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February 5, 2018

Attn: Jennifer Schultz
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910

Re: 90-Day Finding on a Petition To Identify the Northwest Atlantic Leatherback Turtle as a Distinct Population Segment and List it as Threatened Under the Endangered Species Act

Dear Jennifer Schultz,

On behalf of the Center for Biological Diversity (The Center) and Turtle Island Restoration Network (TIRN), we submit this letter regarding the announcement by the National Marine Fisheries Service (NMSF) of the 90-day finding on a petition to identify the Northwest Atlantic leatherback turtle (*Dermochelys coriacea*) as a Distinct Population Segment (DPS) and list it as threatened under the Endangered Species Act (ESA).[1]

Based on the best available scientific and commercial information, the Center and TIRN consider that the NW Atlantic leatherback turtle population is distinct and significant from the Pacific and South Atlantic population and thus should be identified as DPS. The Center and TIRN are concerned by the proposed downlisting of this subpopulation. Here we analyzed whether the population should be downlisted from endangered to threatened given the substantial increases in the number of nests by the adult females across the U.S Caribbean and Florida. However, because there is not downlisting criterion in the 1992 Recovery Plan for the Atlantic population (NMFS & USFWS 1992), population abundance has greatly fluctuated at important nesting beaches throughout the U.S. Caribbean and Florida in the last decades, and ongoing threats are substantial, we believe that downlisting is not appropriate at this time. Importantly, downlisting without prohibitions on take would greatly compromise conservation efforts and regulatory measures that have been in place under endangered status for decades.

To ensure that the status review is comprehensive, NMFS and the U.S. Fish and Wildlife Service (USFWS) must consider the best available scientific and commercial information pertaining to the leatherback turtles. Here we provide and reiterate information on current distribution, migratory movements, genetic population structure, population status and trends, threats that adversely impact the species, and ongoing efforts to conserve NW Atlantic leatherbacks in US waters and across the Caribbean. This information supports the identification of the NW Atlantic

[1] Endangered and Threatened Wildlife; 90-day finding on a petition to identify the Northwest Atlantic leatherback turtle as a distinct population segment and list it as threatened under the Endangered Species Act. (82 FR 57565) , Wednesday, Dec 6, 2017

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leatherback turtle as a DPS, but it does not support a downlisting determination as this time because ongoing threats continue to affect this species after more than 40 years of listing, likely resulting in wide population fluctuations in the last decades.

1. The NW Atlantic leatherback turtle qualifies as a distinct population segment

The NW Atlantic leatherback turtle subpopulation qualifies as a DPS under the ESA. Based on the NMFS's DPS policy, to classify the NW Atlantic leatherback turtle into a DPS there are two elements that must be considered: (1) The discreteness of the population segment in comparison with the rest of the species to which it belongs; and (2) the significance of the population segment to the rest of the species (or subspecies) to which it belongs.

The NW Atlantic leatherback turtle subpopulation may be considered discrete if it satisfies one of the following conditions: a) It is markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors. Quantitative measures of genetic or morphological discontinuity may provide evidence of this separation; and 2) it is delimited by international governmental boundaries within which differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist that are significant in light of section 4(a)(1)(D) of the ESA.[2]

If the NW Atlantic leatherback turtle is found discrete under one or more of the above conditions its biological and ecological significance is considered. Thus, the NW Atlantic leatherback turtle may be considered significant based on the importance of the following applicable factors: a) Persistence of the discrete population segment in an unusual or unique ecological setting for the taxon; b) evidence that loss of the discrete population segment would result in a significant gap in the range of the taxon; c) evidence that the discrete population segment represents the only surviving natural occurrence of a taxon that may be more abundant elsewhere as an introduced population outside its historic range; or d) evidence that the population segment differs markedly from other populations of the species in its genetic characteristics.[3]

Based on the best available scientific and commercial information (see below), the NW Atlantic leatherback turtle qualifies as a DPS because the population can be considered discrete and significant.

