



September 25, 2015

Via Regulations.gov Portal

Green Turtle Proposed Listing Rule
Attn: NOAA-NMFS-2012-0154
National Marine Fisheries Service
Office of Protected Resources
1315 East-West Highway, Room 13535
Silver Spring, MD 20910

Re: Comments of the American Petroleum Institute on the Proposal to Remove the Current Range-Wide Listing for Green Sea Turtles and List Eight Distinct Population Segments as Threatened and Three as Endangered (NOAA-NMFS-2012-0154)

Dear Sir/Madam:

This letter provides the public comments of the American Petroleum Institute (“API”) on the U.S. Fish and Wildlife Service’s (“FWS”) and the National Marine Fisheries Service’s (“NMFS”) (collectively, “the Services”) proposed rule (“Proposed Rule”) to remove the current range-wide listing for green sea turtles (“green turtles”) under the Endangered Species Act (“ESA”) and establish eleven distinct population segments (“DPS”), eight of which have proposed threatened status and three of which have proposed endangered status.¹ Specifically, API is providing comment on the Services’ proposed North Atlantic DPS. If designated, the proposed North Atlantic DPS would not meet the definition of a threatened or endangered species, and therefore should not be listed. Additionally, for that reason, the Services should not designate critical habitat; if they choose to propose critical habitat, they must carefully evaluate the economic impacts that would result from a final designation. Finally, the Services must make available to the public all supporting documents and underlying data that form the basis for their Proposed Rule.

API appreciates the opportunity to provide this information and analysis. We hope and expect that the Services will give close consideration to the comments set forth below.

¹ 80 Fed. Reg. 15,272 (Mar. 23, 2015).

TABLE OF CONTENTS

I.	INTRODUCTION	3
A.	The American Petroleum Institute	3
B.	Summary of Comments	3
II.	DETAILED COMMENTS	5
A.	Global Overview of the Green Turtle	5
B.	Overview of the Proposed North Atlantic DPS	6
C.	The Green Turtle In The Proposed North Atlantic DPS Is No Longer Threatened or Endangered	13
1.	The ESA’s Standards for Listing	13
2.	The Status Review Team’s Findings Are the Best Available Evidence that Green Turtles in the Proposed North Atlantic DPS Are Not Threatened.....	15
3.	The ESA’s Required Five-Factor Analysis Is Not Met	27
4.	The Proposed North Atlantic DPS Has Recovered.....	43
D.	The Services Cannot Designate Critical Habitat for the Proposed North Atlantic DPS	49
1.	Economic Impact of Designation Could Be Substantial.....	50
2.	Impacts on Small Business Need to be Carefully Considered.....	52
E.	The Services Have Not Made Available Supporting Documentation for the Rulemaking	53
III.	CONCLUSION.....	53

I. INTRODUCTION

A. The American Petroleum Institute

API is a national trade association representing over 600 member companies involved in all aspects of the oil and natural gas industry. API's members include producers, refiners, suppliers, pipeline operators, and marine transporters, as well as service and supply companies that support all segments of the industry and provide most of the nation's energy. API and its members are dedicated to meeting environmental requirements, while economically developing and supplying energy resources to meet consumer demands. Numerous API members may be impacted by these proposed actions because they conduct, or plan to conduct, energy exploration and development activities in or near the Gulf of Mexico ("GoM") and other areas the Services believe to be occupied by green turtles.

API's members provide a tremendous economic benefit to the region. In 2011, oil and gas development in the GoM resulted in nearly a quarter-million jobs.² Those employment numbers are projected to have increased significantly in the ensuing years.³ From an investment perspective, the Bureau of Offshore Energy Management ("BOEM") has determined that over a 40-year period, the 2012–2017 five-year drilling plan will result in "[b]etween \$1,050 million and \$2,180 million in income."⁴

B. Summary of Comments

API appreciates and shares the Services' interest in green turtle conservation, and does not here challenge the proposed establishment of eleven DPSs.⁵ Instead, API provides these comments on the proposed status for just one of the putative DPSs: the North Atlantic DPS. We dispute the necessity and legality of listing the proposed North Atlantic DPS when green turtles in the region have made great strides in recovery over the past few decades and no longer meet the ESA's definitions for threatened or endangered species. As discussed at length below, the Status Review Team ("SRT")'s findings are the best available evidence of the recovery status of

² QUEST OFFSHORE RESOURCES, INC., THE STATE OF THE OFFSHORE U.S. OIL AND GAS INDUSTRY: AN IN-DEPTH STUDY OF THE OUTLOOK OF THE INDUSTRY INVESTMENT FLOWS OFFSHORE, at A12 tbl. 26 (Dec. 2011), *available at* http://www.api.org/~media/files/policy/exploration/quest_2011_december_29_final.pdf.

³ *Id.*

⁴ U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF OCEAN ENERGY MANAGEMENT, OUTER CONTINENTAL SHELF OIL AND GAS LEASING PROGRAM: 2012-2017 FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT, OSC ESIA/EA BOEM 2012-030, at 4-488 (July 2012), *available at* http://www.boem.gov/uploadedFiles/BOEM/Oil_and_Gas_Energy_Program/Leasing/Five_Year_Program/2012-2017_Five_Year_Program/2012-2017_Final_PEIS.pdf.

⁵ Even with the extension, the short comment deadline made it nearly impossible to meaningfully evaluate and comment on the merit of 11 different proposed DPSs under the multifactor analysis required by the DPS Policy. 61 Fed. Reg. 4,722 (Feb 7, 1996). Meaningfully commenting on the sufficiency of the 11 DPSs within a discrete timeframe is particularly difficult when the studies on which these proposed determinations were made are not publically available. API therefore did not attempt to review each of the DPS analyses and instead focused on the aspect of the proposal for which there was the most publically available information—the listing status of green turtles in the proposed North Atlantic DPS.

green turtles, and the SRT concluded that green turtles in the proposed North Atlantic DPS are not presently in danger of extinction, nor are they likely to become in danger of extinction within the foreseeable future. Not only do green turtles in the proposed North Atlantic DPS fail to meet the ESA's five-factor test for listing, they are in fact meeting all the Recovery Plan goals that the Services set for green turtles in the Atlantic.

The SRT examined and developed the best scientific information available with respect to the status of the green turtle in the proposed North Atlantic DPS. It then analyzed this information using an even stricter version of the ESA's five-factor analysis—the SRT's standard for "extinction" was more generous than the statutory definition, and its horizon for "foreseeability" was far beyond what the Services have elsewhere determined could reasonably be predicted. Even using these broader parameters for threats to the continued existence of the green turtle, the SRT overwhelmingly estimated that there was less than a one percent likelihood that the proposed North Atlantic DPS would go extinct within 100 years. These conclusions are supported by the lack of threats posed under the ESA's five-factor analysis: over the past few decades, conservation efforts have succeeded in significantly reducing or eliminating destruction and modification of habitat, predation, and overutilization to the degree that surveys of green turtle populations in the proposed North Atlantic DPS demonstrate multiple year-over-year record increases. Government efforts and public awareness have led to a sizeable network of existing national, state, and local regulatory mechanisms in the countries within the proposed North Atlantic DPS that actively protect green turtles. Green turtles in the North Atlantic DPS cannot accurately be said to be "likely to become an endangered species within the foreseeable future."

In fact, green turtles in the proposed North Atlantic DPS have met the goals laid out in the Recovery Plan established for that population in 1991: the Florida nesting levels have far exceeded the Recovery Plan's goal of 5,000 nests per year for a 6-year period, more than a quarter of nesting beaches are in public management and encompass more than half of nesting activity, there are higher numbers of individuals at foraging grounds, and all priority one tasks in the Recovery Plan have been successfully implemented.

Considering all these facts, API requests that the Services decline to list the proposed North Atlantic DPS of the green turtle as either endangered or threatened. To the extent that the Services take the position that they will not delist species unless specifically petitioned to do so, API requests that the Services treat this letter as a delisting petition. This result is appropriate given the remarkable recovery of the green turtle within the proposed North Atlantic DPS and the accomplishment of the Recovery Plan's goals. Additionally, while it is somewhat self-evident that it is inappropriate to designate critical habitat for a DPS that is neither threatened nor endangered, because the Services request information on critical habitat, API herein provides our concerns and objection to this potential future action.

Finally, the proposed rule is based on a great deal of information that is not publicly available. API requests that the Services make available all studies and data underlying the Proposed Rule. And, more broadly, because NMFS is taking steps to improve their assessment of various sea turtle stocks and seeking partners for doing so, API believes it is particularly important that the Services view proposals such as these as opportunities for increased collaboration through transparency and dialogue.

II. DETAILED COMMENTS

A. Global Overview of the Green Turtle

Green turtles are large, hard-shelled sea turtles that have a comparatively small head.⁶ Their top shell is smooth with shades of black, gray, green, brown, and yellow, while their bottom shell is a yellowish-white.⁷ Adult green turtles are unique among sea turtles because they are herbivores, eating mostly seagrasses and algae.⁸ Green turtles can be found in three types of habitat: (1) beaches, where they nest; (2) open ocean convergence zones; and (3) coastal (neritic) areas, where they forage on or near the sea floor.⁹ Adult females migrate hundreds to thousands of kilometers from foraging and feeding areas to mainland or island beaches for nesting.¹⁰ Nesting generally occurs in the summer between June and September, with peak nesting in June and July.¹¹ During this season females nest in approximately two-week intervals, laying an average of five nests with an average number of 135 eggs in Florida nests.¹² Following a two-month incubation period, hatchlings will emerge and swim to offshore areas, where it is believed that they live for several years and feed on plants and animals.¹³ These hatchlings reach a certain age and size range and move to nearshore foraging grounds to feed.¹⁴

Green turtles are globally distributed and generally found in subtropical waters along continental coasts and islands, including in more than 140 countries.¹⁵ Nesting occurs in over eighty countries.¹⁶

⁶ *Green Turtle* (*Chelonia mydas*), NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION FISHERIES, <http://www.nmfs.noaa.gov/pr/species/turtles/green.htm> (last visited July 24, 2015).

⁷ *Id.*

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.*

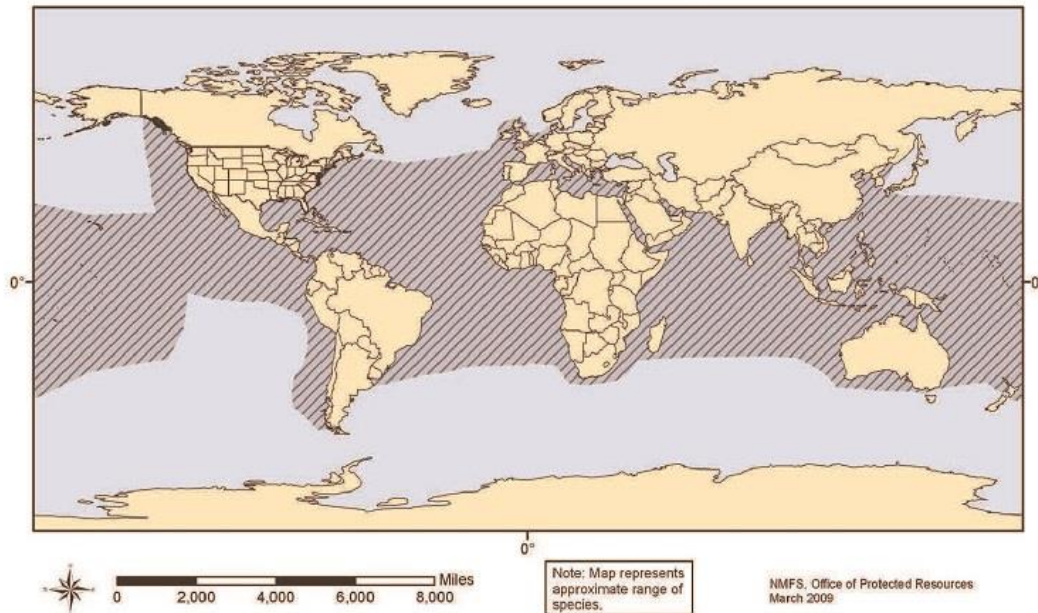
¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id.*

Green Sea Turtle Range



Source: *Green Turtle* (*Chelonia mydas*), NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION FISHERIES, <http://www.nmfs.noaa.gov/pr/species/turtles/green.htm> (last visited July 24, 2015).

B. Overview of the Proposed North Atlantic DPS

The Services have proposed to create the North Atlantic DPS, which encompasses the green turtle's habitat in the Atlantic Ocean from its northernmost presence through the middle of the Atlantic and enclosing the Caribbean.¹⁷ The proposed DPS extends from the boundary of South and Central America north along the coast through the northern extent of the green turtle's range.¹⁸ Its northernmost boundary extends due east across the Atlantic Ocean at 48° N. to the European coast, following that south through the northern portion of Mauritania on the African continent.¹⁹ The proposed DPS is then bounded on its southern extreme by the 19° N. latitude west to the Caribbean basin, where it then turns south and west at 63.5° W., 19° N., and due south at 7.5° N., 77° W., closing the proposed DPS's boundaries at the boundary of South and Central America.²⁰ The proposed North Atlantic DPS includes the most critical nesting sites in the world and the notable countries of Panama, Costa Rica, Nicaragua, Honduras, Belize, Mexico, the United States, Puerto Rico, the Bahamas, Cuba, Turks and Caicos Islands, Republic of Haiti, Dominican Republic, Cayman Islands, and Jamaica.²¹ In the U.S. Atlantic and GoM waters, green turtles can be found offshore from Texas to Massachusetts, as well as in Caribbean

¹⁷ 80 Fed. Reg. at 15,287.

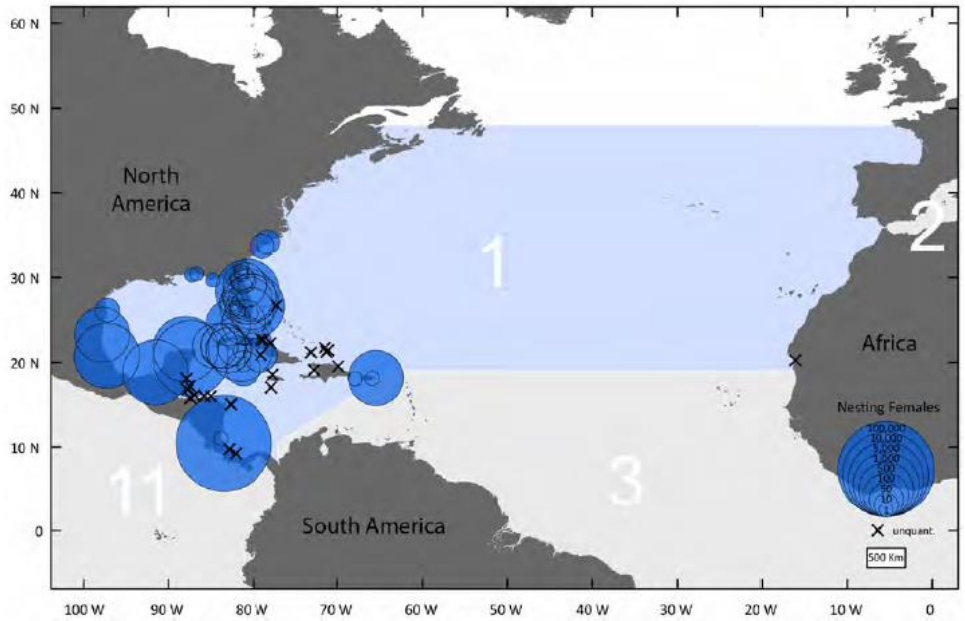
¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.*

waters.²² Florida waters host a number of important feeding areas.²³ The proposed North Atlantic DPS can be found labeled “1” and shaded light blue in the below figure:



Source: NATIONAL MARINE FISHERIES SERVICE, STATUS REVIEW OF THE GREEN TURTLE (*Chelonia mydas*) UNDER THE ENDANGERED SPECIES ACT at 79 fig.5.1 (March 2015).

