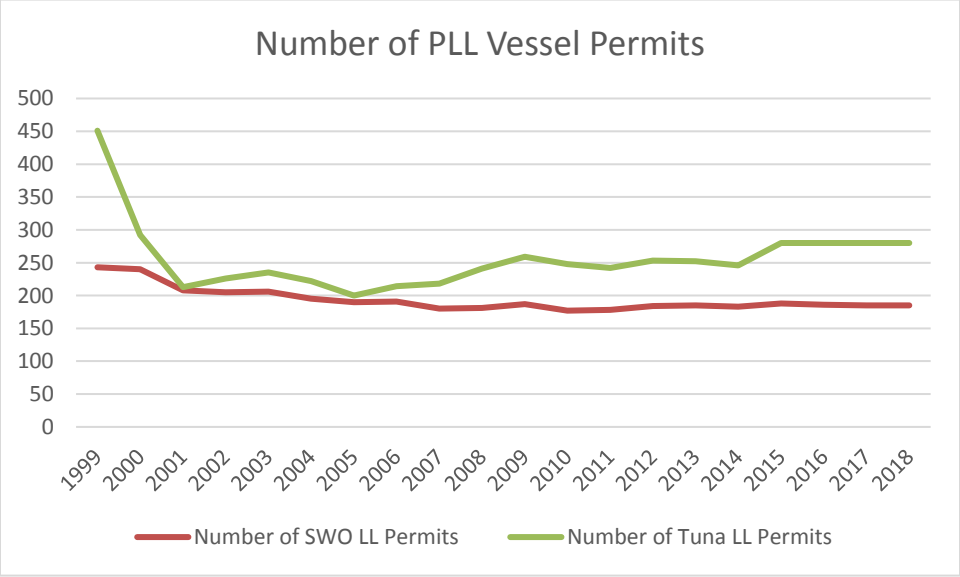
In 1982, ICCAT recognized the importance of the Gulf of Mexico as a spawning area and banned targeted bluefin fishing. With Mexico's recent efforts to repeal this prohibition and reopen the Gulf of Mexico to directed bluefin fishing, any move by the U.S. to relax restrictions in the Gulf could open the door for targeted fishing of bluefin in the area. The U.S. must continue to demonstrate its commitment to this critical protection that has been in place internationally for nearly four decades.

Although ICCAT decided in 2017 to abandon its 20-year rebuilding plan, the western population of Atlantic bluefin tuna remains severely depleted, at just 45 or 69 percent of its already depleted 1974 level (ICCAT 2018). In addition, the current western quota is predicted to lead to further population decline for the foreseeable future, with an approximately 8 percent decline expected by 2020.

Gulf GRAs have not had significant adverse socioeconomic impacts

While there have been some reductions in longline target catch since Amendment 7, the catch of yellowfin tuna, the primary target fish for the Gulf longline fleet, increased during the Gulf GRA period. In 2006-12, 2059 yellowfin tuna were kept on average each year in April and May in the Gulf of Mexico (NOAA 2014, Table 4.12). In 2016, that number rose to 2842 yellowfin tuna, a 38% *increase* (NOAA 2018, Table 16). Similarly, when looking at fleet and target catch trends, it is important to remember that attrition in the longline fleet has been happening for more than a decade for many reasons, many of which have nothing to do with regulations (e.g., aging captains and boats; Figure 1).

Figure 1. Number of Directed Swordfish Longline permits and Atlantic Tunas Longline permits, 1999-2018, showing that the attrition in the longline fishery began long before Amendment 7 was implemented in 2015. (Source: NOAA)



Furthermore, the U.S. has *never* landed its full baseline swordfish quota and has landed at least 40% below the quota as early as 2006; A7 is not the reason for the underharvest. The DEIS even predicts a decrease in overall revenue, including a decrease in average annual revenue per vessel due to Preferred Alternative C3, primarily due to a decrease in swordfish catch (NOAA 2019b). To repeat, NOAA estimates

that reopening the GRAs to fishing in April and May as proposed would *decrease* revenue compared to leaving them in place from $627,842 to $501,799-$626,885, up to a 20% decline in revenue.