The NW Atlantic leatherback turtle subpopulation is discrete because is geographically isolated in the northern portion of the Atlantic Ocean. Scientific evidence shows that the NW Atlantic leatherback turtle subpopulation nest mostly on beaches along the western Atlantic Ocean from North Carolina to French Guiana, across the Caribbean Sea, and Gulf of Mexico (Wallace et al. 2013). The subpopulation forages and migrates in pelagic and shelf waters within 16 Large Marine Ecosystems (LME) including the East and North Brazil shelf, Caribbean Sea, Gulf of Mexico, Southeast U.S continental shelf, Northeast Sea, North Sea, Celtic-Biscay shelf, Iberian coast, Mediterranean Sea, Canary Current and Guinea Current (Wallace et al. 2013). Tagging

[2] 61 Fed. Reg. at 4725
[3] Id.

and satellite tracking information suggest that individuals in this subpopulation show migration patterns within the NW Atlantic (Fig. 1) (NMFS & USFWS 2013; Fossette et al. 2014). Leatherbacks can also enter the Mediterranean Sea (Caracappa et al. 2017; Ergene & Uçar 2017; Masski & Tai 2017; Roden et al. 2017). The NW leatherback subpopulation is distinct from the South Atlantic subpopulation with minimum overlap in foraging grounds near the equator (Turtle Expert Working Group 2007; Dodge et al. 2014; Fossette et al. 2014; Dodge et al. 2015; Horrocks et al. 2016; Bond & James 2017; Chambault et al. 2017; Roden et al. 2017). Migratory and foraging patterns show a markedly geographical split between the subpopulation of the North and South Atlantic (Fig. 1) (Fossette et al. 2014). As such, the migratory behavior of individuals from each Ocean sub-basin is markedly different. In addition, most current IUCN Red list assessment identified and listed seven distinct subpopulations of leatherback turtles across the world, including the NW Atlantic subpopulation (Wallace et al. 2013). Overall, IUCN designation of subpopulations is fairly similar to DPS designations under the ESA.

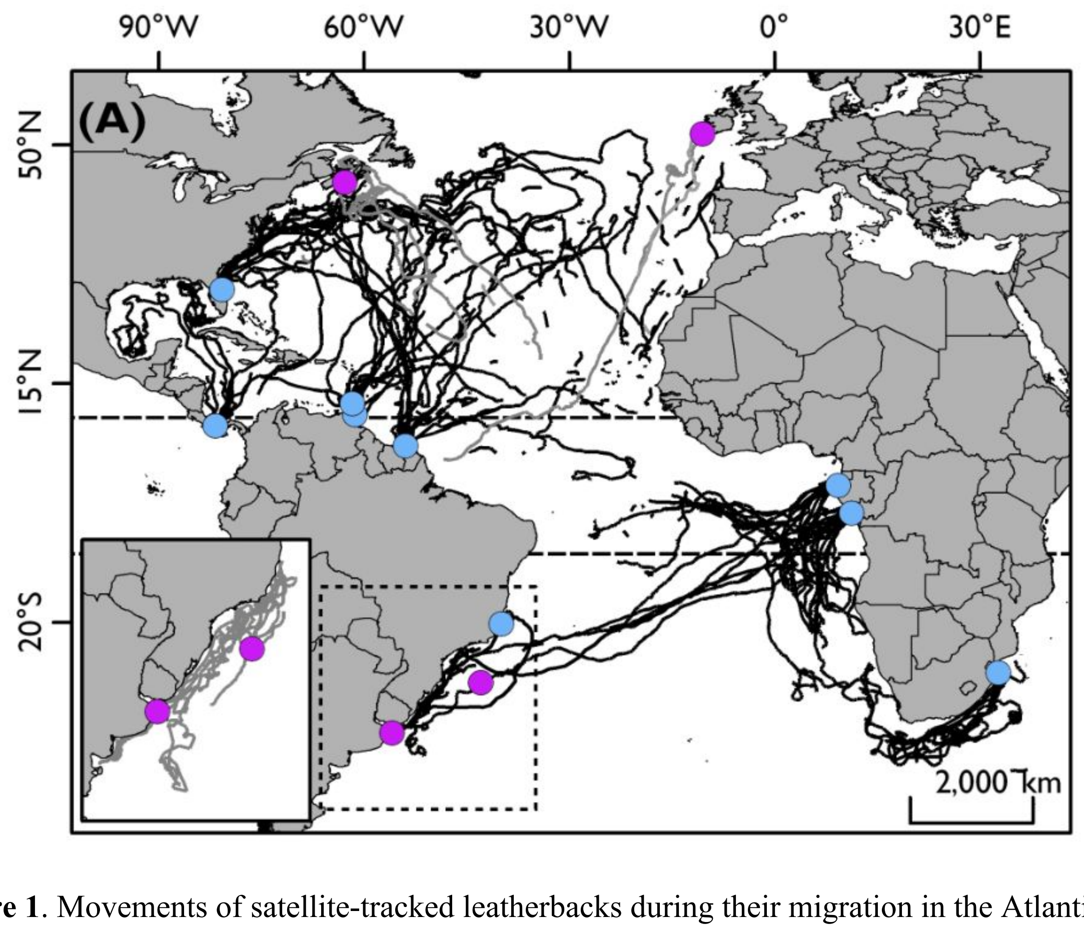

Figure 1. Movements of satellite-tracked leatherbacks during their migration in the Atlantic Ocean, between 1995 and 2010. Black lines: movements of females tagged on the nesting beach (n = 93). Grey lines: movements of individuals tagged near presumed foraging grounds (n = 13; four males, one juvenile and eight females). Blue dots: deployment from a nesting site. Purple dots: deployment at sea. Inset: movements of six individuals tagged on their foraging grounds in the southwestern Atlantic. *Figure and legend from Fossette et al. 2014*, *(Fig. 1a).*