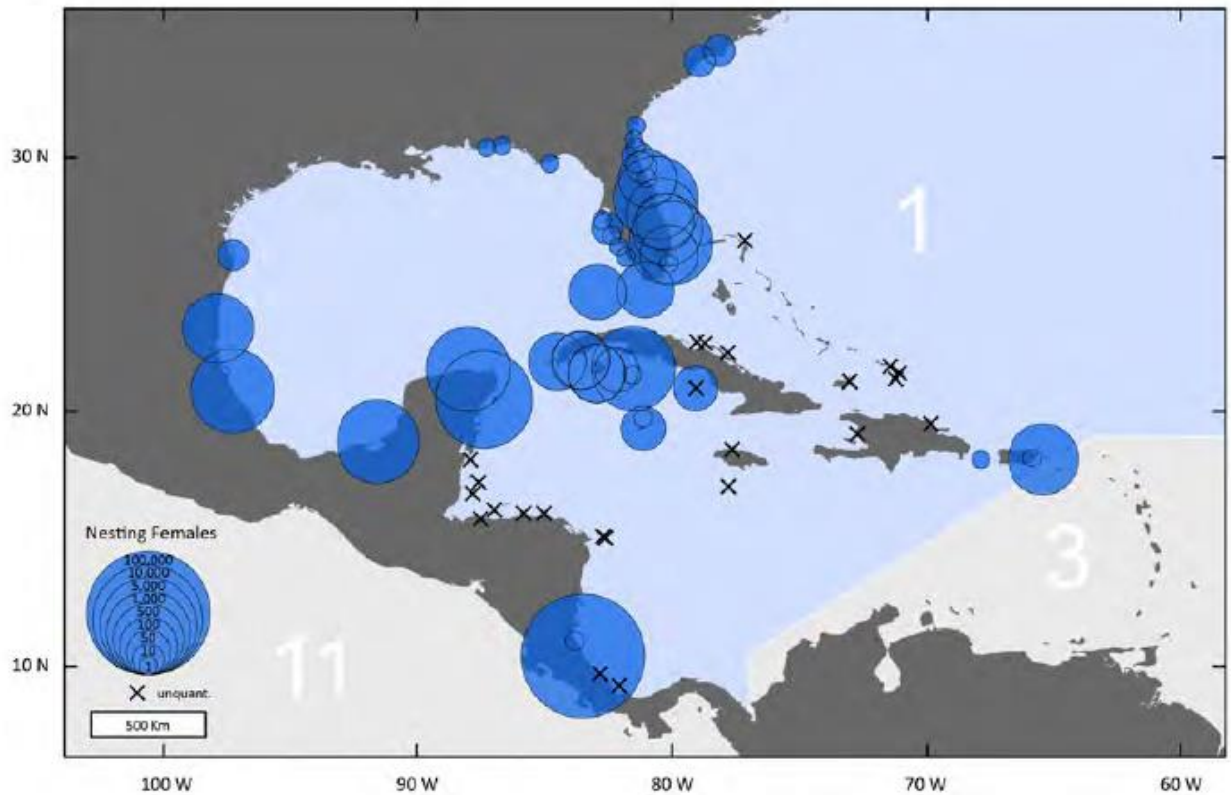
The Services have identified the proposed North Atlantic DPS as distinct for a number of reasons. Scientists have identified eight major clades of maternally inherited mitochondrial DNA (“mtDNA”), and only two of those clades are found in the Atlantic and Mediterranean region.²⁴ Within clade I, there are two strongly divergent groups of haplotypes found, one which is restricted to the Mediterranean and the other to the western North Atlantic.²⁵ The one specific haplotype shared by both Mediterranean and western North Atlantic turtles has been found in only two individuals, which shows that there is very strong long-term isolation of females.²⁶ This geographic separation of divergent haplotypes identifies the proposed North Atlantic DPS as discrete.²⁷ Tracking of individuals and DNA testing at nesting sites has confirmed this hypothesis.²⁸

Green turtles in the proposed North Atlantic DPS are some of the most studied in the world, and data for the species goes back forty years for populations in Costa Rica and thirty-five

²² *Id.*
²³ *Id.*
²⁴ *Id.* at 15,279.
²⁵ *Id.*
²⁶ *Id.*
²⁷ *Id.*
²⁸ *Id.* at 15,280.

years for populations in Florida.²⁹ The long-term data available for green turtles in the proposed North Atlantic DPS shows that populations are strong and are continuing to increase.

There are seventy-three nesting sites in the proposed North Atlantic DPS, including Tortuguero, Costa Rica—the largest green turtle nesting site in the world, with an estimated number of nesting females greater than 132,000.³⁰ Nesting distribution and abundance within the western proposed North Atlantic DPS can be seen below:



Source: NATIONAL MARINE FISHERIES SERVICE, STATUS REVIEW OF THE GREEN TURTLE (*CHELONIA MYDAS*) UNDER THE ENDANGERED SPECIES ACT at 80 fig.5.2 (March 2015).

In addition, each individual “nesting site” can represent numerous independent beaches (such as all the beaches located in one U.S. county or even in one U.S. state), making the amount of available nesting beach space much larger than the seventy-three-site figure indicates—and a figure that the Services fail to quantify.³¹ These nesting sites host at least 158,953 nesting females, as estimated by the Services—and that figure does not include the twenty-six sites at which green turtles are known to nest, but for which there is no estimates of nesting females.³² “The North Atlantic DPS is characterized by geographically widespread nesting at a diversity of

²⁹ *Id.* at 15,287.

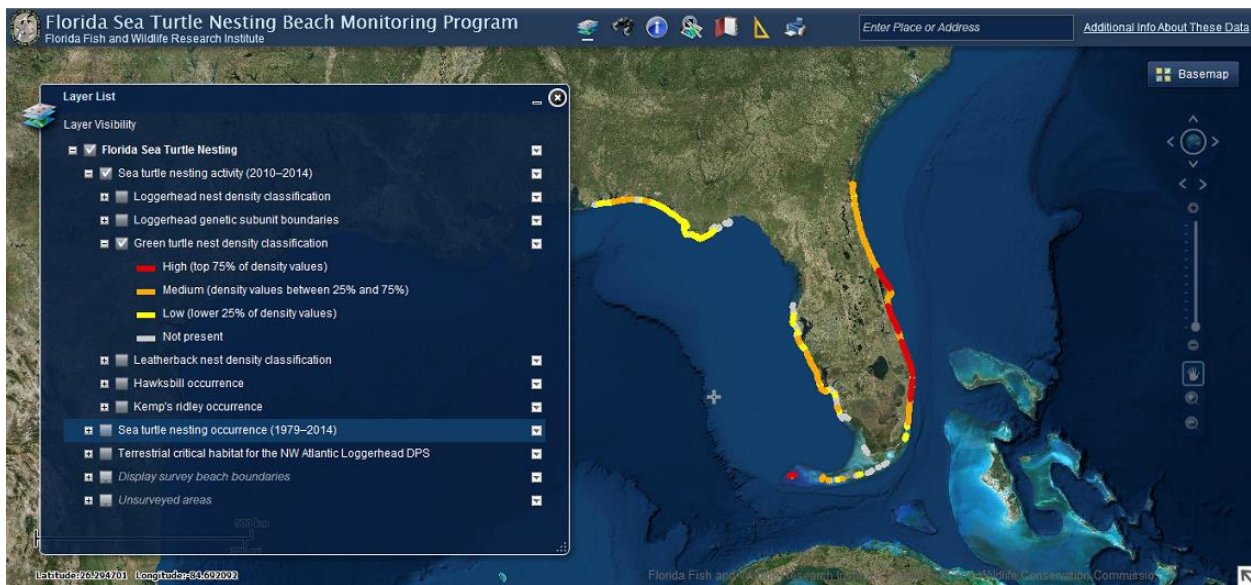
³⁰ *Id.* at 15,276, 15,287.

³¹ *Id.* at 15,287.

³² *Id.* at 15,287–88.

sites, both mainland and insular.”³³ The data that the Services have analyzed show that the proposed North Atlantic DPS has a large number of strongly utilized nesting sites that will further the recovery of the species.

Information on general population trends in the proposed North Atlantic DPS bear out the density and quality of the nesting sites, and the number of nesting females. The long-term population viability analyses (“PVAs”) available for the proposed North Atlantic DPS show either no trend or a positive trend, sometimes even strongly positive—none exhibited a decline.³⁴ As the Services note, “[g]reen turtle nesting population trends have been encouraging, exhibiting long-term increases at all major nesting sites, including Tortuguero . . . and Florida.”³⁵ Data from the Florida Fish and Wildlife Research Institute indicate the density and extent of green turtle nesting activity within the state between 1979 and 2014, showing nesting along large portions of the state’s coastline and medium- or high-density for a substantial part.



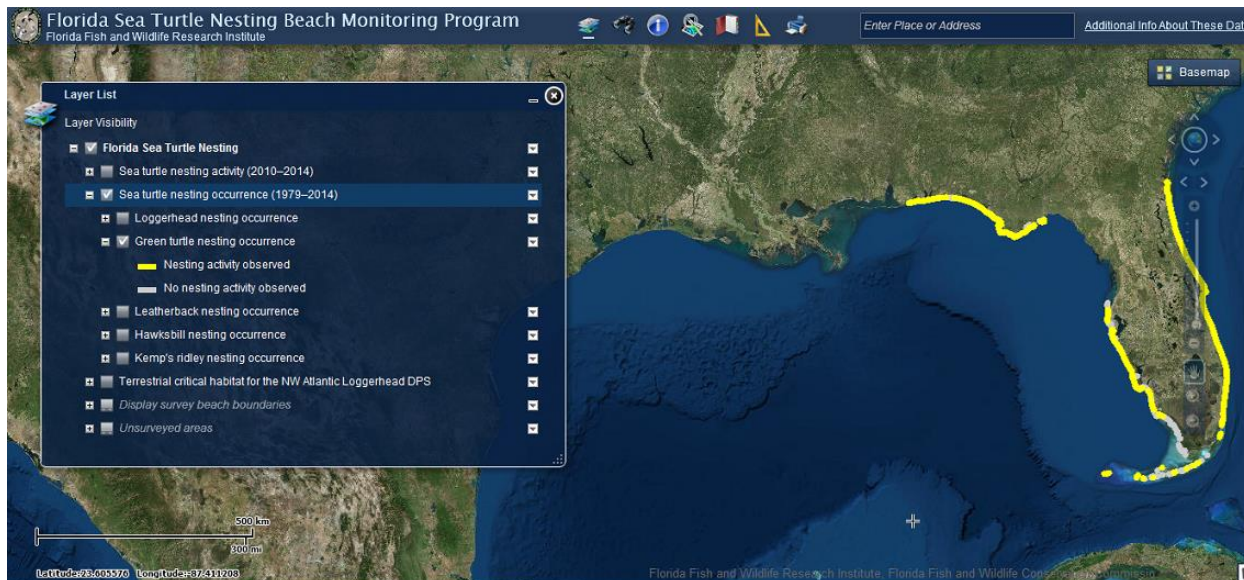
Source: *Florida Sea Turtle Nesting Beach Monitoring Program*, FLORIDA FISH & WILDLIFE RESEARCH INSTITUTE, <http://ocean.floridamarine.org/SeaTurtle/nesting/FlexViewer/> (last visited June 11, 2015).

³³ *Id.* at 15,292.

³⁴ *Id.* at 15,288.

³⁵ *Id.* at 15,292.

Similar data from Florida shows the expansive span of area within the state that nesting has occurred within the past 35 years.



Source: *Florida Sea Turtle Nesting Beach Monitoring Program*, FLORIDA FISH & WILDLIFE RESEARCH INSTITUTE, <http://ocean.floridamarine.org/SeaTurtle/nesting/FlexViewer/> (last visited June 11, 2015).

Figures on the abundance and nesting activity in the proposed North Atlantic DPS are strongly supported by the data aggregated in the World Conservation Union’s (“IUCN”) 2002 Red List Global Status Assessment for the green turtle (“IUCN Global Status Assessment”), authored by its Marine Turtle Specialist Group (“MTSG”).³⁶ The IUCN Global Status Assessment examined thirty-four nesting rookeries used as Index Sites, three of which are located in the proposed North Atlantic DPS: Tortuguero, Costa Rica; the Yucatan Peninsula, Mexico; and Florida, United States. In an analysis of past and present nesting activity and subpopulation trends, all three North Atlantic Index Sites exhibited strong growth of 75 to 107%.

³⁶ MARINE TURTLE SPECIALIST GROUP REVIEW, WORLD CONSERVATION UNION, 2002 IUCN RED LIST GLOBAL STATUS ASSESSMENT: GREEN TURTLE (*CHELONIA MYDAS*), available at http://www.widecast.org/Resources/Docs/MTSG_Assessment_CM_2002.pdf (hereinafter IUCN GLOBAL STATUS ASSESSMENT).

