OCEANA | Protecting the World's Oceans
1350 Connecticut Ave. NW, 5th Floor
Washington, DC 20036 USA
+1.202.833.3900
oceana.org

July 14, 2014

Chairman Richard B. Robins, Jr.
2014 Council Coordination Committee
Mid-Atlantic Fishery Management Council
800 N. State Street, Suite 201
Dover, DE 19901

Dear Chairman Robins:

We received your recent letter on behalf of the Council Coordination Committee regarding Oceana's March 2014 report *Wasted Catch: Unsolved Problems in U.S. Fisheries*. We have evaluated your concerns and provided comprehensive explanations and examples to address them in the following pages. Oceana stands by the *Wasted Catch* report, which uses the most comprehensive and recently updated data available from the federal government and does not include factual inaccuracies or misinformation.

Many of the criticisms outlined in the letter from the Council Coordination Committee are related to data taken from the National Marine Fisheries Service's *National Bycatch Report* (NBR), which was also communicated by the Council Coordination Committee at its 2014 meeting in Virginia Beach. While much of our report is based on government data obtained from the national report, more recent data from specific fisheries were used where appropriate. As noted in the report, we made the decision to focus on the NBR for nationwide consistency. As you are fully aware, fisheries data are not reported in the same manner in each region; therefore, the most consistent source of data was, and continues to be, the 2014 NBR.

Contrary to concerns raised in your correspondence, the report does highlight positive steps that have been taken to reduce bycatch in U.S. fisheries. The purpose of *Wasted Catch*, however, is to provide a national overview of the problem of bycatch suited for the general public, to highlight the fisheries and gears that still need improvement, and to suggest solutions that would further reduce bycatch. The report was not intended to chronicle the status and progress of every fishery in the U.S. We understand that an overview such as this cannot capture every detail of every fishery, which is why we call on the National Marine Fisheries Service (NMFS) to compile and publish better quality data and full fishery reporting in future national bycatch updates. We call on the Council Coordination Committee to reiterate this request for improved reporting and to actively work toward achieving regional consistency.

In the pages below, we have addressed the Council Coordination Committee's specific concerns with *Wasted Catch* to clarify our intentions with the report and our future goals. We hope that these responses resolve your concerns and that we can continue to work with the Councils and NMFS in developing and implementing fisheries management measures that benefit both fishermen and fishery resources.

OCEANA | Protecting the World's Oceans
1350 Connecticut Ave. NW, 5th Floor
Washington, DC 20036 USA
+1.202.833.3900
oceana.org

List of Concerns Identified by the Council Coordination Committee

GENERAL COMMENTS

The Definition of Bycatch

The report states that "Bycatch is the capture of non-target fish and ocean wildlife, including what is brought to port and what is discarded at sea, dead or dying" (p. 6). It would be more helpful and less confusing to have aligned your definition with the Magnuson-Stevens Act, which would be all unused/discarded fish, regardless of condition (dead or surviving discarding). It would also be helpful to cite current discard mortality rate estimates when they are available.

Section 3 of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) defines "bycatch" as fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. In the Oceana report, we define bycatch as the catch of non-target fish and ocean wildlife, including what is brought to port and what is discarded at sea. There are no significant differences between these two definitions that are misleading when discussing the general impacts of bycatch. Furthermore, our definition is important for thinking about retained incidental catch, such as juvenile fish, that are brought to port and reduced and sold as fish meal. It is important that this bycatch is avoided in the first place, which is supported by the MSA.

We agree that discard mortality rates are important, but are most appropriate for fishery and gear-specific studies. Unfortunately, they are not often available; they should be included in future reporting by NMFS.

Bycatch vs. Marine Mammal Mortality

The report states that "Bycatch exceeds mortality limits established by law for 20 percent of the marine mammal populations in the U.S." (p. 13). Bycatch and mortality of marine mammals are two different things, and this is a mismatched comparison.

This statistic was not meant to conflate mortality with bycatch. Oceana simply used common language to explain a complex term, Potential Biological Removal (PBR), in a reader-friendly way. However, in the case of marine mammals, bycatch often leads to mortality, serious injury, diminished reproductive capacity or other stress-induced illness. For this reason, it is important to establish hard limits on the capture and mortality of protected species.