The NW Atlantic leatherback turtle subpopulation is also discrete because is genetically differentiated from other leatherback turtle subpopulations within the Atlantic and Pacific Ocean basins. Previous studies have clearly demonstrated markedly genetic differences between Atlantic and Pacific subpopulations (Dutton et al. 1999). Within the Atlantic basin, studies show that the genetic structure of the NW Atlantic subpopulation is significantly different from the East and South Atlantic populations based on both maternally inherited mitochondrial DNA (mtDNA) haplotypes and biparentally inherited nuclear microsatellite DNA markers (Dutton et al. 2013). In fact, the weak differentiation detected with microsatellites in this study suggests a fine scale level of demographic independence among different subpopulations nesting within the NW Atlantic (e.g., Florida, St. Croix, Atlantic Costa Rica, Trinidad, and French Guiana and Suriname) (Dutton et al. 2013).Other genetic studies from rockeries and foraging grounds indicate that leatherbacks from the NW Atlantic are distinct from leatherbacks in the South Atlantic (Stewart et al. 2016; Roden et al. 2017). Assignments results from genetic studies and satellite and tag tracking are congruent (Stewart et al. 2013). Thus, the NW Atlantic leatherback turtle subpopulation is discrete because is markedly separate from other subpopulations of the South Atlantic and Pacific based on physical, behavioral, and genetic factors.

The NW Atlantic leatherback turtle subpopulation is also significant. The nesting subpopulation represents a large portion of the species global range as the second largest leatherback nesting subpopulation in the world (Wallace et al. 2013). The subpopulation is significant because it persist in several ecological settings unique to the species (e.g., large marine ecosystems, Caribbean Sea, and Mediterranean Sea). In addition, the loss of the subpopulation would result in a significant gap in the current geographic range of the species (e.g., half of Ocean basin and several Seas). Finally, the subpopulation is significant because the population segment differs markedly form other populations of the species in its genetic characteristics (Dutton et al. 2013).

In conclusion, the NW Atlantic leatherback turtle qualifies as a DPS because the population can be considered discrete and significant. As such the Services should designate this subpopulation as a DPS. The Services should also determine whether other global subpopulations should be divide in different DPS.

2. The best available scientific information does not support downlisting

The best available scientific and commercial information does not support downlisting the NW Atlantic leatherback turtle from endangered to threatened at this time because the subpopulation remains in danger of extinction in a significant portion of its range.

Downlisting the NW Atlantic leatherback turtle from endangered to threatened should be based on a recovery criterion. The global population of leatherback turtle was listed as an endangered species under the ESA in 1970.[4] However, NMFS and the U.S. Fish and Wildlife Service (USFWS) have managed the Pacific and Atlantic leatherback turtle subpopulations independently since the 1990s because differences in ocean basins population genetic structure,

[4] 35 Fed. Reg. at 8497

migration and nesting patterns, species specific threats, and management. As such, the Services developed two separate recovery plans for leatherback turtles: one for the U.S. Caribbean, Atlantic and Gulf of Mexico (NMFS & USFWS 1992), and one for the U.S. Pacific population (NMFS & USFWS 1998). Although each subpopulation has its own recovery plan, a recovery criterion for downlisting the Atlantic subpopulation was never established (e.g., NMFS & USFWS 1992). Thus, there is no reference criterion to determine that downlisting is adequate.

Under the ESA a species, subspecies, or DPS is "endangered" if it is in danger of extinction throughout all or a significant portion of its range, and "threatened" if it is likely to become endangered within the foreseeable future throughout all or a significant portion of its range (16 U.S.C 1532(60) and (20)). To downlist the proposed DPS of NW Atlantic leatherback turtle from endangered to threatened, NMFS should determine if the DPS is no longer in danger of extinction throughout all or a significant portion of its range (i.e., NW Atlantic) and it is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. Although nesting populations across the U.S. Caribbean and Florida have significantly increased over the past 40 years, the number of nests in important nesting areas have declined in the last decade (NMFS & USFWS 2013; FWC & FWRI 2017; Garner et al. 2017). In addition, the NW Atlantic subpopulation still faces major and unaddressed threats that affect population recovery and thus, the species remain in danger of extinction (i.e., endangered) in a significant portion of its range.