Furthermore, any relatively minor reductions in target catch because of the GRAs are offset by the ability to use alternative gears in the GRAs, including with funding through the *Deepwater Horizon* Oceanic Fish Restoration Project's longline repose program. The repose program is also a factor in decreasing fishing effort in the Gulf since the participating vessels are voluntarily opting to be compensated not to fish with pelagic longlines. Note that the increase in yellowfin catch mentioned in the prior paragraph occurred even though fewer boats are fishing due to the repose program. Amendment 13 will also hopefully make it easier for longliners to fish with alternative gears in the Gulf.

Preferred Alternative C3 is unscientific and ill-advised

Preferred Alternative C3 would allow fishing in the Gulf GRAs until 63,150 pounds of IBQ allocation had been caught. There are many flaws with this proposal:

1. It would effectively double the IBQ available to the Gulf in April and May – and thus the potential mortality – since the value was chosen based on the 2015-17 IBQ share for April and May. To put this in perspective, this proposed tonnage is equivalent to nearly 30 mt, or almost three times the entire U.S. bluefin tuna longline mortality in the Gulf of Mexico (including dead discards) for all of 2017 (11.7 mt, NOAA 2018b). It is as if this threshold is to encourage the fleet to catch more bluefin now that they are finally avoiding them.
2. To prevent overages, this proposal would require real-time reporting and quota monitoring, something that has not been achieved to date. Given the specific poundage, it assumes 100 percent accuracy in reporting, which is unattainable. It is also unclear how dead discards could be counted in real-time toward the threshold given the months-long lag in dead discard estimates.
3. NOAA prefers this alternative under the guise of scientific research, as an "evaluation," a "monitoring area," yet there is no scientific methodology proposed to test the effectiveness of the GRAs. Years of research, including from electronic tagging and observer studies, led to the current siting of the Gulf GRAs in time and space, yet according to the long List of Preparers in the DEIS, **none of the bluefin scientists at the Southeast Fisheries Science Center were even consulted when developing this preferred alternative**. Furthermore, NOAA is undergoing an effort to determine a robust method for evaluating closed and gear restricted areas, and any future effort to evaluate the effectiveness of the Gulf GRAs should follow that to-be-determined methodology (NOAA 2019c). Nonetheless, in the mere four seasons that the GRAs have been in place, it is highly unlikely that conditions have changed to the point that the original scientific justification for the current GRAs is in question. Furthermore, the GRAs are not causing increased uncertainty in the status of the stock or otherwise, as is alluded to in the proposed rule.
4. A single disaster set in the Gulf GRAs would undermine the entire system. Only the fully implemented GRAs can avoid bluefin interactions and associated mortality for the time and area of peak spawning and bluefin interactions, as meticulously examined and determined during the

Amendment 7 development process. If NOAA allows fishing to move back into these spatiotemporal hot spots, a disaster set or sets become much more likely, reversing the conservation gains of the Gulf GRAs and complicating IBQ accounting.

Maintain or expand the Gulf GRAs

The Gulf GRAs are also well sited, in both time and space. We strongly recommend that NOAA select Management Option C1: No Action. The Gulf GRAs have been in place for just four spawning seasons and have been more effective at reducing wasteful mortality of spawning bluefin tuna than expected. Amendment 7 estimated just a 32 percent reduction in annual bluefin interactions in the Gulf (NOAA 2014), but average annual interactions have declined by 70 percent (NOAA 2018). It is premature and ill-advised to give any further consideration to modifying the Gulf of Mexico GRAs now. If anything, based on recent catch rate data (NOAA 2019b; included as Figure 2 below), any modification should be to extend the spatiotemporal extent of GRAs (one big box plus the month of March), rather than this preferred alternative to undermine the success of the current GRAs.

Figure 2. Bluefin tuna catch per unit effort, April-May, 2015-2017, showing interactions around the borders of the GRAs. (Source: NOAA 2019b)