Minimizing Bycatch through Habitat Conservation

The report states that conservation of habitat for juvenile fish would minimize bycatch (p. 32). This assumes that protecting habitat affects the number of discards.

This assertion is a misrepresentation of Oceana's statement. The report states that a possible solution in the Northeast bottom trawl fishery is to "Conserve habitat for juvenile fish to bolster the recovery of depleted stocks and minimize bycatch."

Conserving habitat helps stocks rebuild, and when they do so, a healthy size distribution will allow for more efficient catch of legal-sized fish with less bycatch than when targeting a depleted stock. Conserving essential fish habitat for spawning, breeding, feeding and growth to maturity by juveniles is a common approach supported by the Magnuson-Stevens Act and subsequent guidance on Essential Fish Habitat (EFH) conservation. Furthermore, identifying juvenile habitat and minimizing fishing in these areas will reduce interactions with juveniles, effectively reducing bycatch.

OCEANA | Protecting the World's Oceans
1350 Connecticut Ave. NW, 5th Floor
Washington, DC 20036 USA
+1.202.833.3900
oceana.org

Theme of Notable Progress

While section titles in the report suggest some "notable progress," the lack of time series information to describe trends means that readers cannot interpret the snapshot provided in the report in terms of whether or not (or to what extent) progress has been made in reducing bycatch.

The *Wasted Catch* report explicitly mentions progress with a number of different examples:

- "In Alaska groundfish fisheries, halibut and salmon are prohibited species that cannot be targeted or brought to port, and they are managed with a bycatch limit in trawl fisheries targeting pollock, sole, flounder and cod. If fishermen exceed the bycatch limits, they risk prematurely ending their season. In 2012, the North Pacific Fishery Management Council voted to reduce halibut bycatch quota by 15 percent in the Gulf of Alaska trawl fishery, bringing the limit to approximately 4 million pounds." (p. 16)

- "Additionally, in 2011, after years of Oceana advocacy, New England sea scallop fishermen developed a new type of dredge that included deflector panels and other components to minimize the number of sea turtles caught and crushed by the heavy steel gear." (p. 20)

- "For example, in 2003, the California Fish and Game Commission banned the use of bottom trawls to catch spot prawns in Southern California. This fishery had previously discarded 17 pounds of fish (many of them severely depleted rockfish) for every 1 pound they kept. After the ruling, fishermen transitioned to using traps instead, a move that dramatically reduced bycatch and improved the market value of the spot prawns they sell." (p. 21)

- "For example, pollock trawl companies have implemented an electronic monitoring system using real-time reporting from other fishermen in a cooperative effort to avoid bycatch hotspots. In order to comply with bycatch limits, Alaska trawl fishermen report where and when they encounter the most salmon each day so that the information can be circulated to the entire fleet and others can avoid these hotspots. This approach keeps the fleet fishing longer and saves salmon, representing hundreds of thousands of dollars in economic value." (p. 22)

- In 2013, New England scallop fishermen, in conjunction with the University of Massachusetts, developed a similar technique to avoid catching yellowtail flounder, which dramatically reduced bycatch and allowed the fleet to maintain access to lucrative fishing grounds. Fishermen report bycatch through the program, which in turn disseminates near real-time information so the entire fleet can avoid bycatch hotspots." (p. 22)

Direct quotes from Oceana staff in the media:

- "Cano-Stocco acknowledges that the United States is actually one of the better nations when it comes to preventing unnecessary carnage to the creatures of the sea."
  Report: A fifth of U.S. fish are tossed out
  By Jason Huffman, March 20, 2014

- "'Proven solutions and innovative management strategies can significantly reduce the unnecessary deaths of sharks, sea turtles, dolphins and other marine life, while maintaining vibrant fisheries,' said Dr. Geoff Shester, California program director at Oceana."
  Bycatch' Is Likely On Your Dinner Plate
  By Joan Reddy , March 21, 2014

- "While pressing for better data, conservation groups including Oceana hope to hold on to what they see as improvements in fisheries stocks benefiting from the changes made in 2006. 'We are looking to make sure that we don't roll back the progress on our fisheries,' Cano-Stocco said. 'There's been better management in place, so we certainly don't want to see that go away.'"
  Report: Weak Oversight Leaves Endangered Species Vulnerable to Fishermen's Nets
  By Randy Leonard, March 20, 2014