2.1 Population abundance and trends in important nesting areas are declining

The petition and 90-day finding stated that the NW Atlantic leatherback turtle is threatened but not currently at risk of extinction (i.e., endangered) due to its overall population size. Both documents cited a total estimated adult population size ranging between 17,000 and 52,000 turtles based on nesting counts from 2004-2005 published more than 10 years ago (Turtle Expert Working Group 2007). This estimate is grossly outdated and likely does not represent current population abundance. In addition, the population size estimate is substantially imprecise. Moreover, downlisting determination must not be based on population abundance estimates alone, but on an analysis of population size and ongoing threats that affect the species.

Overall, the population trend based on the number of nests[5] in most U.S nesting beaches steadily increased since the 1980s, however, large population fluctuations and declines have been observed in the past decades (Fig. 2). The number of nests for the most important nesting beaches in the U.S. Caribbean and Florida significantly increased in the past 40 years, suggesting overall positive population trends (NMFS & USFWS 2013). However, the number of nests in these nesting areas showed wide fluctuations and significant declines in the last two decades (Fig. 2). Few studies have addressed these patterns, but there is still not clear answers to whether these fluctuations respond to species nesting cycles, environmental conditions, or ongoing threats (Garner et al. 2017). It is likely that ongoing threats are partially causing these patterns in the past decades.

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[5] The number of nest and nesting females in nesting beaches can be used as proxy for population trends (National Research Council et al. 2010)

The nesting population of the leatherback turtle across Florida and the U.S. Caribbean seems to have been decreasing in the last few years. The number of leatherback nests reported on 27 core index beaches across Florida (n=205) in 2017 was likely the lowest since 2006 (FWC & FWRI 2017). Although index nesting beaches do not account for all the beaches in Florida where leatherback turtle nest, they are representative of population trends across Florida (FWC & FWRI 2017). Overall leatherback turtle nest counts across Florida increased exponentially since at least 1988, however leatherback nest numbers have substantially declined since 2014 and fluctuated since 2006 (FWC & FWRI 2017). This decline and substantial population fluctuation warrants more attention to determine the cause of declines in nesting populations.