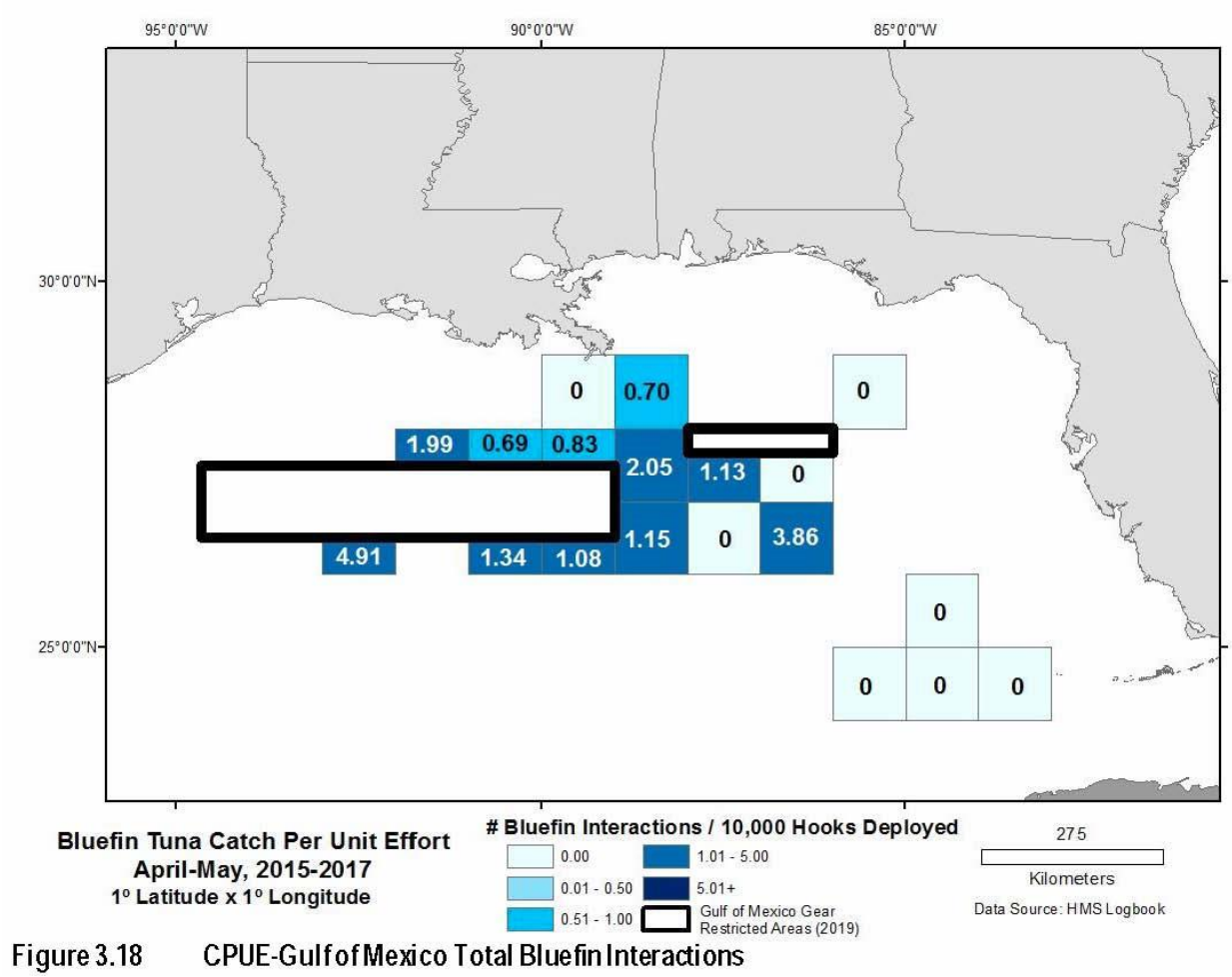


Figure 3.18 CPUE-Gulf of Mexico Total Bluefin Interactions

Gulf of Mexico Weak Hook Alternatives: We support Preferred Alternative D2: Seasonal requirement (January – June) for Weak Hooks.

Year-round use of weak hooks has been mandatory in the Gulf of Mexico since 2011, intended to straighten and release large spawning bluefin tuna from longlines. The weak hooks are another success story, having reduced dead discards of bluefin in the Gulf of Mexico by almost 75 percent (NOAA 2018). Research with hook timers found that the weak hooks release fish soon after hook-up, suggesting high survival rates of bluefin tuna that straighten and release from the weak hooks (Foster and Bergmann 2012). However, there is some concern that weak hooks reduce target catch, although the data in Appendix B (Table C.2) show a dramatic increase in CPUE and overall interactions for yellowfin tuna, the primary target species of the Gulf longline fishery (NOAA, 2019b). There is also concern that weak hooks increase catch of white marlin and roundscale spearfish, although that could be a result of stock growth of the species, unrelated to the weak hooks.