- "Oceana said that although U.S. fishermen have made great progress in reducing what's known as bycatch – sea life that becomes indiscriminately ensnared in nets or lines – up to 22 percent of the overall catch is still tossed back into the water."
  9 dirtiest fisheries: 2 California industries make the list, Oregon absent
  By Lynne Terry, March 21, 2014

REGIONAL CONCERNS

MID-ATLANTIC

Turtle Bycatch
The National Bycatch Report Update (p. 22) does state the average turtle interaction rate for Mid-Atlantic bottom trawl (fish and scallop) fisheries to be 353. However, only 110 of those are in the summer flounder, scup, and black sea bass fisheries (scallops and croaker account for most of the rest), and that 110 is composed of 60 turtles estimated caught and 50 turtles that were estimated to have interacted/escaped with turtle excluder devices.

This comment, as is stated in the Council's own letter to Oceana, has more to do with how fisheries are delineated and compiled in the *National Bycatch Report.* We will take care to distinguish between fisheries identified by target catch versus those identified by gear in the future. However, in this case, Oceana should have noted these 350 captures as inclusive of both mortalities and interactions.

In addition, in the 2012 summer flounder, scup, and black sea bass specifications environmental assessment, it notes that for 2008-2010 there were 12 actual (versus extrapolated) observed sea turtle takes (all loggerhead) and that 10 of those were released alive (83%) and 2 (17%) were dead.

There will always be a difference between observed and estimated events. Only focusing on observed bycatch grossly underestimates the actual takes and represents a dangerous course for any fishery management organization. Extrapolated estimates are derived by NMFS and widely accepted as being important to report, therefore Oceana's use of these estimates is appropriate. If better information about sea turtle bycatch in the summer flounder, scup and sea bass fishery was available as of 2012, it should have been incorporated into the updated NBR. Oceana is happy to report on the successful reduction of bycatch, but can only do so if the updated information is publicly available.

NEW ENGLAND

Target Species
For example, the placement of halibut as the first target species for the bottom trawl fishery is a misrepresentation as current regulations allow vessels to only land one halibut per trip.

The ordering of target species was not intended to reflect relative importance. Oceana included halibut in the summary of the Northeast bottom trawl fishery to describe the nature of the fishery with recognizable species for a public audience. At no time does this report attach relative catch magnitude or importance to this list.

Sturgeon Mortality Rates
The report states that the New England and Mid-Atlantic Gillnet Fishery is responsible for "more than 1,200 mortalities" of sturgeon (p. 36). While "more than 1,200" is applicable to total bycatch, observer "data indicates that mortality rates of Atlantic sturgeon caught in…gillnet gear is approximately…20%", again confusing bycatch versus mortality.

Both the map on p. 27 and the fact sheet on p. 36 state "1,200 endangered sturgeon were captured as bycatch each year from 2006-2010," which specifically distinguishes between bycatch and bycatch mortality. Oceana once again calls attention to the need to manage takes of Endangered Species Act (ESA) species in addition to bycatch. Because of the recent listing of sturgeon under the ESA, overall takes (both lethal and non-lethal) are important and must be accounted for in assessing the overall performance of the fishery.

Sea Turtle Mortality
The report references the U.S. National Bycatch Report Update and provides an estimate of 350 sea turtle mortalities in the New England and Mid-Atlantic gillnet fisheries. This is a misrepresentation of the data as it implies 100% of the turtles are killed.

As noted above, this should have been documented as "bycatch" or "interactions" rather than "mortalities." However, Oceana calls attention to the multiple requirements of the Magnuson-Stevens Act and Endangered Species Act when managing takes and bycatch of ESA species. The unknown fate of a bycaught endangered or threatened animal highlights the need for managers to establish take limits that account for the high uncertainty of post-release mortality rates.

Interactions with sea turtles in this region are unlikely because sea temperatures are colder than those preferred by sea turtles. It is unclear why this is included as one of the problems for the northeast bottom trawl fishery.