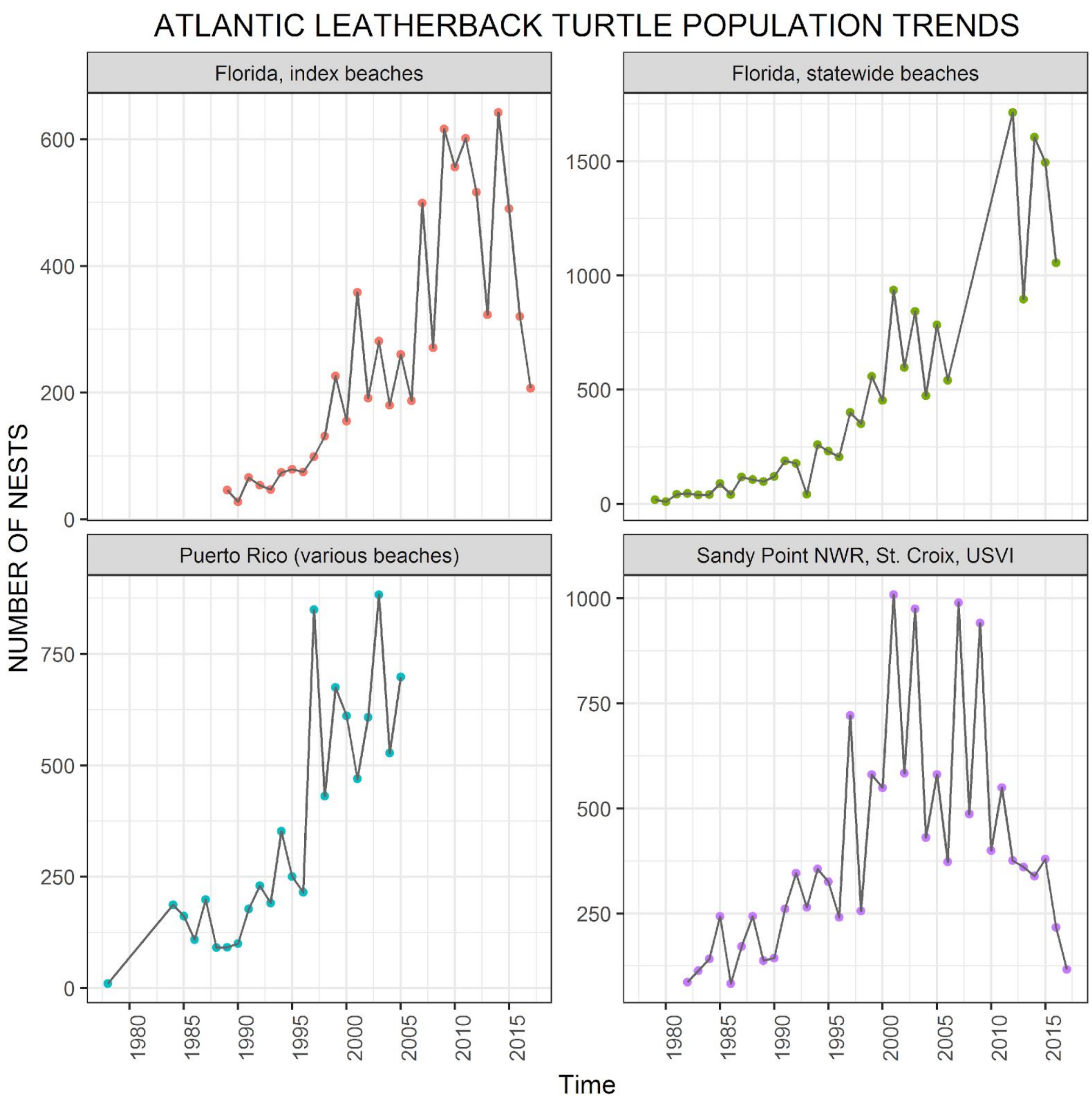

Figure 2 Population trajectories based on the number of nests for NW Atlantic leatherback turtles in important U.S nesting grounds of Florida, Puerto Rico and St. Croix, Virgin Islands. Florida nesting beaches are divided in index beaches and statewide beaches. Index beaches in

Florida include 27 core reference beaches that are representative of the nesting population across the state. The number of nest on Florida core index beaches in 2017 could be the lowest number of nests reported since 2006, however, those counts did not include leatherback nesting at the beginning of the season (before May 15) (Florida data from FWC & FWRI 2017). *Nesting data and sources are attached with this letter*.

At other important U.S Caribbean nesting areas in Puerto Rico and the U.S. Virgin Islands, the number of nests also significantly increased since the 1980s, but major population fluctuations and declines has occurred after 1995 (Fig. 2). The average number of nests per nesting female at the Sandy Point National Wildlife Refuge (NWR) in St. Croix, U.S. Virgin Islands significantly declined between 1992 and 2010 with a record low in the latter year (Garner et al. 2017). In addition, average hatching success declined over a 30-year period and the number of hatchlings produced per turtle declined in the 2000s (Garner et al. 2017). Although, a stable percentage of remigrants have continued to nest at the Refuge, the number and percentage of neophytes have decreased (Garner et al. 2017). Garner et al. (2017)'s results suggest that this population has slowed growth and that may begin to decline in the future.

Abundance trends of other important nesting populations across the Caribbean are also declining. For example, the nesting population of the southern Caribbean island of Trinidad, one of the largest contributors of adult recruitment to the NW Atlantic leatherback subpopulation (Turtle Expert Working Group 2007), has been declining at ~ %5 per year for more than a decade (Eckert & Mitchel 2018).

NMFS and FWS must use the best available scientific information in the status review for the NW Atlantic leatherback turtle. Most of the studies cited in the petition regarding population trends of the subpopulation are more than five years or decade old. Current data on nesting trends in the U.S Caribbean and Florida is mostly unpublished, but it is readily available for analysis (see FWC & FWRI 2017; Garner et al. 2017). In addition to nesting numbers, information on nesting females, recruitment rates, hatching success, remigration intervals, and fecundity in nesting grounds should be include in the status review to determine population trends in the near future (Garner et al. 2017). Importantly, the Services must be consistent when using nesting numbers as a proxy for population trends. Increasing number of nests generally translate to an increase in population abundance overtime (National Research Council et al. 2010). On the other hand, decreasing nesting observations may also indicate a decline in population trend (National Research Council et al. 2010).

2.2 Threats continue to affect leatherback turtles throughout the NW Atlantic

NMFS determines whether species are threatened or endangered based on any one or a combination threats factors (section 4(a)(1)): The present or threatened destructions, modification or curtailment of habitat or range; overutilization for commercial, recreational, scientific, or educational purposes; disease or predation; inadequacy of existing regulatory mechanisms; or any other natural or manmade factors affecting the species' existence (16 U.S.C. 1533(a)(1), 50 CFR 424.11(c)).