Index Site No.	Subpopulation	Data Type	Past Estimate		Present Estimate		Interval	Trend (% Change)	Citation (Past)	Citation (Present)
			Years	Mean	Years	Mean				
32	Western Atlantic Ocean, Costa Rica (Tortuguero)	Number of nests	1971-1975	ca. 41,250 nesting emergences	1992-1996	72,279 nesting emergences	21 yr	+ 75%	Carr et al. 1982, modified from Bjorndal et al. 1999	Modified from Bjorndal et al. 1999
33	Western Atlantic Ocean, México (Yucatan Peninsula)	Number of nests	1983	2,623 nests (ca. 874 females)	2000	4,641 nests (ca. 1,547 females)	17 yr	+ 77%	Marquez 1984 a,b	Instituto Nacional de Pesca/R. Marquez pers. comm.
34	Western Atlantic Ocean, United States (Florida)	Nesting females	1980	366 females	1995-2000	2,278 nests (ca. 759 females)	20 yr	+ 107%	Dodd 1982	Meylan et al. 1994, FMRI, INBDEP (c/o B. Witherington)

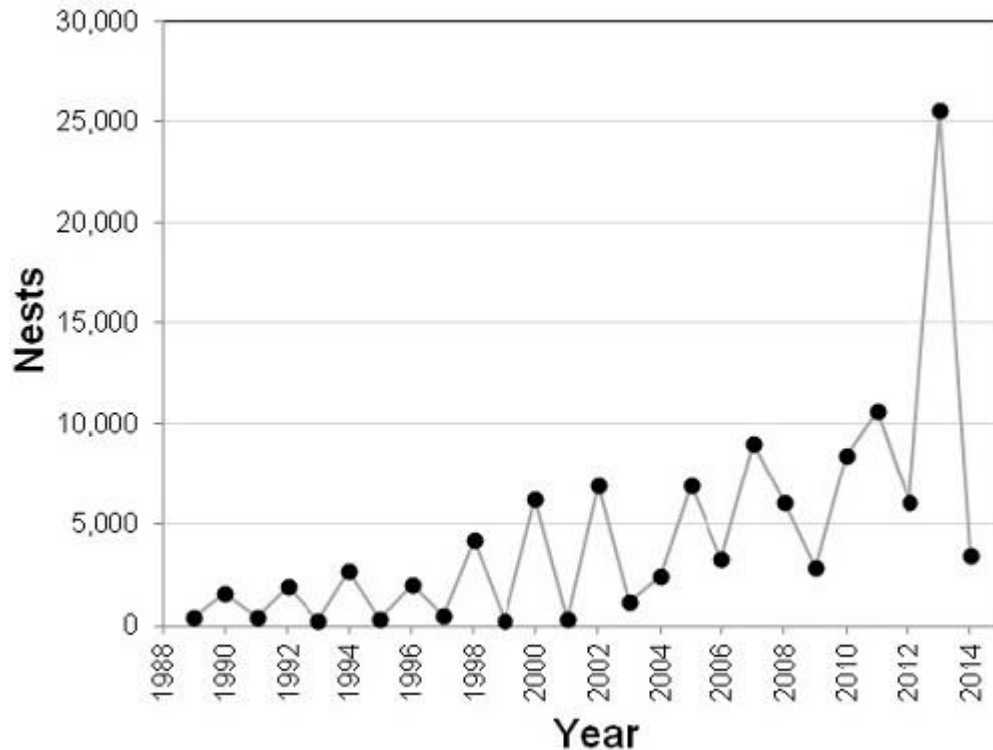
Source: IUCN GLOBAL STATUS ASSESSMENT at 26–27 tbl. 4.

Similarly, the IUCN Global Status Assessment created a table of global population trends over a three-generation interval, which, for every nesting beach in the proposed North Atlantic DPS, demonstrated positive rates more than eighty percent.

Index Site No.	Subpopulation (Index Site)	Past	Present	Notes	Subpopulation three generations ago (estimated)		Current Subpopulation (estimated)	Estimated three-generation reduction
32	Western Atlantic Ocean, Costa Rica (Tortuguero)	13,570 (1975)	24,076 (1996)	Subpopulation increased from 1975 baseline to 1996 (Bjorndal et al. 1999); increasing trend still present (S. Troëng pers. comm.).	Exponential	13,750	27,911	+ 103%
					Linear	13,750	26,534	+ 93%
33	Western Atlantic Ocean, México (Yucatan Peninsula)	874 (1983)	1,547 (2000)	Likely larger prior to 1983 baseline (Parsons 1962), but increasing since.	Exponential	874	1,593	+ 82%
					Linear	874	1,588	+ 82%
34	Western Atlantic Ocean, United States (Florida)	366 (1980)	759 (2000)	Likely larger prior to 1980 baseline (Parsons 1962, Witzell 1994a,b), but increasing since.	Exponential	366	779	+ 115%
					Linear	366	789	+ 113%

Source: IUCN GLOBAL STATUS ASSESSMENT at 32 tbl. 5.

The state of Florida, in which 90% of all the U.S. green turtle nesting beaches are found, has observed a one hundredfold increase in nest abundance since surveys began in 1989.³⁷



Annual green turtle nest counts on core Index beaches. Since 1989, nest counts have ranged from 267 to 25,553, peaking in 2013. Numbers show a mostly biennial pattern of fluctuation, with the 2013 counts exceeding twice the next highest year. Low numbers in 2014 were expected, however, because green turtles set two consecutive record highs in 2011 and 2013. Nesting green turtles tend to follow a two-year cycle with wide year-to-year fluctuations.

These most recent figures, covering 2013 and 2014, show that in 2013, index beaches in Florida reached an all-time high for nests of 5,553, which is about twice the prior all-time high documented in 2011.³⁸ The 2014 low was on par with the typical lows seen over the past decade for the observed cyclical abundance pattern.³⁹ Overall, an exponential increase in nests is suggested. This best available scientific information was brought to the Services’ attention by a peer reviewer, but the Services declined to add it to the draft Status Review “since [they] did not have the information at the time.”⁴⁰ The Services also declined to consider this new best available information in their Proposed Rule.

³⁷ *Index Nesting Beach Survey Totals (1989-2014)*, FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, <http://myfwc.com/research/wildlife/sea-turtles/nesting/beach-survey-totals/> (last visited July 24, 2015).

³⁸ Florida Fish and Wildlife Conservation Commission Fish and Wildlife Research Institute, *Statewide Nesting Beach Survey Program: Green Turtle Nesting Data, 2010-2014*, available at <http://myfwc.com/media/2988445/greenturtlenestingdata10-14.pdf> (last visited July 24, 2015).

³⁹ *Index Nesting Beach Survey Totals (1989-2014)*, FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, <http://myfwc.com/research/wildlife/sea-turtles/nesting/beach-survey-totals/> (last visited July 24, 2015).

⁴⁰ *Status Review of the Green Turtle, Chelonia mydas*, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, http://www.cio.noaa.gov/services_programs/prplans/ID232.html (last visited July 24, 2015).

Even without the increased abundance demonstrated in 2011 and 2013, the Service's Status Review indicates that green turtles in the proposed North Atlantic DPS show strength and increased viability across all of the critical population parameters: abundance, population trends, spatial structure, and diversity and resilience.⁴¹ The species has shown increases at major nesting sites within the proposed North Atlantic DPS, and has several stronghold populations there.⁴² Additionally, green turtles have a diverse geographic range.⁴³ Green turtle populations in the proposed North Atlantic DPS are abundant and continue to increase at incredibly healthy rates. These findings are discussed further in the Status Review section below.

C. The Green Turtle In The Proposed North Atlantic DPS Is No Longer Threatened or Endangered

1. The ESA's Standards for Listing

The ESA sets a high standard for listing a species as threatened or endangered, which is not met in the case of the proposed North Atlantic green turtle DPS. An "endangered" species is statutorily defined as one that is presently in danger of extinction throughout all or a significant portion of its range.⁴⁴ A "threatened" species is one that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.⁴⁵ When evaluating the status of a species, the Services must consider the following five factors: (1) the present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; and (5) other natural or manmade factors that affect the species' continued existence.⁴⁶ In making these assessments, the Services must use "the best scientific and commercial data available" after conducting a review of the status of the species and taking into account the efforts being made by any nation or political subdivision of a nation to protect the species, including through predator control, protection of habitat and food supply, or other conservation practices.⁴⁷

As discussed above and throughout these comments, the best scientific and commercial data available strongly suggest that green turtles are, in many places in the proposed North Atlantic DPS, at the highest abundances ever surveyed.⁴⁸ There is certainly no rational or scientifically supportable basis for interpreting the best available data to suggest that green

⁴¹ 80 Fed. Reg. at 15,292.

⁴² *Id.* at 15,293.

⁴³ *Id.* at 15,276.

⁴⁴ 16 U.S.C. § 1532(6).

⁴⁵ *Id.* § 1532(20).

⁴⁶ *Id.* § 1533(a)(1).

⁴⁷ *Id.* § 1533(b)(1)(A).

⁴⁸ See NATIONAL MARINE FISHERIES SERVICE, STATUS REVIEW OF THE GREEN TURTLE (*CHELONIA MYDAS*)

UNDER THE ENDANGERED SPECIES ACT at 86–89 (March 2015) [hereinafter 2015 STATUS REVIEW].

turtles in the proposed North Atlantic DPS are likely to become in danger of extinction in the foreseeable future.

Courts have universally held that the decision to list a species as threatened or endangered is not to be based on speculation or a misplaced intent to err on the side of species conservation:

Under Section 4, the default position for all species is that they are not protected under the ESA. A species receives the protections of the ESA only when it is added to the list of threatened species after an affirmative determination that it is “likely to become endangered within the foreseeable future.” Although an agency must still use the best available science to make that determination, *Conner [v. Burford]*, 848 F.2d 1441 (9th Cir. 1988) cannot be read to require an agency to “give the benefit of the doubt to the species” under Section 4 if the data is uncertain or inconclusive. Such a reading would require listing a species as threatened if there is any possibility of it becoming endangered in the foreseeable future. This would result in all or nearly all species being listed as threatened.⁴⁹

Whether a species should be listed under the ESA (or not) is not a question of whether the species is important, iconic, or deserving of conservation. Nor can species be listed based on a finding that they are being harmed, may be harmed in the future, or that certain threats are adversely impacting their abundance. Listing status is measured by the prospect that the species will cease to exist. Assessing the prospect of extinction is necessarily imprecise, and the Services’ judgments are entitled to deference if based on best available evidence and the five listing criteria, but the question the ESA requires the Services to answer does not change: Is this species at risk of extinction today, or is a risk of extinction likely to arise in the foreseeable future?

The ESA does not define the term “foreseeable future;” the Services, however, have interpreted it to mean “the horizon over which predictions about the conservation status of the species can be reasonably relied upon.”⁵⁰ Because of the uncertainties inherent in attempting to predict the future, a forecast that is reasonably reliable—and thus encapsulates the “foreseeable future”—tends, at most, to look forward only a few decades. It does not allow for analyses based on speculation or that are not grounded in facts and knowledge. “The timeframe over which the best available scientific data allow us to reliably assess the effect of threats on the

⁴⁹ *Trout Unlimited v. Lohn*, 645 F. Supp. 2d 929, 947 (D. Or. 2007); see also *Center for Biological Diversity v. Lubchenco*, 758 F. Supp. 2d 945, 955 (N.D. Cal. 2010) (finding that the “benefit of the doubt” concept does not apply in the Section 4 listing context); *Oregon Natural Resources Council v. Daley*, 6 F. Supp. 2d 1139, 1152 (D. Or. 1998) (ESA requires a determination as to the likelihood—rather than the mere prospect—that a species will or will not become endangered in the foreseeable future); *Federation of Fly Fishers v. Daley*, 131 F. Supp. 2d 1158, 1165 (N.D. Cal. 2000) (“The ESA cannot be administered on the basis of speculation or surmise.”).

⁵⁰ 80 Fed. Reg. at 15,276 (emphasis added).

species is the critical component for determining the foreseeable future.”⁵¹ For example, when assessing the “foreseeable future” for the polar bear, FWS looked at available data predictions for the habitat and generation timespans to establish forty-five years as the foreseeable future; for the Yellowstone cutthroat trout, FWS landed on a foreseeable future of two to three decades.⁵²

Additionally, one of the few and key risks identified to the green turtle is the effect that climate change may have on the turtles’ habitat. Climate change science and predictions are fraught with modeling limitations and uncertainties, which are acknowledged by the Intergovernmental Panel on Climate Change.⁵³

The FWS has regularly applied a mid-century “foreseeable future” time horizon when analyzing the projected impacts of climate change on species petitioned for listing under the ESA. In 2008, when making its polar bear listing decision, FWS completed a comprehensive analysis of climate change modeling uncertainty and the reliability of future forecasts in connection with its polar bear listing decision.⁵⁴ FWS concluded that there is a scientific consensus that predictions of climate change on at least a broad scale extending to mid-century are relatively unaffected by emissions assumptions, but that longer-term projections and forecasts at the regional or local scale are considerably less certain.⁵⁵

FWS further found that climate predictions extending to the end of the century far exceed the existing credibility of climate models and forecasts.⁵⁶ These temporal model limitations apply regardless of the species being proposed for listing. The Proposed Rule’s projection of a 100-year foreseeable future is therefore unreliable and inconsistent with the Services’ recognition of the foreseeability of potential climate change impacts far into the future.

2. The Status Review Team’s Findings Are the Best Available Evidence that Green Turtles in the Proposed North Atlantic DPS Are Not Threatened

Dividing the globally listed green turtle species into 11 different DPSs presented the Services with a formidable analytical challenge. Not only did the Services need to assess the distinctiveness of each of the 11 DPSs under their multi-factor DPS Policy, they were then required to assess the status of each of those proposed DPSs under the ESA’s five-factor analysis. Given the number of different analyses required to be conducted at once, the Services appropriately convened a panel of experts and utilized structured expert opinion.

In September 2012, the Services appointed an SRT consisting of members “affiliated with NMFS Science Centers and the Services’ field, regional, and headquarters offices and [who] provided a diverse range of expertise, including green turtle genetics, demography,

⁵¹ 73 Fed. Reg. 28,212, 28,239 (May 15, 2008).

⁵² 72 Fed. Reg. 1,064, 1,070 (Jan. 9, 2007).

⁵³ INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2014 SYNTHESIS REPORT at 36–37 (2015).

⁵⁴ See 73 Fed. Reg. at 28,226.

⁵⁵ *Id.* at 28,253.

⁵⁶ *Id.* at 28,253–54.

ecology, and management, as well as risk analysis and ESA policy.⁵⁷ The SRT was “charged with reviewing and evaluating all relevant scientific information relating to green turtle population structure globally to determine whether any populations may qualify as DPSs, and, if so, to assess the extinction risk for each proposed DPS.”⁵⁸

To assess the extinction risk for the proposed North Atlantic DPS, the SRT was presented with the most extensive and complete data set of any of the 11 DPSs,⁵⁹ including nesting data, which the Services determined to be “the primary and best available information source for directly evaluating status and trends of the DPSs”⁶⁰ Relying on this “best available information, the SRT—the foremost experts at the Services—overwhelmingly estimated that there was less than a 1% likelihood that the proposed North Atlantic DPS would go extinct within 100 years.⁶¹ Importantly, the data on which the SRT based their projection did not even include the 2013 record-breaking nesting season in Florida.⁶²

The Services considered the SRT’s findings in the Status Review to be the best available scientific and commercial information,⁶³ agreed that it is not likely that green turtles would go extinct within 100 years,⁶⁴ and then proposed a listing concluding that the proposed North Atlantic DPS is likely to be placed in danger of extinction in the foreseeable future.⁶⁵ Importantly, the disconnect between the proposed listing of the North Atlantic DPS and the SRT’s findings on which the listing was based cannot be attributed to a need to harmonize widely differing opinions. The SRT’s Status Review demonstrated a 99.55% certainty that green turtles in the proposed North Atlantic DPS were not likely to be placed at risk of extinction within the next 100 years, and an overwhelming consensus that the risk of extinction over the next 100 years was less than 1%.