The *Wasted Catch* report clearly includes sea turtle bycatch as an issue with the Mid-Atlantic bottom trawl fishery with annual estimates (p. 35). The inclusion of sea turtles as an issue to be addressed in the Northeast bottom trawl fishery is based on geography of the fishery "modes" created by the Northeast Region Standardized Bycatch Reporting Methodology that blur the catch of Northeast and Mid-Atlantic fisheries. The lack of fishery-specific turtle bycatch management is the point we intended to make with the highlighted bullet.

Northeast Bottom Trawl Discards
The report states that shrinking quotas encourage discarding (p. 32); the logic used to construct this statement is not intuitive and should be further explained.

This comment paraphrases our text from page 32, which states that "Shrinking quotas encourage and even require many marketable fish to be discarded instead of being brought to port, an approach that does not conserve fish or benefit fishermen." We understand that quotas are critical to ensuring that overfishing does not occur and that fishermen do not like to throw fish away. Further, it should be noted that the New England Fishery Management Council's own team of experts, the Groundfish Plan Development Team,

noted its concern with incentives to discard as recently as October 2012, with this advice to the Council: "With the expected low ACLs in FY 2013, the incentives to discard constraining stocks may increase."[1]

Skate Discards
The report states that the discarding of millions of skates in the bottom trawl fishery will likely cause a change to the population and the ecosystem, however, no supporting reference is provided.

Researchers have noted that skate populations are not immune to the impacts of overfishing. Barndoor, thorny and winter skates have been depleted in the Northeast region, requiring landing prohibitions and trip limits. This statement was meant as a generalization of the potential consequences of high fishing mortality on a species complex, where serial depletion of species could occur before lagging stock assessments document the problem. The sentence also uses the word "change" and does not say by how much or in which direction. Oceana supports sustainable skate fisheries, but this will only be possible with species-specific reporting and when management measures can simultaneously recover depleted stocks while allowing harvests of more abundant ones.

PACIFIC

Harpoon Fishery for Swordfish
The report does not reveal that harpoon gear is comparatively inefficient, and the method is considered artisanal rather than commercially viable. In other words, a harpoon fleet could not sustain the fishing community.

The harpoon fishery for swordfish is the oldest swordfish fishery on the West Coast, historically supporting a vibrant fishing community. At its peak in 1979, prior to the authorization of drift gillnets, the harpoon fishery landed over 1,600 metric tons of swordfish, according to the California Department of Fish and Wildlife. That is comparable to annual swordfish catches by drift gillnets in the 1980s and far greater than any annual swordfish catches with drift gillnets in the past 18 years. We recognize that harpoons are not as efficient at catching swordfish as drift gillnets, largely explaining why drift gillnets have largely outcompeted harpoons. This trend is common in high-bycatch fisheries and explains why cleaner gears are outcompeted by high-bycatch gears. However, this does not mean that cleaner gears like harpoons are inherently not "commercially viable." In fact, harpoon-caught swordfish are still landed off California, sometimes in combination with swordfish caught with other methods, and it is a commercially viable swordfish gear in the Atlantic. Without explaining why harpooning is no longer commercially viable given its history in California, and without identifying the various challenges associated with increasing harpoon landings under current conditions, we find the CCC's general statements about harpooning misleading and factually inaccurate. Oceana believes it would be more productive to work collaboratively on ways to promote swordfish landings with harpoons and other proven clean gear types as a solution to the bycatch problems associated with the drift gillnet fishery.

Sunfish Bycatch
The national report uses observed individuals expanded for sampling rate, while the SAFE document for the California drift gillnet fishery also notes that 98% of the ocean sunfish (molas) are returned alive and undamaged. The ocean sunfish catch represents 91% of the total bycatch in the California drift gillnet fishery.

[1] NEFMC, 2012. Memo to Groundfish Oversight Committee, available: http://www.nefmc.org/nemulti/council_mtg_docs/Nov%202012/5_121012_PDT%20Meeting_Ver3.pdf

For the two California fisheries (swordfish drift gillnet and halibut set gillnet), we used the most up-to-date data summaries and reports from the West Coast region observer program.[2] Since this has the precise number of each species kept and discarded, it represents more accurate and up-to-date information than the national report or the SAFE reports.