The NW Atlantic leatherback turtle continues to be threatened with habitat degradation, overutilization due to fisheries bycatch, diseases, marine pollution, climate change, and inadequate regulatory mechanisms. Destruction of its nesting habitat by coastal erosion, urbanization, and pollution across significant porting of the species range is substantial (NMFS & USFWS 2013). Bycatch in both artisanal and commercial fisheries significantly contribute to individual mortality, especially for fisheries outside U.S. jurisdiction (Wallace et al. 2013; Garrison & Stokes 2016). Oil spills can affect nesting beaches and foraging areas (Wallace et al. 2013, 2017). For example, increasing shipping traffic and marine noise due to industrialization and oil and gas explorations in the Gulf of Mexico pose a direct threat for leatherback turtles in foraging grounds and migratory routes (Wallace et al. 2017; Ward 2017). Marine pollution, especially plastic debris has caused mortalities in leatherback turtles.

2.2.1. Fisheries bycatch and entanglements

Bycatch of leatherbacks in U.S. commercial coastal and pelagic fisheries as well as in international fleets continue to be the main cause of direct adult mortality (Stewart et al. 2016; Hamelin et al. 2017; Santidrian Tomillo et al. 2017; Swimmer et al. 2017). In fact, leatherback sea turtle is the most common species captured as bycatch in both the Atlantic and Pacific basins (Swimmer et al. 2017). Several fisheries greatly contribute to leatherback bycatch including pelagic gillnets, longlines, and trawls. For example, the average incidental take of NW Atlantic leatherback turtles was ~1,430 live and 50 dead individuals annually in all commercial US fisheries from 1990 to 2007 (Finkbeiner et al. 2011), despite fishery regulations and mitigation measures (Swimmer et al. 2017).

Bycatch of leatherback turtles, however, has declined by 40% in the Atlantic U.S.-managed pelagic longline swordfish and tuna fishery since 2004 (Fig. 3), after regulations such as circle hooks (vs. J hooks) and fish bait (vs. squid baits) were implemented (Swimmer et al. 2017). After reaching a historical high of ~ 1,400 interactions in 2004, incidental leatherback turtle bycatch for the entire U.S. Atlantic pelagic longline fleet has been approximately between 200 and 600 interactions per year since 2005 (Fig. 3) (Garrison & Stokes 2016). There was a sharp increase in 2012 associated with an increase in reported fishing effort (Fig. 3) (Garrison & Stokes 2016). In 2014 alone, 279 interactions (198-393, 95% CI) of leatherback turtles in regular and experimental fishing were estimated to occur, mostly in the Gulf of Mexico (Garrison & Stokes 2016). However, these data likely underestimate real bycatch of leatherback in pelagic longlines, given the relatively low observer coverage (~8%) of the Atlantic longline pelagic fleet and the highly likelihood of underreporting (Garrison & Stokes 2016).

Most leatherbacks caught incidentally in U.S. fisheries are generally released alive (Garrison & Stokes 2016), but there is lack of information of post-release mortality. Overall, an estimated of approximately 15-85 % of sea turtles die after being released alive from fishery interactions, depending on degree of injury and body condition (Lewison et al. 2004; Swimmer et al. 2014). For example, leatherback with neck injuries or front flipper loss due to fisheries interaction are unlikely to survive after being released alive (NMFS 2017). In the U.S. northeast and Mid-Atlantic fishing region, post-bycatch mortality rate for sea turtles (including leatherbacks) in different fishing gear was estimated at 47% for trawls, 58% for gillnets, and 80 % for dredges from 2006 to 2010 (Upite et al. 2013). Given the number of reported leatherback turtle caught in U.S. commercial fishing gear and those unreported elsewhere, pre and post-released mortality could be significant and likely underestimate.

Fishery bycatch of leatherbacks and entanglement in fishing gear in areas of the NW Atlantic region may continue to partially contribute to population declines. For example, the decline of leatherback turtle nesting in Trinidad and Tobago in 2000 was associated with high level of mortality of nesting females caught in coastal gillnet fisheries, which have reported more than 3,000 leatherbacks entangled that year (Lum 2006). Entanglement of leatherback turtles in vertical lines of pot/trap fisheries is common in the NW Atlantic (Innis et al. 2010; Hamelin et al. 2017). In the Northeast Atlantic fishing regions, at least 110 live and 27 dead leatherback turtles were reported entangled in fishing gear such as lobster pots between 2007 and 2012 (NMFS & USFWS 2013). In the Canadian area of the Northeast Atlantic, ~ 205 leatherback turtle entanglements in pot gear (e.g., crab and lobster) and trap nets (e.g., mackerel) were reported from 1998 to 2014 (Hamelin et al. 2017). From this, ~ 15 % (31 individuals) were reported dead in fishing gear and the rest were released alive (Hamelin et al. 2017). Overall, post-release survival of disentangled leatherback turtles is poorly documented (Innis et al. 2010, 2014). But it is certain that entanglement causes physical injuries (e.g., flipper and neck) and physiological stress that can increase the likelihood of post-release mortality (Upite et al. 2013; Innis et al. 2014; NMFS 2017). Given the high probability of underreporting leatherback turtle entanglements by fishers and the uncertainty about post-release survivorship, morality rate due to entanglements are likely grossly underestimated (Hamelin et al. 2017). This affects the ability to determine real mortality rates due to fishing interactions, and thus underscore the need to better evaluate and estimate entanglement's mortalities.