Nor can these inconsistent conclusions be attributed to differences between the ESA’s listing standards and the SRT’s analytical framework. As explained further below, the SRT examined and developed the best scientific information available and viewed such information under each of the ESA’s five listing factors, as well as factors beyond those mandated by the ESA. Further, in assessing the likelihood of extinction, the SRT utilized a standard for “extinction” that is lower than the ESA’s standards and a horizon for the “foreseeability” of threats that is well beyond what the Services have elsewhere determined could reasonably be predicted.

⁵⁷ 80 Fed. Reg. at 15,275.

⁵⁸ *Id.*

⁵⁹ 2015 STATUS REVIEW at 84.

⁶⁰ 80 Fed. Reg. at 15,286.

⁶¹ 2015 STATUS REVIEW at 119.

⁶² *Status Review of the Green Turtle, Chelonia mydas*, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, http://www.cio.noaa.gov/services_programs/prplans/ID232.html (last visited July 24, 2015).

⁶³ 80 Fed. Reg. at 15,330.

⁶⁴ *Id.* at 15,287.

⁶⁵ *Id.* at 15,293.

Nonetheless, even if the differences between what the SRT considered in the Status Review and what the Services considered in the listing proposal could credibly allow the Services to conclude that the likelihood of extinction was, to some degree, greater than projected by the SRT, they could not plausibly conclude that a risk of extinction was *likely* in the foreseeable future. The process employed by the SRT demonstrates that they used the best available information on abundance, abundance trends, and threats to provide the Services the best available projection of the likelihood that the proposed North Atlantic DPS would go extinct. It is beyond the Services' discretion to ignore or arbitrarily discount the best available data of its foremost experts. As courts have noted, the Services are entitled to deference, but "only to the extent that the agency utilizes, rather than ignores, the analysis of its experts."⁶⁶

a. SRT Evaluation Process

The process employed by the SRT to reach these findings was robust, logical, and designed to evaluate risk from all angles. To ensure that their analyses and assessments were grounded in the best available information, the SRT identified at the outset the best scientific information available on the status of green turtles in each of the proposed DPSs.⁶⁷ As the Services would also later determine in their Proposed Rule,⁶⁸ the best scientific information available for assessing the status of green turtles was the nesting data.⁶⁹

As explained elsewhere in these comments, the nesting data for the proposed North Atlantic DPS demonstrated long-term increases in nests and nesting females in the primary rookeries and in a large number of geographically diverse set of secondary nesting beaches. While the observed increases in abundance provided important data, the SRT's goal (like the Services' under the ESA) is to assess the abundance trends, and the likelihood of extinction, in the future. To extrapolate future abundance trends from existing population trends, the SRT used nesting data to develop bar plots and PVAs.⁷⁰

Bar plots were used when the nesting sites had at least ten years of nest survey data generated through consistent protocols, and where the most recent survey year was within the last decade.⁷¹ The proposed North Atlantic DPS contains three nesting beaches that met these standards: (1) El Cuyo, Mexico; (2) San Felipe, Cuba; and (3) Guanabacoa, Cuba.⁷² The SRT found evidence of increasing population trends in San Felipe, Cuba and did not identify trends for Guanabacoa, Cuba or El Cuyo, Mexico.⁷³ However, the SRT noted that:

⁶⁶ *Defenders of Wildlife v. Babbitt*, 958 F. Supp. 670, 685 (D.D.C. 1997).

⁶⁷ 2015 STATUS REVIEW at 23.

⁶⁸ 80 Fed. Reg. at 15,286.

⁶⁹ 2015 STATUS REVIEW at 23.

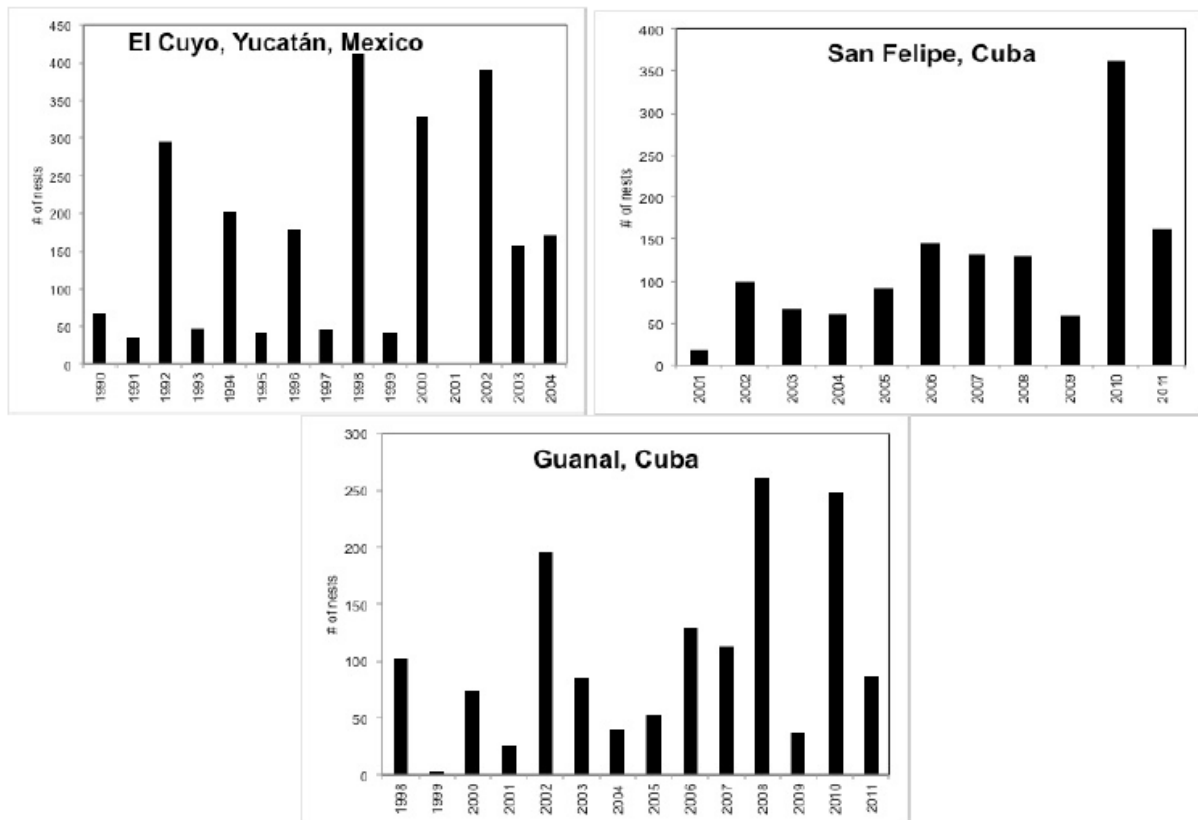
⁷⁰ *Id.*

⁷¹ *Id.*

⁷² *Id.* at 85.

⁷³ *Id.* (internal citations omitted).

[e]lsewhere in Mexico, especially along the Yucatan Peninsula, nesting has increased. In the early 1980s, approximately 875 nests/yr were deposited, but by 2000 this increased to over 1,500 nests/year. In 2012, more than 26,000 nests were deposited in Quintana Roo. The total nester abundance in Mexico (in 5 states: Campeche, Quintana Roo, Tamaulipas, Veracruz, Yucatan) is 24,330 turtles.⁷⁴



Source: 2015 STATUS REVIEW at 85 fig.5.3 (March 2015).

The nest sites for which PVAs could be developed were required to meet even stricter criteria and had to possess: (1) a minimum of fifteen years of nesting abundance data generated through consistent effort and protocols; (2) most recent data less than a decade old; (3) no data gaps longer than three years; (4) most recent data with at least three sequential years; and (5) nesting assemblage with a mean annual nesting level of greater than ten females.⁷⁵ Only thirteen sites in all eleven DPSs met the criteria, and because the proposed North Atlantic DPS contains the most studied and some of the most prolific nesting beaches, four primary nesting sites qualified for PVA analysis: (1) Tortuguero, Costa Rica; (2) Isla Aguada, Mexico; (3) Guanahacabibes, Cuba; and (4) the Florida Index Beaches.⁷⁶

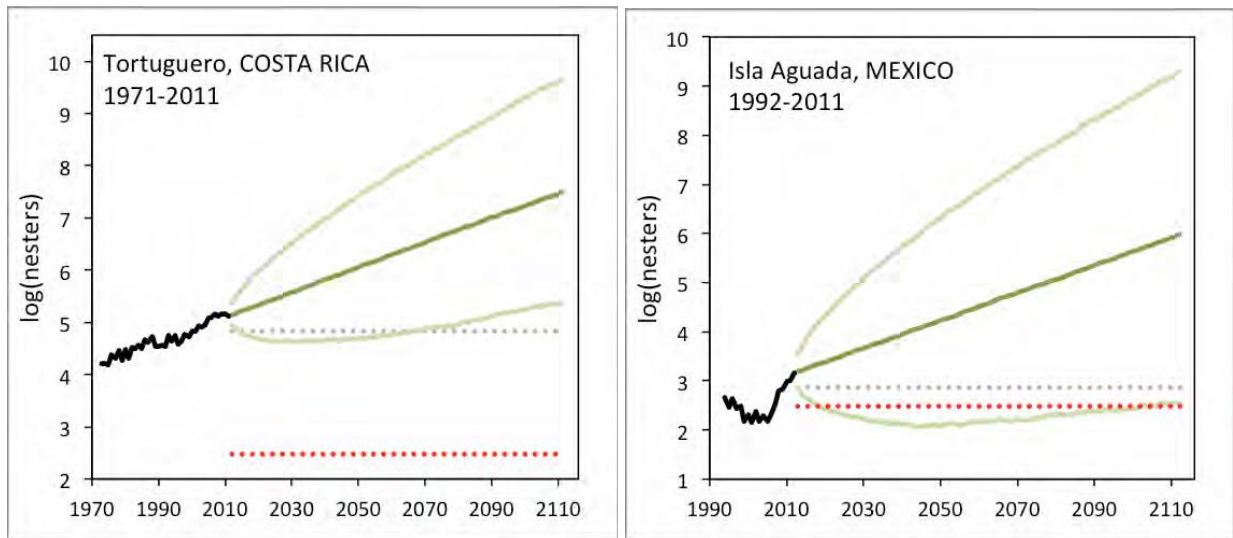
⁷⁴ *Id.*

⁷⁵ *Id.* at 24.

⁷⁶ *Id.* at 85.

To project the extinction risk over time, the SRT identified two biological reference points: (1) a trend-based estimate that evaluated the likelihood that a population would experience a 50% decline from the last observed survey within the next 100 years; and (2) a population-based estimate that evaluated the likelihood that the number of adult females in a population would drop to 100 or less.⁷⁷

Population growth rates in the 15 years of observed data were then sampled randomly and used to project future growth trends over the next 100 years.⁷⁸ The SRT ran 10,000 simulations and plotted the distributions for comparison to the two biological reference points.⁷⁹ For each nesting beach, the average of the 10,000 simulations showed significant increases in annual nesting abundance for the next 100 years and little to no risk of a significant downturn in population trends, and little to no risk that female nesters would fall below critical abundance levels.⁸⁰



Source: NATIONAL MARINE FISHERIES SERVICE, STATUS REVIEW OF THE GREEN TURTLE (*CHELONIA MYDAS*) UNDER THE ENDANGERED SPECIES ACT at 86–87 figs.5.4–5.5 (March 2015).

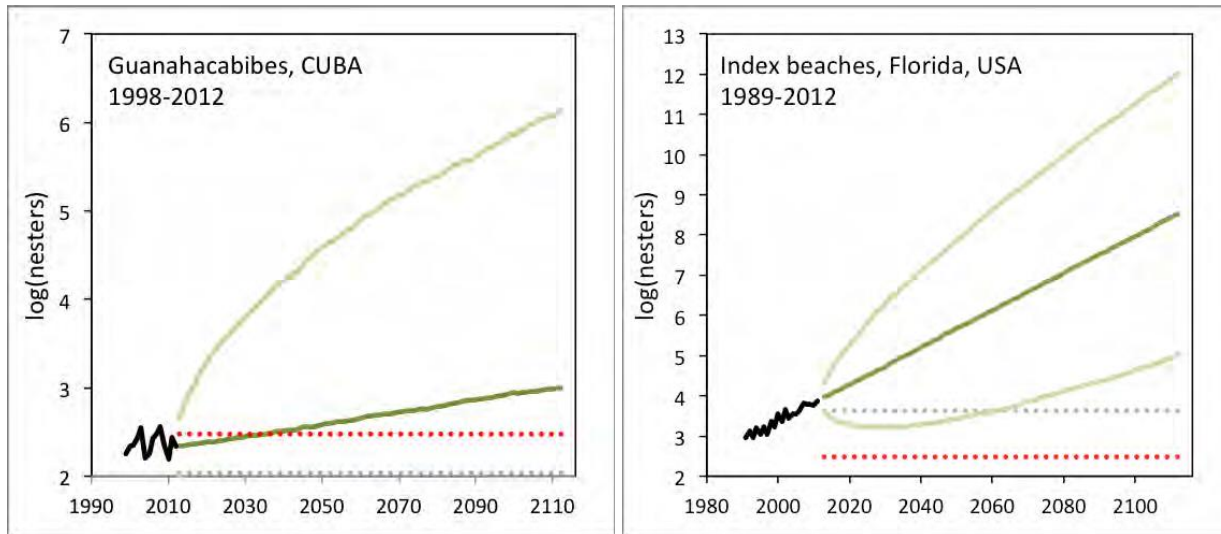
Black line is observed data, dark green line is the average of 10,000 simulations, green lines are the 2.5th and 97.5th percentiles, grey dotted line is trend reference, and red dotted line is absolute abundance reference.

⁷⁷ *Id.* at 823–24.

⁷⁸ *Id.* at 24.

⁷⁹ *Id.*

⁸⁰ *Id.* at 86–89.



Source: NATIONAL MARINE FISHERIES SERVICE, STATUS REVIEW OF THE GREEN TURTLE (*CHELONIA MYDAS*) UNDER THE ENDANGERED SPECIES ACT at 88–89 figs.5.6–5.7 (March 2015).

Black line is observed data, dark green line is the average of 10,000 simulations, green lines are the 2.5th and 97.5th percentiles, grey dotted line is trend reference, and red dotted line is absolute abundance reference.