The definition of bycatch in the Magnuson-Stevens Act (used by the Pacific Fishery Management Council) includes all commercial discards and does not specify between alive and dead. Since this report is centered on bycatch, we conducted our analyses on total commercial discards for consistency across fisheries. For some species, post-release mortality studies have been conducted, and therefore it is possible to obtain estimates of bycatch mortality. However, without such studies, the appropriate precautionary approach is to assume 100 percent discard mortality. For example, assuming 100 percent mortality is the standard for discards in the West Coast groundfish trawl fishery. Although onboard observers note that many ocean sunfish (*Mola mola)* are considered alive upon release, we are unaware of any post-release mortality studies for this species in drift gillnets. Without such studies, it would be inappropriate to ignore the live discards or assume that all "live" sunfish survived without impacts. Furthermore, NMFS has not prepared a stock assessment on ocean sunfish, nor many other discarded finfish, so there is no way to tell what the impact is on this population. Therefore, before discounting the high level of ocean sunfish discards in the drift gillnet fisheries, we urge the Council to seek studies of post-release mortality and an assessment of the effects of the high levels of discards on the ocean sunfish population.

Observer Estimates

The report states that in 2010, an estimated 49 dolphins and 16 endangered sperm whales were seriously injured and killed in the California drift net fishery (p. 31) and that these numbers could be underestimates because observers cover less than 20 percent of the total fishing effort and almost half the boats are never observed at all. As mentioned above, the estimates from the National Bycatch Reports are expanded for sample rate, and therefore may be underestimates or overestimates.

The numbers in our report come directly from the NMFS West Coast Region Observer Summaries and Reports (not the national reports), and the estimates are expanded for sample rate. These numbers were confirmed by NOAA Administrative Report LJ-12-01 by James Carretta and Lyle Enriquez. We acknowledge that the numbers could possibly be overestimates; however, Carretta and Enriquez point out several fundamental problems in the observer sampling which could bias the results, specifically the lack of randomness in the sampling:

> "The fraction of swordfish and thresher shark drift gillnet effort in 2010 that involved 'unobservable' or 'unobserved' vessels was approximately 40-45% of the total estimated effort, which raises concerns about the randomness of the observer sample. An underlying assumption of ratio estimation is that unobserved and observed fishing effort is 'equivalent'. This assumption requires that unobserved vessels are compliant with pinger, extender length, closure area, and other gear regulations, and that bycatch rates are no different from observed vessels. If bycatch rates on unobserved vessels are significantly different, this would bias the resulting bycatch estimates." (Carretta and Enriquez 2012, p. 6.)

Unfortunately, with the low levels of observer coverage and a high proportion of vessels that are never observed, there is significant uncertainty in the magnitude of total bycatch in this fishery. We believe it is

[2] NMFS 2007-2012. Fisheries Observer Program Data Summaries and Reports, available: http://www.westcoast.fisheries.noaa.gov/fisheries/wc_observer_programs/sw_observer_program_info/data_summ_report_sw_observer_fish.html

likely that the "observer effect," when fishing behavior differs with an observer onboard, may be in play, and it does not accurately represent fishery behavior of the entire fleet. That is another reason why Oceana has been requesting 100 percent observer coverage of the California Drift Gillnet Fishery, combined with hard caps on all protected marine life and discarded species.

WESTERN PACIFIC

Western and Central Pacific Purse Seine Fisheries
The report omits U.S. purse seine fisheries operating primarily in the Western and Central Pacific, which make a considerable number of sets on fish aggregating devices (FADs). FAD sets are known to have substantial bycatch of juvenile bigeye tuna, and a range of other non-target pelagic species, most of which are all discarded.

While bycatch occurring while fishing on FADs is concerning, Oceana was looking to draw attention to gear types that consistently have high bycatch wherever they are used (i.e. trawls, gillnets and longlines). Oceana is also aware that a number of groups with strong regional expertise are focused on reducing bycatch in central Pacific purse seine fisheries.

Bycatch and Depletion of Stocks
The tacit assumption that bycatch leads to depletion of stocks is naïve and uninformed, and should not be applied uniformly to all species in a stock complex.

Oceana does not make this blanket assertion in the *Wasted Catch* report. This concept is expressed in such ways as bycatch *can* lead or *has* led to the depletion of stocks, which does not imply that bycatch always leads to the depletion of stocks:

- Page 8: "Discarding large quantities of fish can lead to overfishing, prevent populations from recovering after decades of overexploitation, and disrupt the natural balance of marine ecosystems."