Nevertheless, we support a compromise to change the year-round requirement to a seasonal requirement for the months of January through June. This 6-month weak hook mandate would maintain protection for spawning bluefin tuna during the months of highest longline catch rates, while allowing the use of regular hooks for the other half of the year, including the months of higher white marlin catch rates (NOAA 2019b, Figure 4.18). We emphasize the fact that we support this change since bluefin tuna are much less abundant in the Gulf in July through December, not because we think the IBQ program has in any way made the weak hook rules redundant.

Northeastern United States Closed Area: We support Alternative A1: No Action.

The Northeastern area has been closed to longline fishing in June since 1999 due to high bluefin tuna mortality in the area. There are no data from longline fishing in June in the area since the closed area's inception. It is possible that spatiotemporal changes to the closure may be warranted, particularly a seaward expansion based on the data shown in Figure 4.1 of the DEIS and/or a temporal expansion to include both June and July based on monthly landings data by state. However, until data are collected via a rigorous scientific study that includes fishing in the closed area in June, it would be virtually impossible to reliably estimate impacts of any spatiotemporal changes. That said, the landings data included in Table 3.10 of the DEIS suggest that there could be a sizeable increase in bluefin mortality due to reopening the June closed area (NOAA 2019b).

Any changes to the Northeastern closure, especially any changes that would decrease the spatiotemporal extent, should be evaluated through a carefully designed research program conducted by NOAA scientists. Coincidentally, the timing is opportune since NOAA is undergoing a process to develop this type of methodology for research in closed areas, so that methodology could be applied to the Northeastern area as soon as it has been agreed (NOAA 2019c).

As mentioned above, NOAA's preferred alternative to undertake an "evaluation" and establish a "monitoring area" by setting a threshold for catch does not qualify as a scientific approach to

determining the effectiveness of the closed areas. The preferred alternative is also flawed due to the reporting and quota monitoring issues identified above. In addition, the 150,519-pound threshold for June in just the Northeastern area is equivalent to 68 mt, almost the entire longline catch for all months and all areas of 2018 (88.1 mt). It is hard to argue that threshold is in any way limiting as part of an "evaluation" program.

The Northeastern area has been closed in June for nearly 20 years, and it is reasonable to revisit the effectiveness and suitability of the spatiotemporal boundaries. However, it is critical that NOAA collect additional data through a rigorous scientific research program before it can perform the necessary analyses to evaluate the potential impacts of any changes.

Cape Hatteras Gear Restricted Area: We support Preferred Alternative B2: Eliminate the Cape Hatteras Gear Restricted Area.

Since the inception of the Cape Hatteras GRA, only a small fraction of pelagic longline vessels active in the area have been excluded from fishing there (NOAA 2019b). It is therefore difficult to gauge the effectiveness of the closure, since so many vessels continue to fish there during the GRA months. In addition, the performance-based access is controversial, since there are concerns that the bluefin interactions performance metric may inadvertently reward underreporting and/or dropped dead discards. These concerns were discussed during the development of Amendment 7 and continue, even with the new video monitoring requirements. For these reasons, we support NOAA's proposal to eliminate the Cape Hatteras GRA but urge close oversight over bluefin interactions in the region in the coming years to detect any significant increases in bluefin tuna interactions or catch rates.

Conclusions

The Pew Charitable Trusts and The Ocean Foundation commend NOAA Fisheries on the success of Amendment 7 at meeting its multiple objectives. NOAA dedicated more than six years to developing Amendment 7, with countless hours of staff analysis, deliberation and broad stakeholder consultation. The International Game Fish Association, American Bluefin Tuna Association, individual Gulf longline fishermen and academics, and The Pew Charitable Trusts worked hand in hand supporting NOAA as they endeavored to curb decades of waste and quota overages in the longline fishery. A combined 300,000 individuals and over 250 organizations and businesses joined us to support new protections for bluefin, including the GRAs and the weak hook requirement, and approximately 13,500 individuals echoed that call last spring during the scoping period for this rule. Now, this collaborative, science-based effort is paying off more than even NOAA expected. We look forward to working with you to ensure that this rulemaking does not undermine Amendment 7's success. Most importantly, **the Gulf of Mexico GRAs should not in any way be weakened**.

Thank you for your time and consideration.

Sincerely,

Thomas Wheatley
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The Pew Charitable Trusts

Shana Miller
Senior Officer, International Fisheries Conservation
The Ocean Foundation

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