Site Name	Data Source	Likelihood of 50% decline by end of 100 years	Likelihood female nesting population reduced to 100 by end of 100 years
Tortuguero, Costa Rica	41 seasons of sampling data	0.7%	0.0%
Isla Aguada, Mexico	21 seasons of sampling data	3.7%	2.2%
Guanahacabibes, Cuba	15 seasons of sampling data	27.8%	37.3%
Florida Index Beaches	24 seasons of sampling data	0.3%	0.0%

The PVA Model “assumes all environmental pressures and anthropogenic pressures will remain constant in the forecast period”⁸¹ As such, the PVA provides the best available information on the extinction risk faced by the most essential and most studied populations assuming threats to the turtles neither increase nor decrease in the next 100 years. In other words, unless some new threat to the turtles emerges, the SRT’s PVA model projects that green turtles in the proposed North Atlantic DPS will continue their well-documented year-over-year increases in nesting abundance for at least the next 100 years. This is important information, but further information was necessary to assess the status of green turtles. The next step in the SRT’s evaluation, logically, was to then determine what threats, if any, could emerge over the next century that could impede these growth projections.

⁸¹ 2015 STATUS REVIEW at 25.

Importantly, the Services' analysis of the proposed North Atlantic DPS in the Proposed Rule and the SRT's analysis in the Status Review are seemingly aligned up to this point in the analysis. Both the Proposed Rule and the Status Review view nesting data as the best scientific information available on abundance,⁸² and the fact that the Services based their "threatened" determination on only new or increasing threats strongly suggests that the Proposed Rule recognized that the best available data in the PVA models demonstrate continued upward trends absent the introduction of new threats. The Status Review and the Proposed Rule, however, reached very different conclusions as to the existence of these new or increasing threats, their severity, and the plausibility of concluding that any new or increasing threats would make it likely that green turtles in the proposed North Atlantic DPS would be in danger of extinction in the foreseeable future.

b. Critical Assessment Elements

The SRT evaluated threats to the proposed DPS in conjunction with an evaluation of the resiliency of the proposed DPS to endure those threats and an evaluation of the conservation efforts that could mitigate those threats.⁸³ More specifically, to assess the current (baseline) risk of extinction⁸⁴ to the proposed North Atlantic DPS, the SRT examined: (1) abundance; (2) growth rate; (3) spatial structure; and (4) diversity.⁸⁵ To assess potential future threats or threats too recent to result in observed biological responses,⁸⁶ the SRT examined the same five ESA listing factors that the Services were required to consider for their Proposed Rule.⁸⁷ Finally, potential new or recently implemented conservation efforts were assessed pursuant to Section 4(b)(1)(A) of the ESA, just like the Services would be required to do in their Proposed Rule.⁸⁸ More to the point, the Status Review was based on an assessment of the exact same factors that the Services were required to consider in their Proposed Rule, plus several additional factors.

The SRT examined each of these factors through a voting framework. An SRT member conducted a briefing of relevant information on the proposed North Atlantic DPS and, after all SRT members' questions were answered and additions were incorporated, each SRT member voted on each assessment factor.⁸⁹ For each of the four elements of baseline risk (abundance, trends, structure and diversity), the SRT voted on the likelihood that the element could contribute to a risk of extinction, using the following vote categories:

⁸² 80 Fed. Reg. at 15,287; 2015 STATUS REVIEW at 23.

⁸³ 2015 STATUS REVIEW at 26.

⁸⁴ *Id.* at 559.

⁸⁵ *Id.* at 26.

⁸⁶ *Id.* at 560.

⁸⁷ *Id.* at 26.

⁸⁸ *Id.*

⁸⁹ *Id.*

The following is a voting framework for the Green Turtle Status Review Team to characterize the risk of extinction of 11 DPSs distributed globally. The framework below is to be completed for each of these DPSs independently. Step 1 is intended to provide transparency as to what Elements were the most/least influential in the overall extinction risk voting. Results from Step 1 will be summarized and provided in the Status Review Report. Step 2 characterizes the SRT Expert opinion based on knowledge about Elements 1-6 (see row 13, 14 for listing of Elements).

STEP 1A: RANK THE IMPORTANCE OF CRITICAL ASSESSMENT ELEMENTS 1,2,3, and 4

A. This step one ranking is intended to provide a measure of importance each team member has placed on each input element when judging the Population Extinction Risk. Risks for each VTP element are ranked on a scale of 1 (very low risk) to 5 (very high risk).

B. For Elements 1-4, please give a rank based on the following. These four elements are considered the 'baseline' status for the DPS (ie. Reflect the current risk status for the DPS)

Rank	Risk Category	Description
1	Very Low Risk	Unlikely that this element contributes significantly to risk of extinction, either by itself or in combination with other factors.
2	Low Risk	Unlikely that this element contributes significantly to risk of extinction by itself, but some concern that it may, in combination with other factors.
3	Moderate Risk	This element contributes significantly to long-term risk of extinction, but does not in itself constitute a danger of extinction in the near future.
4	High Risk	This element contributes significantly to long-term risk of extinction and is likely to contribute to short-term risk of extinction in the foreseeable future.
5	Very High Risk	This factor by itself indicates a high risk of extinction in the near future.

The mean votes for each category ranged from 1.18 to 1.45, suggesting that a majority of the SRT estimated that each element presented a “very low” risk of extinction either in isolation or in conjunction with other factors, and that consensus did not view any element as even a “low risk.”⁹⁰

New or recent threats (those in the ESA’s five-factor analysis) were ranked from 0 to -2 with “0” representing a belief that any of the five factors would have “minimal” effects on the “very low” baseline risk of extinction, “-1” representing “moderate effects,” and “-2” having “substantial effects.”⁹¹ The mean response was -0.45, demonstrating that the SRT members found that the threats identified in the ESA five-factor analysis would have little or no impact on the proposed North Atlantic DPS’s “very low” baseline risk of extinction.⁹²

Conservation efforts were assessed under the same voting framework as the five ESA factors, with “0” representing minimal impacts, “1” representing moderate impacts, and “2” representing substantial impacts.⁹³ The mean response was 0.82, indicating again that the SRT did not believe that future conservation efforts would have much impact on the already “very low” risk that the proposed North Atlantic DPS would go extinct.⁹⁴ Importantly, however, these

⁹⁰ *Id.* at 118.

⁹¹ *Id.* at 560.

⁹² *Id.* at 118.

⁹³ *Id.* at 560.

⁹⁴ *Id.* at 118.

mean responses suggest the SRT found the chance that future conservation would benefit green turtles was nearly two times more likely than the risk that future threats would harm green turtles.

	Critical Assessment Elements					
	Element 1	Element 2	Element 3	Element 4	Element 5	Element 6
	Abundance (1 to 5)	Trends / Productivity (1 to 5)	Spatial Structure (1 to 5)	Diversity / Resilience (1 to 5)	Five-Factor Analyses (-2 to 0)	Conservation Efforts (0 to 2)
MEAN						
RANK	1.18	1.18	1.45	1.36	-0.45	0.82
SEM	0.18	0.18	0.16	0.20	0.21	0.18
RANGE	1-3	1-3	1-2	1-3	(-2)-0	0-2

The SRT’s Critical Assessment Elements therefore conclude from the best information available that the proposed North Atlantic DPS has a very low baseline risk of extinction that is unlikely to change based on new threats or threats that are too recent to observe responses. To the extent the SRT found that future events would have any impact at all on the proposed DPS’s baseline risk of extinction, they believed it more likely that the baseline status would be improved rather than harmed.

c. Probability of Reaching Quasi-Extinction

In the final step of their analysis, the SRT synthesized all the previous information into an assessment of the probability that the proposed North Atlantic DPS would reach quasi-extinction. “Quasi-extinction,” which the SRT called the “Critical Risk Threshold,” means that the species “has such low abundance, declining trends, limited distribution or diversity, and/or significant threats (untempered by significant conservation efforts) that the DPS would be at very high risk of extinction with little chance of recovery.”⁹⁵

Again, the SRT utilized a voting framework to extract each SRT member’s expert opinion on the likelihood of extinction. Each SRT member was presented the question: “What is your expert opinion about the probability that the DPS will reach a critical risk threshold within 100 years, throughout all or a significant portion of its range?”⁹⁶ SRT members were directed to answer by assigning 100 points across five risk categories from “Extreme low to Extreme high.”⁹⁷ The extent to which SRT members distributed their 100 points (or not) across the five categories reflected the certainty with which they estimated risk.

⁹⁵ 2015 STATUS REVIEW at 31.

⁹⁶ *Id.* at 561.

⁹⁷ *Id.*

	Probability of Reaching Quasi-Extinction					
	<1%	1-5%	6-10%	11-20%	21-50%	>50%
MEAN ASSIGNED POINTS	87.00	3.00	1.36	4.09	4.09	0.45
SEM	8.82	1.04	0.73	4.09	4.09	0.45
Min	0	0	0	0	0	0
Max	100	10	7	45	45	5

The results clearly demonstrated that the SRT was highly certain (87%) that the proposed North Atlantic DPS faced less than a 1% probability of reaching quasi-extinction. The SRT was even more certain (90%) that the probability the proposed DPS would reach quasi-extinction was 5% or less. Perhaps most important to the ESA’s definition of threatened species as those that are likely to be in danger of extinction in the foreseeable future, the SRT was 99.55% certain that such a risk was highly unlikely.⁹⁸

The best available scientific information is therefore that the proposed North Atlantic DPS is highly unlikely to be in danger of extinction now or for the next hundred years. The Proposed Rule’s conclusion that this risk is “likely” arbitrarily and capriciously ignores the best available scientific evidence and is beyond the apex of deference that could be afforded expert agencies in making scientific determinations.

d. There is No Basis for the Proposed Rule to Disregard the Status Review’s Findings

The Proposed Rule attributes the divergence between the Status Review’s conclusion that there is little to no risk that the proposed North Atlantic DPS would be in danger of extinction and the Proposed Rule’s conclusion that the danger is likely to differences between the “Critical Risk Threshold” evaluated by the SRT and the ESA’s definitions of endangered and threatened species that the Services were required to evaluate in the Proposed Rule.⁹⁹ This creates a faulty comparison.

The ESA defines an endangered species as a species “which is in danger of extinction throughout all or a significant portion of its range,”¹⁰⁰ and a threatened species as one “which is likely to become an endangered species within the foreseeable future.”¹⁰¹ As FWS explained “in simple terms,” “[e]ndangered species are at the brink of extinction now,” while “[t]hreatened species are likely to be at the brink in the near future.”¹⁰²

⁹⁸ Conservatively assuming that “likely” simply means “more likely than not” (*i.e.*, >50%).

⁹⁹ 80 Fed. Reg. at 15,287.

¹⁰⁰ 16 U.S.C. § 1532(6).

¹⁰¹ *Id.* § 1532(20).

¹⁰² U.S. FISH AND WILDLIFE SERVICE, WHAT IS THE DIFFERENCE BETWEEN ENDANGERED AND THREATENED? (Mar. 2003), available at <http://www.fws.gov/endangered/esa-library/pdf/t-vs-e.pdf>.

By comparison, the Status Review assessed the risk that the species would become “quasi-extinct.”¹⁰³ “Quasi-extinction,” which the SRT called the “Critical Risk Threshold,” means that the species “has such low abundance, declining trends, limited distribution or diversity, and/or significant threats (untempered by significant conservation efforts) that the DPS would be at very high risk of extinction with little chance of recovery.”¹⁰⁴

The Services suggest the Critical Risk Threshold “is a condition worse than endangered, because it essentially precludes recovery.”¹⁰⁵ API disagrees. The definition of “Critical Risk Threshold” simply says that recovery is unlikely—a dire circumstance indeed, but one easily encompassed within the ESA’s phrase “in danger of extinction,” the Service’s interpretation of that phrase to mean “on the brink of extinction,” and court holdings finding that this interpretation is valid.¹⁰⁶

Most importantly, however, the Services’ conclusion that they could discount the Status Review’s 87% certainty that the proposed North Atlantic DPS would face less than a 1% chance of reaching a critical risk threshold is at odds with the Services’ use of SRTs in other circumstances. The SRT that NMFS empaneled to assess the status of 82 species of coral evaluated the same definition of “critical risk threshold” and used the same 100-point voting mechanism to reflect the relative certainty.¹⁰⁷ None of the 82 species received a single vote in the “<1%” risk category and the most votes any one risk category received was 37.¹⁰⁸ Fifty-six of the 82 species of coral had mean likelihoods of 50% or higher, yet only 20 species were listed as threatened.¹⁰⁹

Even if the Critical Risk Threshold can be read to be a condition worse than “the brink of extinction,” the SRT’s analysis of the Critical Assessment Elements evaluated the same likelihood of extinction that the ESA requires—not an analysis of the likelihood of reaching the Critical Risk Threshold.¹¹⁰ There again, the SRT’s overwhelming view was that there was a very low risk of extinction.¹¹¹ Importantly, in reaching that conclusion, the SRT examined the same five factors that the Services must evaluate in order to list a species under the ESA.¹¹² And, the

¹⁰³ 2015 STATUS REVIEW at 25.

¹⁰⁴ *Id.* at 31.

¹⁰⁵ 80 Fed. Reg. at 15,287.

¹⁰⁶ *In re Polar Bear Endangered Species Act Listing*, 794 F. Supp. 2d 65 (D.D.C. 2011).

¹⁰⁷ NATIONAL MARINE FISHERIES SERVICE, SYNTHESIS OF RISK ASSESSMENTS: TAXONOMIC, REGIONAL, AND THREAT-BASED PATTERNS, *available at* http://www.nmfs.noaa.gov/stories/2012/05/docs/015_corals_status_review_risk_synthesis.

¹⁰⁸ NATIONAL MARINE FISHERIES SERVICE, SYNTHESIS OF RISK ASSESSMENTS: TAXONOMIC, REGIONAL, AND THREAT-BASED PATTERNS, *available at* http://www.nmfs.noaa.gov/stories/2012/05/docs/015_corals_status_review_risk_synthesis.pdf.

¹⁰⁹ 79 Fed. Reg. 53,852 (Nov. 11, 2014).

¹¹⁰ 2015 STATUS REVIEW at 560 (SRT questionnaire directing SRT members to estimate risk of extinction).

¹¹¹ *Id.* at 118.