- *Wasted Catch* mentions this risk in the context of shark management (p.19) with this statement: "The continued depletion of shark species in the U.S. and around the world highlights the importance of stronger regulations to minimize bycatch." As very few fisheries target sharks, Oceana stands behind this statement and repeats the call for more effective management of shark bycatch in longline and other fisheries.

Longline Fishing Gear
The report identifies longline fisheries as one of the three "harmful" gear types. However, longline fisheries, with sufficient gear modification and monitoring can be a "clean" gear, as demonstrated by the Hawaii longline fishery.

Although Hawaii's longline fishery has been successful in reducing bycatch, it does not mean that all longlines have made similar improvements. We specifically focus on the Southeast snapper-grouper longline fishery and the Atlantic Highly Migratory Species longline fishery because they have high discard rates or a high impact on ESA-listed species. The main theme of *Wasted Catch* is promoting gear modification to reduce bycatch and improve efficiency. The report repeatedly states that longlines, gillnets and trawls can and should be modified through gear changes or management practices. We encourage continued research to support these kinds of temporal, spatial, or other adaptations to improve catch efficiency and reduce bycatch.

Loggerhead Bycatch
The comments in the report regarding the increased loggerhead take limit in the Hawaii longline swordfish fishery are erroneous.

Each fact in the referenced section on page 16 reflects recent science and policy decisions. From the Federal Register on October 4, 2012: "In this final rule, NMFS is revising the annual limits on incidental interactions that may occur between the fishery and leatherback and North Pacific loggerhead sea turtles to 26 and 34 interactions, respectively. If the fishery reaches either of the interaction limits in a given year, NMFS would close the fishery for the remainder of that year."[3]

GULF OF MEXICO

Shrimp Bycatch Rates and Improvements
Estimates that shrimp bycatch is 10 pounds for every pound caught (p. 23 and p. 24) neglect to include the efforts to reduce bycatch since the 1990's (when this ratio was estimated). Since the implementation of many management measures, bycatch estimates have been reduced to somewhere between 4:1 and 6.5:1, and, just as importantly, reduction efforts are still ongoing.

Oceana does not refute that improvements have been made. The referenced sections in *Wasted Catch* report "as much as 4-10 pounds of bycatch per 1 pound of marketable shrimp they bring to port," and that ratios have been as high as 10:1. This range captures the figures cited in the Council Coordination Committee critique and is fully footnoted to reports as recent as 2011. The discard rate of 64 percent is identical to that reported by NMFS in 2014.

TED Compliance Rates
In direct contradiction, NMFS found that 75% of inspected vessels were fully compliant with TEDs and that those that were non-compliant were because of the angle of the TED.

Oceana's 21 percent compliance rate was derived from the National Oceanic and Atmospheric Administration's enforcement memos received via a Freedom of Information Act request in 2011. Missing from this regional view is that not a single inspected vessel was found to be in compliance in Mississippi or Florida, while the highest compliance rate was found in Georgia, at only 47 percent. This report is cited as footnote 28 in *Wasted Catch*.

Turtle Mortality
According to the NMFS National Bycatch Report Update (p. 12), there were an estimated 6,199 turtle mortalities in 2010 for the Gulf of Mexico shrimp trawl fishery and the Southeastern Atlantic shrimp trawl fishery combined, nearly an order of magnitude (8 times) lower than described in the Oceana report.

In 2014, NMFS most recently estimated that more than 53,000 sea turtles are killed in Southeast shrimp trawls each year, with approximately half a million interactions.[4] According to the most recent Biological Opinion, observer data are not reliable enough to calculate bycatch estimates, and we eagerly await more accurate data in the future.

[3] http://www.fpir.noaa.gov/SFD/pdfs/77_FR_60637-Final_Rule-HI_SS_LL_sea_turtle_interaction_limits_2012-10-04.pdf.
[4] National Marine Fisheries Service. 2014. "Reinitiation of ESA S.7 Consultation on the Continued Implementation of the Sea Turtle regulations and the Continued Authorization of the Southeast U.S. Shrimp Fisheries in Federal Waters under the MSA." NOAA Southeast Regional Office, Protected Resources Division, St. Petersburg, FL.