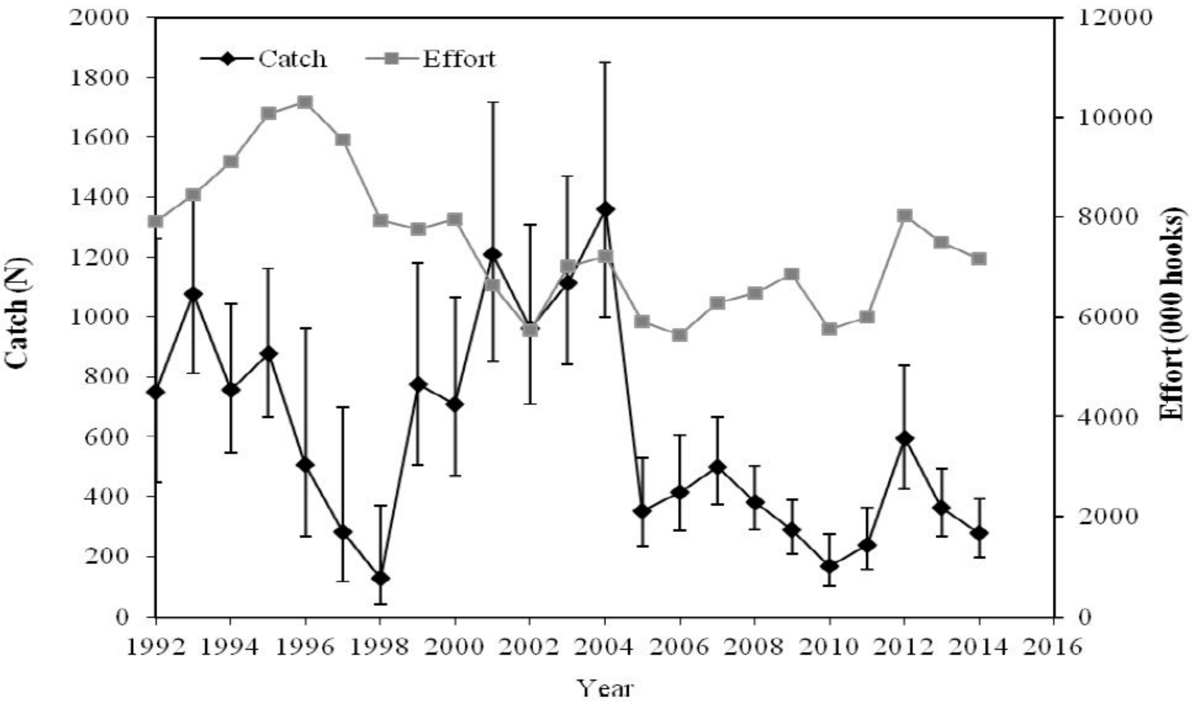

Figure 3. Historical trend in fishery efforts and estimated leatherback turtle takes in the pelagic longline fishery from 1992 to 2014. Error bars represent 95% confidence intervals. *Figure and legend modified after Garrison and Stokes (2016).*

The negative impacts of fishery interactions on Atlantic leatherback populations within U.S. commercial fisheries and elsewhere must be carefully analyzed in the upcoming status review before a downlisting determination from endangered to threatened is made. The Services should use a precautionary approach when evaluating the impact of fishery interactions on leatherbacks during the status review since fishery bycatch and entanglements that lead to mortality are likely underestimated. It is very likely that hundreds of adults NW Atlantic leatherback turtles die every year due to fishery interactions and are never reported.