¹¹² *Id.*

SRT evaluated those threats 100 years into the future—well beyond what is reasonably foreseeable under the ESA.¹¹³

The Services also suggest that the Proposed Rule’s divergent view of the likelihood of extinction was justified because the SRT did not consider the potential impact on the proposed North Atlantic DPS of the removal of ESA protections, but the Proposed Rule contains no analysis that the proposed North Atlantic DPS is likely to be at risk of extinction in the foreseeable future if it ceased to be listed on the ESA.¹¹⁴ To the contrary, both the Status Review and the Proposed Rule demonstrated that, apart from the current ESA listing, green turtles in the proposed DPS are protected under a multitude of treaties and statutes, state regulations, voluntary efforts, and beach acquisitions.¹¹⁵ These protections are in place for green turtles, other sea turtles and marine species, and would not be eliminated based on the hypothetical delisting of the green turtle. Moreover, in the proposed North Atlantic DPS, the vast majority of nesting females are outside of the United States,¹¹⁶ and would likely remain protected regardless of the listing status of the green turtle in the U.S. portion of the proposed North Atlantic DPS—an area the SRT did not consider to be a significant portion of its range.¹¹⁷

In sum, the Status Review is the best available information on green turtles’ risk of extinction in the proposed North Atlantic DPS. The Status Review examined the same factors that the Services must consider under the ESA and several additional factors. All analyses run by the SRT identified a strong long-term trend of increasing abundance throughout the proposed DPS. The expert opinions offered by each SRT member were consistent, highly certain, and overwhelmingly demonstrated that green turtles in the proposed North Atlantic DPS will experience less than a 1% risk of being in danger of extinction for at least the next century. The ESA does not require the Services to adopt the conclusions of their experts, but if the Services reach a different conclusion, they must base that conclusion on the best available information. No such information was presented—certainly nothing that would allow the Services to interpret a “<1%” of risk to mean a “>50%” likelihood of risk. The Services may be entitled to deference, but “only to the extent that the agency utilizes, rather than ignores, the analysis of its experts.”¹¹⁸

Finally, it is not even clear whether the Services disagree with the Status Review’s conclusion that green turtles in the proposed North Atlantic DPS are unlikely to be in danger of extinction in the foreseeable future. In explaining the Status Review’s highly certain “<1%” risk estimation, the Proposed Rule states:

We note that, presumably because this species is such a long-lived species and, as such, it is unlikely that it would go extinct within 100 years even if it was lost in many places, every DPS received

¹¹³ 80 Fed Reg. at 15,286; *see infra* Sec. II.C.1.

¹¹⁴ 80 Fed. Reg. at 15,287.

¹¹⁵ *Id.* at 15,289–92; 2015 STATUS REVIEW at 115–17.

¹¹⁶ 2015 STATUS REVIEW at 84.

¹¹⁷ *Id.* at 117.

¹¹⁸ *Defenders of Wildlife v. Babbitt*, 958 F. Supp. 670, 685 (D.D.C. 1997).

numerous points in the <1 percent category, including those with the most depressed numbers and that faced the highest threats.¹¹⁹

With this statement, the Services seemingly concluded that their current worldwide listing of green turtles as either threatened or endangered is wrong because the worldwide population does not meet the definition of a threatened species (“likely to become” in danger of extinction within the foreseeable future).¹²⁰ When evaluating the most studied, most abundant, most resilient, most spatially diverse, and least threatened of the 11 DPSs, however, the Services then concluded that “continued threats are likely to endanger the [proposed North Atlantic DPS] within the foreseeable future.”¹²¹ That conclusion is arbitrary and capricious.

3. The ESA’s Required Five-Factor Analysis Is Not Met

The Proposed Rule found significant threats under each of the five factors identified in Section 3 of the ESA and concluded that green turtles in the proposed North Atlantic DPS are likely to be in danger of extinction within the foreseeable future. The threats and endangerment risks identified by the Services cannot be rectified with the undisputed and strong evidence that green turtle abundance has increased throughout the proposed North Atlantic DPS and that those trends are projected to continue.

The Proposed Rule offered that it is possible to conclude that abundant and growing green turtle populations are being “negatively affected” because:

increasing threats to the terrestrial and marine habitats are not reflected in the current trend for the North Atlantic DPS, as it was based on nesting numbers and not all current life stages. These increasing threats to the population will become apparent when those life stages affected by the threats return to nest, as the trend information is based solely on numbers of nests. This lag time was considered in our analysis. For example, a threat that affects the oceanic juvenile phase will not be detected until those turtles return to nest, approximately 15 to 20 years later.¹²²

This explanation of the Services’ ability to find increased risks in increasingly abundant populations violates the ESA, is inconsistent with the findings of the Status Review and other available information, and is logically flawed. A great deal about the various life stages of green turtles in the proposed North Atlantic DPS is well known:

¹¹⁹ 80 Fed. Reg. at 15,287 (emphasis added).

¹²⁰ 16 U.S.C. § 1532(20).

¹²¹ 80 Fed. Reg. at 15,293 (emphasis added).

¹²² *Id.* at 15,288.

Life Stage	Approximate Duration	Best Available Abundance Information
<u>Egg/Hatchling phase</u>	40 to 75 days for incubation ¹²³	The proposed North Atlantic DPS “is data rich and has some of the longest running studies on nesting and foraging turtles in the world. All major nesting populations demonstrate long-term increases in abundance.” ¹²⁴
<u>Oceanic juvenile phase</u>	1–7 years ¹²⁵	There are no known abundance surveys in the proposed North Atlantic DPS.
<u>Neritic juvenile phase</u>	Begins when the turtles exit the oceanic zone (1–7 years after hatching) and ends at age of sexual maturity (12–20 years). ¹²⁶	The proposed North Atlantic DPS “is data rich and has some of the longest running studies on . . . foraging turtles in the world.” ¹²⁷ <ul style="list-style-type: none"> - 661% increase in capture rate over 24 years.¹²⁸ - “Significant increase in the annual rate of capture of immature green turtles from 1977 to 2002”¹²⁹

¹²³ *Green Sea Turtle* (*Chelonia mydas*), U.S. FISH & WILDLIFE SERVICE NORTH FLORIDA ECOLOGICAL FIELD SERVICES OFFICE, <http://www.fws.gov/northflorida/SeaTurtles/Turtle%20Factsheets/Green-Sea-Turtle.htm> (last visited July 24, 2015).

¹²⁴ 2015 STATUS REVIEW at 119.

¹²⁵ Goshe *et al.* (2010).

¹²⁶ Zurita *et al.* (2012).

¹²⁷ 2015 STATUS REVIEW at 119.

¹²⁸ Ehrhart *et al.* (2007).

¹²⁹ 2015 STATUS REVIEW at 89 (internal citations omitted).

<u>Adults</u>	Age of sexual maturity (12–20 years) to a nesting lifespan of ~20 years) ¹³⁰	The proposed North Atlantic DPS “is data rich and has some of the longest running studies on nesting and foraging turtles in the world. All major nesting populations demonstrate long-term increases in abundance.” ¹³¹
---------------	---	---

As depicted in the chart above, the only life stage for green turtles in the proposed North Atlantic DPS that is lacking abundance and trend data is the oceanic phase, which lasts between one and seven years. While there are no abundance estimates for this life stage, its increased abundance may be inferred from the observed increases in the neritic population. The neritic population is composed of a pool of juvenile age groups ranging from 1–7 years at the low end and 15–20 years at the upper end. The large size of this multi-age pool can dampen or buffer our ability to see the contribution (or lack thereof) of an individual age class entering the pool. While API agrees that further study may be required to specifically identify the relative proportion of age-groups within the neritic population, the best scientific data available demonstrates an aggregate neritic population that is increasing in abundance. Absent some evidence that specific cohorts with neritic population suffered declines while in the oceanic phase, the best data available is that the aggregate increases in neritic populations are occurring across all age-groups in the neritic population.

Further, the Proposed Rule bolstered its paradoxical conclusion that green turtles are both increasingly abundant and increasingly threatened by suggesting that the SRT identified the prospect of increasing threats.¹³² This suggestion, however, is misleading. The SRT did evaluate the potential impact of threats that would emerge or were too recent to be reflected in current abundance trends—and the SRT evaluated those new or emerging threats under the same five factors the Services used in the Proposed Rule.¹³³ The majority of the SRT members concluded that these potential new or emerging factors would have a minimal impact on current abundance trends.¹³⁴ The Proposed Rule reached the opposite conclusion.

The Proposed Rule’s conclusion that the proposed North Atlantic DPS is likely to be in danger of extinction in the foreseeable future is premised only on the absence of abundance data in one of the four life stages of the green turtle. To be clear, all of the abundance data in the proposed North Atlantic DPS depicts a large and growing population. This is the “best scientific and commercial data available” that the Services are required by the ESA to use when making listing decisions.¹³⁵ It does not cease to be the “best scientific and commercial data available”

¹³⁰ 2015 STATUS REVIEW at 13.

¹³¹ *Id.* at 119.

¹³² 80 Fed. Reg. at 15,288.

¹³³ 2015 STATUS REVIEW at 118.

¹³⁴ *Id.*

¹³⁵ 16 U.S.C. § 1533(b)(1)(A).

simply because we lack data about the oceanic stage. The Proposed Rule’s suggestion that the unequivocal trend data can be overlooked based on some residual uncertainty is impermissible under the ESA. The “best scientific and commercial data available” is that green turtles in the proposed North Atlantic DPS are increasing in abundance, and that those increases are unlikely to be adversely impacted by the new or emerging threats that the Services identified in their five-factor analysis. And, as explained in the subsections below, the Services have not even properly identified these factors to be threats.

a. There Is No New Present or Threatened Destruction of Habitat or Range

The Proposed Rule concludes that green turtle habitat in the proposed North Atlantic DPS continues to be degraded on both nesting beaches and in the neritic/oceanic zones. Again, the SRT examined the same potential threats in greater detail and determined that they would have little or no adverse impact on green turtle abundance trends.¹³⁶

In the terrestrial zone, the Proposed Rule asserts that nesting beaches “continue to be degraded from . . . coastal development, coastal armoring, beachfront lighting, erosion, sand extraction, and vehicle and pedestrian traffic.”¹³⁷ To the extent the Proposed Rule is suggesting that these activities have not been completely eliminated, it is accurate. The Proposed Rule’s assertion that these threats are increasing, however, is inaccurate.

In Florida, coastal development continues to occur, but only pursuant to an increasingly restrictive permitting process.¹³⁸ Florida’s beach protection regulations protect against overdevelopment and erosion. The Coastal Construction Control Line Program prohibits all construction and modification seaward of the 30-year erosion protection line.¹³⁹ Florida’s Department of Environmental Protection is authorized to issue special permits under narrow circumstances, but since 1996, the number of permit applications has dropped and the number of permit denials has increased.¹⁴⁰ Armoring Permit applications have similarly dropped from over 1,000 permits between 1981 and 1985 to around 200 between 2001 and 2005.¹⁴¹

¹³⁶ 2015 STATUS REVIEW at 118.

¹³⁷ 80 Fed. Reg. at 15,288.

¹³⁸ See Kenneth E. Spahn, *The Beach and Shore Preservation Act: Regulating Coastal Construction in Florida*, 24 STETSON L. REV. 353 (1995), available at <http://www.stetson.edu/law/lawreview/media/the-beach-and-shore-preservation-act-regulating-coastal-construction-in-florida-24-2.pdf>.

¹³⁹ FLA. STAT. § 161.053(5)(e).

¹⁴⁰ Thomas K. Ruppert, *Eroding Long-Term Prospects for Florida’s Beaches: Florida’s Coastal Construction Control Line Program*, SEA GRANT LAW & POL. J. 65 (2008), available at <http://nsglc.olemiss.edu/sglpj/Vol1No1/4Ruppert.pdf>.

¹⁴¹ *Id.*

In addition to prohibiting construction that could lead to erosion, eroded beaches in Florida are increasingly being remediated through beach nourishment.¹⁴² Importantly, beach nourishment has been shown to increase nesting success.¹⁴³

Further, federal, state, and local authorities have increased the percentage of important nesting beaches that are permanently protected from *any* disturbance. Foremost among these preserved beaches is the Archie Carr National Wildlife Refuge that was established in 1991, covering 20.5 miles of beach, and protecting 25% to 35% of all green turtle nests in the United States.¹⁴⁴

Protection of green turtle nesting beaches has similarly increased in other countries in the proposed North Atlantic DPS. Costa Rica protects the beach that holds 79% of nesting females as a national park.¹⁴⁵ Cuba and Mexico similarly protect their nesting beaches.¹⁴⁶

Artificial lighting is also increasingly regulated. The state of Florida passed a model lighting ordinance in 1993,¹⁴⁷ and versions of it are newly adopted in counties and municipalities almost every year.¹⁴⁸ In the twenty-seven Florida counties where green turtles are known to nest, twenty-two counties and fifty-eight municipalities have passed lighting ordinances.¹⁴⁹

Far from being new or increasing threats of such a magnitude that they could reverse the proposed North Atlantic DPS's large and increasing abundance, potential threats from construction, armoring, lighting and erosion have decreased throughout the DPS. The best scientific information available is that these decreased threats to nesting beaches correspond to observed increases in nesting abundance.

The only potential threat to nesting beaches identified in the Proposed Rule that could be considered to be increasing is sea level rise. The Proposed Rule cited a single study (Flaxman and Vargas-Moreno (2011)) predicting a one meter increase in sea level by 2060.¹⁵⁰ While API does not pretend to be able to predict the timing or severity of potential sea level rise, we note that the estimated one meter rise by 2060 is an extremely dire prediction and a significant outlier from other model projections. The Intergovernmental Panel on Climate Change ("IPCC"), for instance, does not project sea level rise to reach a meter before 2100, even under its highest risk

¹⁴² 2015 STATUS REVIEW at 94.

¹⁴³ Ernest and Martin (1999).

¹⁴⁴ *Archie Carr National Wildlife Refuge*, U.S. FISH & WILDLIFE SERVICE, <http://www.fws.gov/archiecarr/> (last visited July 24, 2015).

¹⁴⁵ 2015 STATUS REVIEW at 111.

¹⁴⁶ *Id.* at 95–96.

¹⁴⁷ *Marine Turtle Protection*, FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, <http://myfwc.com/wildlifehabitats/managed/sea-turtles/protection/> (last visited July 24, 2015).

¹⁴⁸ *Id.*

¹⁴⁹ 2015 STATUS REVIEW at 95.

¹⁵⁰ 80 Fed. Reg. at 15,288.

scenarios.¹⁵¹ Indeed, the “one meter by 2060” scenario in Flaxman and Vargas-Moreno (2011) was not based on a predictive model. It was an “alternative future” scenario designed to be used in strategic conservation planning. Nonetheless, this same “one meter by 2060” was considered in the Status Review as well and was viewed by SRT members as presenting little to no threat to nesting green turtles in the proposed North Atlantic DPS.

The Proposed Rule similarly erred in concluding that neritic and oceanic habitat was increasingly being threatened in the proposed North Atlantic DPS.¹⁵² The sargassum habitats used by green turtles are abundant and well-protected. Gross estimates of the standing stock for sargassum in the North Atlantic range between 4 and 11 million metric tons.¹⁵³ According to the best scientific information available, sargassum abundance has remained steady with no observed declines in biomass or range for as long as it has been studied.¹⁵⁴

Additionally, sargassum has been protected under a fishery management plan (“FMP”) since 2002,¹⁵⁵ and is protected as essential fish habitat.¹⁵⁶ The FMP for sargassum is incredibly stringent, even though there is only one known commercial harvester of sargassum.¹⁵⁷ The sargassum FMP: (1) limits the total allowable catch of sargassum to 5,000 pounds per year; (2) limits harvesting to November to June to protect turtles; (3) requires observers on any vessel harvesting sargassum; (4) prohibits harvest within 100 miles of shore; and (5) imposes gear specifications.¹⁵⁸

The Proposed Rule’s suggestion that pollution in these habitats is increasing is based on water quality studies in other countries that were conducted as far back as 1977.¹⁵⁹ While API does not dispute that many nations in the proposed North Atlantic DPS potentially could do more to improve their maritime water quality, there is no disputing that water quality laws, regulations,

¹⁵¹ INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2014 SYNTHESIS REPORT SUMMARY FOR POLICYMAKERS (2015), available at https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf.