The statement that the southeast snapper-grouper longline fishery "likely" causes "significant mortalities" to sea turtles (p. 28) is false; sea turtles were not listed as heavily affected by the southeast snapper-grouper bottom longline fishery.

Oceana would welcome evidence that Southeast longline fisheries do not have significant bycatch of sea turtles. Unfortunately, data reported in the NBR remains highly uncertain, with coefficients of variation for sea turtle bycatch in Southeast fisheries ranging from 0.69 to 33.7, implying that the variation (or degree of imprecision) is as much as 3,370 percent of the actual estimate for the snapper-grouper vertical line fishery, in the latter case. Oceana understands that deriving accurate and precise bycatch estimates for protected species is not easy, but it is difficult to ascertain the impact of fisheries from existing data. Therefore, we believe the word "likely" remains appropriate until other evidence is available.

Oceana would like to highlight recent work in the Southeast region to address turtle bycatch in the Gulf of Mexico bottom longline fishery through time-area management. The failure of South Atlantic fishery managers to take similar action unnecessarily puts sea turtle populations at risk, and Oceana calls on the South Atlantic Fishery Management Council to ensure that the turtle takes are not excessive in this fishery.

Dusky Shark Bycatch
On page 19, there is no delineation that the bycatch estimates of dusky sharks are based on bycatch values spanning 4 years from the NMFS bycatch report.

As is the case for all bycatch estimates in the Southeast region, entries are either spanning four years or from a single year. However, when they span four years, the table legend notes that those are yearly averages, so they do in fact apply to one year. Additionally, this means that in some years bycatch is significantly higher than those estimates, which could be concerning for an overfished species such as dusky sharks.

Landings (Pounds) vs. Bycatch (Individuals)
The claim of a 66% discard rate in the bottom longline fishery is not validated by the NMFS National Bycatch Report Update, which does not present a bycatch ratio or percentage; these values cannot be estimated because landings are reported as pounds, and bycatch is reported as individuals.

In *Wasted Catch*, bycatch is reported in pounds on all of the fishery fact sheets for consistency (pages 28-36). Bycatch reported in individual fish does present a computational challenge for conducting an overview study such as this. In an effort to derive nationwide robust bycatch estimates, we took a conservative approach to convert the number of discarded fish into pounds using five and ten percent of maximum weights for individual species to reflect our assumption that the majority of discarded fish are juveniles. While this might be a generalization, it is a conservative one and is explained in the report. NMFS recognizes that this inconsistency in reporting should be addressed in future NBR updates, which we look forward to seeing in the future.

SOUTH ATLANTIC

Target Species in South Atlantic
On page 28, the statement that "Seven out of eight targeted species in this fishery are still being overfished in the South Atlantic, and bycatch estimates remain unknown" is not factually correct.

These facts may have been outdated by the time the report was released. According to our interpretation of the 2013 Fish Stock Sustainability Index (FSSI) tables, of the 17 stocks within the South Atlantic

OCEANA | Protecting the World's Oceans
1350 Connecticut Ave. NW, 5th Floor
Washington, DC 20036 USA
+1.202.833.3900
oceana.org

Snapper-Grouper Fishery Management Plan, six are either overfished or overfishing continues, and nine have an unknown overfishing status, which is no less concerning.

CONCLUSION

In summary, Oceana fully stands by the report and will continue to raise awareness about ongoing bycatch problems. We can agree that quality bycatch data are essential for making informed management decisions and that we share the common goal of reducing bycatch in fisheries where it remains a problem. Despite notable improvements that have been made in many U.S. fisheries, there is more that can be done to improve fishing selectivity, accountability measures, and catch monitoring to benefit the understanding and management of bycatch into the future. We hope that these responses resolve your concerns and that we can continue to work with the Councils and NMFS in developing and implementing fisheries management measures that benefit both fishermen and fishery resources.

Sincerely,

Dominique Cano-Stocco
Responsible Fishing Campaign Director

cc: Eileen Sobeck
Assistant Administrator, NOAA Fisheries
1315 East-West Hwy
Silver Spring, MD, 20910