2.2.2. Diseases

Diseases affect the Atlantic subpopulation of leatherback turtles. For example, adrenal gland parasites have been found in several individuals in North American waters since 2005, although the pathogenicity of this agent remains unknown (Ferguson et al. 2016). In addition, solitary large intestinal diverticulitis has been described in over 30 adults from U.S. waters (Stacy et al. 2015). The impact of these conditions on leatherback turtle population growth has not been investigated. This should be a research priority to better understand the potential accumulative effects of diseases combined with other stressors on increasing the extinction risk of the species.

2.2.3. Plastic ingestion and debris

Ingestion of marine plastic is a major threat that could cause direct and indirect mortality in leatherback turtles in the NW Atlantic (Mrosovsky et al. 2009; Plot & Georges 2010; Schuyler et al. 2014). Leatherback turtles feed primarily on jellyfish, prey that can be easily mistaken with plastic debris. Several studies have reported ingestion of plastic debris by leatherback in the NW Atlantic (see review by Nelms et al. 2016). Analysis of necropsy records of 408 leatherback turtles show a sharp increase of individuals with plastics in the gastrointestinal track since the late 1960s, from which a substantial portion caused gut blockage (Mrosovsky et al. 2009). Necropsies of disentangled leatherbacks that have died post-release have shown considerable large pieces of plastic (e.g., 83 x 35 cm) in their stomachs (Innis et al. 2010). Considerable amount of buoyant plastic debris within leatherback intestines could affect turtle swimming behavior and buoyancy control (Fossette et al. 2010). Plastic ingestion can also compromise the ability of adult females to lay eggs. For example, ~ 2.6 kg of plastic bags have been documented in at least one adult leatherback female nesting in French Guiana, preventing eggs passage (Plot & Georges 2010). Leatherbacks are among the turtle species more vulnerable to plastic debris ingestion due to their feeding habits (Schuyler et al. 2014). Plastic debris on nesting grounds has been also identified as a threat for the survival of leatherback turtles (NMFS & USFWS 2013). The effects of plastic ingestion and debris on foraging and nesting grounds is not well understood, but it is likely to affect population dynamic my compromising reproduction success.

2.2.4. Climate Change

Climate change through sea level rise, intense storms and warming is already affecting NW Atlantic leatherback turtle hatchling success and thus population dynamic. For example, tidal overwash due to high tides has been documented to reduce hatchling survival in leatherback turtle nests in French Guiana (Caut et al. 2010). Intense tropical storms and hurricanes has shown to reduce hatchling success in green and loggerhead turtle nests in Florida (Lindborg et al. 2016) and may also be affecting leatherbacks. Warming of nesting grounds may be already affecting population demographics by skewing sex ratios during temperature-dependent sex determination resulting in a higher proportion of females (Tomillo et al. 2015; Laloë et al. 2016, 2017). For example, due to increasing of mean annual sand temperatures, leatherback turtles nesting in St. Eustatius (North East Caribbean) have had female-biased hatchling production for the past three decades with less than ~24% males produced every year (Laloë et al. 2016). Global warming will certainly increase the female-skew ratio. In addition, delay nesting have been correlated to increased water temperatures in foraging grounds, which may affect incubation and hatchling success (Neeman et al. 2015). All climate change related these threats will only worsen under future emissions scenarios.

The additive and synergistic effects of all these threats should be recognized and analyzed in the extinction risk analysis during the status review process. Cumulative effects of stressors such as physical injuries and physiological stress (post-releasement from fisheries bycatch and entanglement), plastic ingestion, diseases, and toxins, among others, could affect the reproductive capacity of adult leatherback turtles and thus population growth and survival. Several threats are poorly documented, introducing substantial uncertainty on population viability analysis and future population status. The Services should use a precautionary approach to determine whether downlisting from endangered to threatened is in fact warranted, given the ongoing threats to the species and the considerable population trend fluctuations on the last few years.

Conclusion

The Center and TIRN agrees that the NW Atlantic leatherback turtle should be considered a DPS because the best available scientific information shows that this subpopulation is discrete and significant. However, we believe that downlisting this subpopulation from endangered to threatened is premature and inadequate at this time due to lack of recovery criterion in the recovery plan; wide fluctuations and declines in population abundance of important U.S. Caribbean and Florida nesting populations over the past decades; and ongoing threats that affect population growth and stability. Population declines in the past decades have occurred despite of ESA's endangered species protection; take prohibitions; strict conservation measures at all major nesting beaches; and current fishery regulations. Although existing regulatory mechanisms and conservation efforts have promote the recovery of nesting populations in the U.S. Caribbean and Florida, conservation measures are still inadequate to address fishery interactions and climate change related stressors that threaten this subpopulation with extinction in a significant portion of its range. Downlisting this subpopulation from endangered to threatened is therefore not advisable.

Thank you for the opportunity to comment on this matter.

Sincerely,

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