¹⁵² 80 Fed. Reg. at 15,288.

¹⁵³ Fishery Management Plan for Pelagic Sargassum Habitat of the South Atlantic Region, South Atlantic Fishery Management Council (Nov. 2002) at 28.

¹⁵⁴ *Id.* at 16; see also J.N. Butler and A.W. Stoner, *Pelagic Sargassum: has its biomass changed in the last 50 years?* 31 DEEP-SEA RES. 1259–1264 (1984); U. Nierman, H.G. Andres, and H.C. John, *Distribution and abundance of pelagic Sargassum in spring 1979*, 17 SENCKENB. MARIT. 293–302 (1986).

¹⁵⁵ SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL, FISHERY MANAGEMENT PLAN FOR PELAGIC SARGASSUM HABITAT OF THE SOUTH ATLANTIC REGION (Nov. 2002).

¹⁵⁶ NMFS, SOUTHEAST REGIONAL OFFICE, ESSENTIAL FISH HABITAT: A MARINE FISH HABITAT CONSERVATION MANDATE FOR FEDERAL AGENCIES SOUTH ATLANTIC REGION (Sept. 2010), at 11–12.

¹⁵⁷ *Sargassum*, SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL, <http://www.safmc.net/Library/Sargassum> (last visited July 24, 2015).

¹⁵⁸ SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL, FISHERY MANAGEMENT PLAN FOR PELAGIC SARGASSUM HABITAT OF THE SOUTH ATLANTIC REGION (Nov. 2002).

¹⁵⁹ 80 Fed. Reg. at 15,288.

and infrastructure, in addition to improvements in maritime disposal practices and technology, have certainly improved maritime water quality since 1977.¹⁶⁰

In the United States, the Proposed Rule's suggestion that marine pollution is increasing ignores the effects of the Clean Water Act ("CWA"), the CWA's increasingly strict industrial discharge limits, wastewater discharge limitations and treatment requirements, storm water permitting requirements, and marine and vessel discharge limits.¹⁶¹ The Proposed Rule similarly ignores the passage of the Beaches Environmental Assessment and Coastal Health Act of 2000, which strengthened coastal water quality criteria, and the passage of the Clean Boating Act of 2008, which authorized EPA to regulate discharges from small recreational vessels.¹⁶²

The Proposed Rule's suggestion that marine pollution in the proposed North Atlantic DPS is an increasing threat is not in accordance with the evidence. The best scientific information available suggests there have been "large declines" in marine pollution in the proposed DPS.¹⁶³ Those declines are likely attributable to the increased stringency of water quality laws and regulations throughout the proposed North Atlantic DPS. Those declines may also correlate with observed increases in green turtle abundance over the same time period. The best information available is that marine pollution is a declining threat to green turtles in the proposed North Atlantic DPS—not a new or increasing threat that could reverse the long-term trend of increasing green turtle abundance.

b. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes is a Decreasing Threat

Overutilization for commercial, recreational, scientific, or educational purposes is similarly a decreasing threat to the green turtle. Although intentional capture of green turtles is ongoing in Costa Rica, Mexico, Cuba, the Bahamas, Jamaica, and the Cayman Islands,¹⁶⁴ it is declining, and there are laws in place to regulate it. While green turtle fishing in Nicaragua remains somewhat common, the Status Review noted that Nicaraguan fishing had no noticeable

¹⁶⁰ *Wastewater, Sewage and Sanitation*, UNITED NATIONS ENVIRONMENT PROGRAMME: THE CARIBBEAN ENVIRONMENT PROGRAMME, <http://www.cep.unep.org/publications-and-resources/marine-and-coastal-issues-links/wastewater-sewage-and-sanitation> (last visited July 24, 2015); *Solid Waste and Marine Litter*, UNITED NATIONS ENVIRONMENT PROGRAMME: THE CARIBBEAN ENVIRONMENT PROGRAMME, <http://www.cep.unep.org/publications-and-resources/marine-and-coastal-issues-links/solid-waste-and-marine-litter> (last visited July 24, 2015).

¹⁶¹ *See Water*, U.S. ENVIRONMENTAL PROTECTION AGENCY, <http://www2.epa.gov/regulatory-information-topic/water> (last visited July 24, 2015).

¹⁶² *About the Clean Boating Act*, U.S. ENVIRONMENTAL PROTECTION AGENCY, <http://water.epa.gov/lawsregs/lawguidance/cwa/vessel/CBA/about.cfm> (last visited July 24, 2015).

¹⁶³ Christine A. Ribic, Seba B. Sheavly, & David J. Rugg, *Trends in Marine Debris in the U.S. Caribbean and the Gulf of Mexico 1996-2003*, 11 J. INTEGRATED COASTAL ZONE MGMT. 7–19 (2011), available at http://www.aprh.pt/rgci/pdf/rgci-181_Ribic.pdf.

¹⁶⁴ 80 Fed. Reg. at 15,289.

impact on green turtle populations in the proposed North Atlantic DPS or even within the nearby nesting beaches.¹⁶⁵

The Status Review notes that poaching was a pervasive problem in Tortuguero in Costa Rica as early as the 1970s and was at its worst between 1997 and 1999: a mean of 600 adults were killed in that period, and a peak of 1,720 nesting adults were poached in 1997. Conservation and nest protection efforts, however, have resulted in substantial decreases in poaching—in 2011 only 181 nests were poached (1.5% of the total number of nests), and in 2011 only 32 adults were poached.¹⁶⁶ These are substantial decreases from prior poaching rates, and likely contribute to the observed increases in nesting at Tortuguero.¹⁶⁷

Similarly, although decades ago harvesting posed a threat to green turtles in Mexico along the GoM, a 1973 law provided protection to sea turtles and prohibited direct harvest.¹⁶⁸ Additionally, in 1990 the president issued a decree banning the use or sale of sea turtle products throughout all of Mexico.¹⁶⁹ There are also other conservation programs in place in Mexico to discourage harvesting and to eliminate poaching.

In Cuba, a directed sea turtle fishery closed in 2008,¹⁷⁰ thus substantially decreasing the amount of intentionally captured green turtles. Currently, green turtles caught as bycatch can be utilized in only two communities; elsewhere, they cannot be used and must be discarded.¹⁷¹ Cuban authorities are working to confiscate sea turtle meat, and even though fines for illegal harvesting of sea turtles are high, the government is considering increasing them even more.¹⁷² Cuba's Office of National Fishing Inspection is increasing efforts to address illegal sea turtle harvest.¹⁷³ It is clear that intentional capture of green turtles is decreasing in Cuba, and that national authorities are working through the law to discourage it further.

Harvesting of green turtles in Panama has decreased as well from the higher levels reported decades ago.¹⁷⁴ In 2009, the Bahamian government outlawed harvesting, possession, purchase, and sale of turtles, their parts, and their eggs, and prohibited the molestation of sea turtle nests.¹⁷⁵ In the Cayman Islands, 2008 legislation prohibited the possession of eggs, taking of nesting females, and taking or disturbance of any sea turtle between April and November.¹⁷⁶

¹⁶⁵ 2015 STATUS REVIEW at 100.

¹⁶⁶ *Id.* at 98–99.

¹⁶⁷ *Id.*

¹⁶⁸ *Id.* at 99.

¹⁶⁹ *Id.* at 115.

¹⁷⁰ *Id.* at 99.

¹⁷¹ *Id.*

¹⁷² *Id.*

¹⁷³ *Id.*

¹⁷⁴ *Id.*

¹⁷⁵ *Id.* at 113.

¹⁷⁶ *Id.* at 113–14.

There are also licensing conditions stipulating the size of green turtles that can be caught.¹⁷⁷ In Puerto Rico, conservation projects and the outlawing of turtle and egg harvesting have led to the control of intentional capture of green turtles.¹⁷⁸

The best scientific and commercial information available demonstrate that harvesting and poaching are decreasing throughout the proposed North Atlantic DPS. The fact that poaching still occurs to some lesser degree is not evidence that “[c]urrent harvest of green turtles and eggs, in a portion of this DPS, continues to be a significant threat to the persistence of this DPS.”¹⁷⁹ Unless poaching could be identified as a new or increasing threat, it is unlikely to have any impact on green turtles. Indeed, the fact that green turtle nesting abundance increased through times when poaching was more prevalent suggests that the current (lower) level of poaching is not a threat to the proposed North Atlantic DPS.

c. Disease and Predation Are Not New or Increasing Threats

The Services identify disease (namely, fibropapillomatosis), harmful algal blooms, and predation by raccoons, foxes, hogs, and coyotes as “significant threats” to the proposed North Atlantic DPS. As with each other “threat” identified in the Proposed Rule, these issues are not new, nor are they increasing.

Scientists have known for decades that fibropapillomatosis has been found in green turtle populations.¹⁸⁰ As well, for decades scientists have been aware of the potential effects that fibropapillomatosis may have on green turtles.¹⁸¹ But the Services themselves note in the Proposed Rule that “there is uncertainty of the long-term survivability and effect on the reproductive effort of the population.”¹⁸² Peer reviewers of the Status Review note that there are “no conclusive estimates of the effect of [fibropapillomatosis] on mortality or reproduction.”¹⁸³ Photographic evidence of other turtles shows that the tumors on some turtles go into regression, and that the presence of fibropapillomatosis may not hinder an individual’s growth.¹⁸⁴ The Services themselves also note in their Status Review that, even despite the continued existence of fibropapillomatosis in the North Atlantic DPS, “[g]reen turtles in Florida have demonstrated encouraging signs of recovery after more than 20 years of protection efforts with the population increasing at a rate of 13.9 percent per year.”¹⁸⁵ In short, though fibropapillomatosis has been shown to be affecting the green turtle, it is not a new threat, and there is no reliable indication

¹⁷⁷ *Id.*

¹⁷⁸ *Id.* at 101.

¹⁷⁹ 80 Fed. Reg. at 15,289 (emphasis added).

¹⁸⁰ See, e.g., U.S. FISH & WILDLIFE SERVICE AND NATIONAL MARINE FISHERIES SERVICE, RECOVERY PLAN FOR U.S. POPULATION OF ATLANTIC GREEN TURTLE (*CHELONIA MYDAS*) at 11 (Oct. 1991) [hereinafter RECOVERY PLAN].

¹⁸¹ RECOVERY PLAN at 11.

¹⁸² 80 Fed. Reg. at 15,289.

¹⁸³ NATIONAL MARINE FISHERIES SERVICE, SUMMARY OF PEER REVIEW COMMENTS ON THE 2015 GREEN TURTLE STATUS REVIEW at cmt.A54 (Jan. 2015).

¹⁸⁴ 2015 STATUS REVIEW at 103.

¹⁸⁵ *Id.* at 102.

that it is affecting reproduction or mortality rates—in fact, green turtle populations continue to increase year over year in spite of the disease’s existence.

The Proposed Rule also names harmful algal blooms as a potential threat to green turtles, but the Status Review makes clear that the Services overstate the situation.¹⁸⁶ To begin with, there have only been two such events recorded.¹⁸⁷ Although the Proposed Rule notes that “[s]ea turtle stranding trends indicate that these events were acting as a mortality factor,”¹⁸⁸ the Status Review elucidates that turtles that may have been affected were “otherwise robust and healthy in appearance” and “completely recovered within days of being removed from the area of the red tide.”¹⁸⁹ It appears these were isolated incidents, with limited effects on the turtles. Most importantly, the Status Review noted that “[t]he population level effects of these events are not yet known”¹⁹⁰ and that the SRT viewed algal blooms and all the other risks identified herein as having minimal impact on green turtles’ increasing abundance.

Predation of nests and hatchlings is not a new threat to green turtles either, and protection methodologies continue to be developed and implemented. The Services acknowledge that “[n]est protection programs are in place at most of the major nesting beaches in the North Atlantic DPS,” and they state that predation is only a significant threat “in the absence of well managed nest protection programs.”¹⁹¹ This statement is borne out by the data, which show that efforts at predator monitoring and removal have caused a sharp decline in nest predation and are estimated to have saved 120,597 turtle eggs in 2002.¹⁹² There are several measures authorities take to counteract predation, such as combatting the feeding of predatory wildlife, predator monitoring and removal, and caging of nests, among others. Predation is a recognized, managed, and decreasing threat to green turtles. It is not a new threat, nor an increasing threat, nor remotely likely to impede the proposed North Atlantic DPS’s long-term increases in abundance.

d. There Are Many Existing and Adequate Regulatory Measures

There are many existing and adequate regulatory mechanisms in place to protect the green turtle and multiple other means through which harms to the turtle will be reduced. The mechanisms exist at the international, national, state, and local levels. The task which the Services assigned themselves—evaluating the status of the DPS “absent the protections of the ESA”—is irrelevant to the ESA’s five-factor analysis and particularly misplaced in a “Factor D” analysis of existing regulatory mechanisms. Green turtles benefit from protections that governments extend to all sea turtle species, not just green turtles, ensuring protections for the green turtle regardless of its actual listing status.

¹⁸⁶ 80 Fed. Reg. at 15,289.

¹⁸⁷ *Id.* at 15,289.

¹⁸⁸ *Id.*

¹⁸⁹ 2015 STATUS REVIEW at 103.

¹⁹⁰ *Id.* at 103.

¹⁹¹ 80 Fed. Reg. at 15,289.

¹⁹² *Information about Sea Turtles: Threats from Invasive Species Predation*, SEA TURTLE CONSERVANCY, <http://www.conserveturtles.org/seaturtleinformation.php?page=invasivespecies> (last visited July 24, 2015).

Internationally, the Services name at least twelve treaties, conventions and national laws with international reach that work to protect the green turtle.¹⁹³ These include, for example, the Inter-American Convention for the Protection and Conservation of Sea Turtles, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and the Food and Agriculture Organization Technical Consultation on Sea Turtle-Fishery Interactions, among others.¹⁹⁴ The Services note that:

As a result of these designations and agreements, many of the international impacts directed at sea turtles have been lessened: harvest of eggs and adults has been reduced at several nesting areas through nesting beach conservation efforts and an increasing number of community-based initiatives are in place to reduce the take of turtles in foraging areas.¹⁹⁵

Additionally, the implementation of turtle excluder devices (“TEDs”) in the United States and South and Central America has proved to be beneficial.¹⁹⁶ Given the substantial number of international laws and agreements that protect green turtles, the Services cannot say that this network is lacking or “inadequate.”

In the United States, green turtles are protected through multiple statutes at the federal level. As the Services note, ESA listing provides “relatively comprehensive protection and recovery activities to minimize the threats to green turtles in the United States.”¹⁹⁷ It requires consultation by federal agencies when they are contemplating an action that may harm the turtles, provides for the development of a recovery plan (which has, as discussed below, guided the recovery of the green turtle so successfully that it should now be considered for delisting), and makes available funding for recovery efforts.¹⁹⁸ The National Environmental Policy Act of 1969 also protects sea turtles in that it requires review of federal actions to assess their environmental impact and consideration of alternatives to reduce that impact.¹⁹⁹ The Magnuson-Stevens Fishery Management and Conservation Act mandates responsible fishing practices and bycatch mitigation for any fleets that sell fishery products to the United States, which not only protects U.S. populations, but also those in any seas in which those fleets operate.²⁰⁰ The Marine Turtle Conservation Act is also effective both nationally and internationally, as it authorizes a dedicated fund to support marine turtle conservation projects in foreign countries, emphasizing both protecting nesting populations and nesting habitat.²⁰¹ Nationally, in 1987, the United States

¹⁹³ 2015 STATUS REVIEW at 116–17.

¹⁹⁴ *Id.*

¹⁹⁵ *Id.* at 117.

¹⁹⁶ *Id.*

¹⁹⁷ 80 Fed. Reg. at 15,289.

¹⁹⁸ 2015 STATUS REVIEW at 116.

¹⁹⁹ *Id.*

²⁰⁰ *Id.*

²⁰¹ *Id.*

required all trawling shrimp boats to equip their nets with TEDs, pushing the successful adoption of these devices on a nationwide scale. Recently the state of Louisiana repealed a state law that prevented Louisiana Department of Wildlife and Fisheries agents from enforcing federal TED regulations, marking another step forward in greater protection of green turtles.²⁰²

States and localities have many laws and rules that protect green turtles as well. Florida—the center of green turtle nesting activity and populations for the continental United States—has its own Marine Turtle Protection Act that protects the green turtle through restrictions on takes of turtles, possession or disturbance of eggs or nests, and beach renourishment and other projects, among other things.²⁰³ Both the Florida Department of Environmental Protection and the Florida Fish and Wildlife Conservation Commission review permits for coastal construction projects that affect marine turtles.²⁰⁴ The Florida Department of Environmental Protection has also established conditions for engaging in beach cleaning efforts.²⁰⁵ Florida's efforts at governance even extend to scientific and protection efforts, ensuring that activities related to green turtles—such as research and conservation projects—are scrutinized before being authorized and permitted.²⁰⁶ Local ordinances in Florida address issues such as light pollution.²⁰⁷ Governments have engaged in awareness efforts for the public to address such issues as the effects that beach furniture, littering, and other human impacts have on green turtles.²⁰⁸ These laws and regulations in Florida are important and representative examples of the range of issues and threats to the green turtle that are addressed through existing legal mechanisms.

Other nations in the proposed North Atlantic DPS have protections in place for the green turtle as well. Laws in the Bahamas, Belize, Bermuda, Cayman Islands, Costa Rica, Cuba, Guatemala, Haiti, Mauritania, Mexico, Nicaragua, the United States, and Puerto Rico—the vast majority of major states in the North Atlantic DPS—have put into place restrictions on fishing, harvesting, or takes of green turtles.²⁰⁹ Other national laws address fishing practices and the use of TEDs, and the Services have found general laws in other countries such as Honduras that act

²⁰² Benjamin Alexander-Bloch, *Bobby Jindal Signs Bill Allowing Enforcement of Turtle-Excluder Provisions*, NOLA.COM (July 2, 2015 12:35 PM), http://www.nola.com/environment/index.ssf/2015/07/bobby_jindal_signs_bill_allowi.html.

²⁰³ *Marine Turtle Protection*, FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, <http://myfwc.com/wildlifehabitats/managed/sea-turtles/protection/> (last visited July 24, 2015).

²⁰⁴ *Id.*

²⁰⁵ *Mechanical Beach Cleaning Guidelines*, FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, <http://myfwc.com/wildlifehabitats/managed/sea-turtles/beach-activities/beach-cleaning-guidelines/> (last visited July 24, 2015).

²⁰⁶ *Marine Turtle Protection*, FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, <http://myfwc.com/wildlifehabitats/managed/sea-turtles/protection/> (last visited July 24, 2015).

²⁰⁷ *Id.*

²⁰⁸ *See, e.g.*, FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, FLORIDA SEA TURTLES: SHARE THE BEACH: BEACH FURNITURE AND SEA TURTLES, *available at* http://myfwc.com/media/418556/Seaturtle_ShareBeach_Furniture.pdf.

²⁰⁹ 2015 STATUS REVIEW at 113–16.

to protect the green turtle.²¹⁰ These nations are also subject to numerous international treaties that benefit sea turtles (directly or incidentally) and national laws with international reach, such as the Magnuson-Stevens Fishery Management and Conservation Act.²¹¹

Given the widespread and multi-layered coverage of regulatory mechanisms protecting the green turtle in the proposed North Atlantic DPS, green turtles are clearly not threatened by the inadequacy of existing regulations. Yet, the Services reached that conclusion—by examining not existing regulations, but rather the hypothetical absence of regulations in the future. As the Proposed Rule explained, the Services “evaluate[d] the status of the DPS absent the protections of the ESA.”²¹²

This standard is wholly distinct from, and in fact in complete contradiction with, the ESA’s mandate to consider “the inadequacy of existing regulatory mechanisms.”²¹³ The Service’s suggestion that the act of delisting a species is itself a threat to the species is not supported by the ESA. In fact, if the Service’s interpretation were true, no species could be delisted.

Notwithstanding the Services’ misinterpretation of their statutory authority, they significantly overestimate the threats that would emerge if green turtles in the proposed North Atlantic DPS were no longer listed and significantly underestimate the conservation value of the numerous laws, regulations, and restrictions that would remain. The Services warn that “[w]ithout alternate mechanisms in place to continue certain existing conservation efforts and protections, threats would be expected to increase and population trends may be curtailed or reversed.”²¹⁴

Even in the absence of direct protections under the ESA, green turtles would be incidental beneficiaries of the protections afforded other sea turtles and threatened and endangered species within their range. The wildlife refuges would remain. Green turtles would still receive protections through fisheries management. The state of Florida’s comprehensive beach and in-water protections would remain. Gear restrictions, gear modifications, and spatial and temporal fishing restrictions would continue. The multiple international treaties that directly or incidentally protect green turtles would continue to count the United States as a participating signatory. And, counties and municipalities are unlikely to abolish their lighting restrictions. In every other nation in the proposed North Atlantic DPS, in which the vast majority of sea turtles nest, a change in listing ESA listing status would have little or no impact on their protections.

²¹⁰ *Id.*

²¹¹ *Id.* at 104.

²¹² 80 Fed. Reg. at 15,293.

²¹³ 16 U.S.C. § 1533(a)(1) (emphasis added).

²¹⁴ 80 Fed. Reg. at 15,293.

e. Other Natural or Manmade Factors Do Not Negatively Impact Green Turtles

Under this factor, the Services list a number of activities that allegedly affect the continued existence of the green turtle in the proposed North Atlantic DPS. The Services fail to explain, however, the risks to the turtles or the effects on reproduction or population counts that justify a conclusion that these factors contribute to the “threatened” status of green turtles. These activities include fishing bycatch, channel dredging, vessel strikes and boat traffic, climate change and related natural disasters, cold stunning, and marine debris.²¹⁵ None of these factors are shown to be increasing to such a degree that they pose a significant threat of extinction to the green turtle and thus do not support a “threatened” listing.

Many of the studies showing adverse impacts to green turtles of fishing activity predate the proliferation of TEDs. The Services have previously explored the effects of recent fishing industry trends and conditions on sea turtle populations with regard to loggerhead turtles, and found that:

A variety of conservation measures for fisheries and non-fishery activities have been enacted in many areas, including in the Northwest Atlantic. . . . Additionally, many fisheries, especially the shrimp trawl fisheries in the Northwest Atlantic Ocean and Gulf of Mexico, have experienced substantial declines, thus potentially reducing impacts to sea turtles. The benefits of those fishery reductions, if permanent, combined with conservation actions, if sufficiently effective, may only now, or may soon, begin to become evident on the nesting beaches. The agencies are committed to reducing fisheries bycatch further regardless of the listing status.²¹⁶

The changes in fisheries that NMFS considered the greatest threats to green turtles have been transformative and highly significant. Details on these fisheries and measures implemented are discussed below.

Pelagic Longline Fishery for Highly Migratory Species. The number of vessels in the pelagic longline fishery for highly migratory species, which NMFS considers to be among the threats to green turtles, has declined substantially. Mortality from pelagic longline fishing that continues to occur is limited spatially and temporally to further reduce turtle interactions and is further mitigated through changes in technology and practices.

Scallop Fishery. Use of scallop dredges, which NMFS considered a major threat to the green turtle, is down as well. As with the pelagic longline fishery, many scallop controls are now mandated and proving effective. NMFS adopted an industry-developed TED, the chain mat

²¹⁵ 80 Fed. Reg. at 15,290–91.

²¹⁶ 76 Fed. Reg. 58,868, 58,896 (Sept. 22, 2011).

over the mouth of the scallop dredge, in 2006.²¹⁷ In 2011, NMFS implemented a seasonal closure to protect sea turtles and Framework 22 to the Scallop Fishery Management Plan that contains further measures to reduce scallop fishing effort during times and in areas where green turtles and the fishery overlap.²¹⁸ The industry has also developed a specialized dredge frame that prevents the possibility of turtles passing under the dredge and suffering severe injury and death. NMFS currently mandates use of this new dredge in the Scallop FMP Framework Adjustment 23.²¹⁹ Today, the scallop dredge fishery is estimated to lethally take only the equivalent of three mature females annually, down from estimates in the hundreds early this century.²²⁰

Gillnet Fisheries. Gillnet gear use, which NMFS also considered a major threat to the green turtle, is also down. Like all others, those significantly fewer fishermen using gillnets now comply with time/area and soak time restrictions designed to prevent green turtle injuries and deaths. Gill nets are banned in some states as well.

Shrimp Fisheries – Perhaps the most extensive changes are those that have occurred in the GoM and South Atlantic shrimp fisheries, which account for a substantial number of incidental green turtle takes. As with each of the other fisheries that NMFS alleges threaten green turtles, the significantly fewer participants in the shrimp fishery are required to use technology to reduce green turtle mortality—in this case, TEDs. Advances continue to be made with respect to the utilization of TEDs: on July 1, 2014, Louisiana Governor Bobby Jindal signed a bill repealing a state law that prevented Louisiana Department of Wildlife and Fisheries agents from enforcing federal TED regulations.²²¹ Louisiana’s new-found ability to enforce these federal regulations will lead to even greater protection of green turtles.

With respect to channel dredging, the Services allege that 105 green turtles have been “impacted” over a 33-year period.²²² Not only is this an exceptionally low fraction of a population believed to exceed 150,000, the Services make no explanation of what “impacted” means, or how these “impacts” are affecting green turtle populations or reproduction. The Services also ignore their own best evidence that the Army Corps of Engineers is successfully reducing potential threats, including through modification of the dredges and NMFS’s imposition

²¹⁷ See NATIONAL MARINE FISHERIES SERVICE, ISSUES AND OPTIONS ON THE STRATEGY FOR SEA TURTLE CONSERVATION AND RECOVERY IN RELATION TO U.S. ATLANTIC OCEAN AND GULF OF MEXICO FISHERIES at 12 (May 2009), available at http://www.nmfs.noaa.gov/pr/pdfs/strategy/scoping_document..

²¹⁸ See 76 Fed. Reg. 19,929 (Apr. 11, 2011) (Framework 22 proposed rule).

²¹⁹ See 77 Fed. Reg. 20,728 (Apr. 6, 2012).

²²⁰ Kimberly T. Murray, *Interactions Between Sea Turtles and Dredge Gear in the U.S. Sea Scallop (Placopecten magellanicus) Fishery, 2001–2008*, FISHERIES RESEARCH (in press).

²²¹ Benjamin Alexander-Bloch, *Bobby Jindal Signs Bill Allowing Enforcement of Turtle-Excluder Provisions*, NOLA.COM (July 2, 2015 12:35 PM), http://www.nola.com/environment/index.ssf/2015/07/bobby_jindal_signs_bill_allowi.html.

²²² 80 Fed. Reg. at 15,290.

of annual take limits based on expected numbers of impacted turtles.²²³ Channel dredging is not a new or emerging threat or likely to be a significant threat at all.

The Services also allege that vessel strikes and boat traffic are a “major mortality source” in Florida with respect to green turtles. The study that the Services cite to support this allegation (Singel *et al.* (2003)) does not reach the same conclusion. Singel *et al.* (2003) found only that, of the stranded sea turtles that the study examined, about a third exhibited evidence of a vessel strike or propeller damage. Singel *et al.* (2003) did not conclude that vessel strikes and boat traffic were resulting in major mortalities. To the extent that vessel strikes are an increasing threat, they are likely increasing in large part due to green turtles increasing abundance in neritic waters. Such an increase is not evidence of a threat in the same way that a decrease in vessel strikes due to a population collapse is not evidence of the absence of a threat.

Climate change is another factor that the Services allege constitutes a threat to the green turtle, but the Proposed Rule shows that the Services are unable to prove true effects on populations or on reproduction. The Services allege that temperature fluctuations in the future may cause extirpation in turtles, but then state that “sea turtles have survived past eras that have included significant temperature fluctuations”²²⁴—the Services simply elect to highlight the chance that green turtles will be negatively affected without discrediting the equally plausible chance that the turtles will not be affected at all or that they may benefit. Similarly, the Services allege that changes in temperatures in nesting areas may result in the reduction of male hatchling production or alter the nesting timing, but make no explanation of the harm that green turtle populations would suffer from these scenarios.²²⁵ A population with a higher proportion of females than males could very well lead to an increase in reproduction and abundance because males can mate multiple times but females need only have their eggs fertilized once.

The Services also allege “cold stunning” threat to green turtles, but cold stunning is a natural event that, from time to time, results in localized sea turtle mortality and has done so for as long as sea turtles have been studied. The Services do not assert that cold stunning events are becoming more frequent or severe, and largely cite cold stunning events that have occurred outside the known range of the green turtle in the proposed North Atlantic DPS as evidence of risk within the proposed North Atlantic DPS.²²⁶ The Services allege that cold stunning results in “mortality.”²²⁷ While true, this does not amount to a significant threat to green turtles in the proposed North Atlantic DPS. In fact, these cold stunning events have occurred throughout green turtles’ existence, including during periods of significant increases in abundance. The prospect that a cold stunning event could happen again is no indication that the proposed North Atlantic DPS’s increasing abundance would be impeded.

²²³ *Id.*

²²⁴ *Id.* at 15,291.

²²⁵ *Id.*

²²⁶ *Id.*

²²⁷ *Id.*

Finally, the Proposed Rule alleges that oil and gas platforms, demolition, spills, seismic activities, and explosives use all “affect” sea turtles, with no explanation or evidence that green turtles are threatened by these factors. Indeed, these claimed “threats” amount to little more than the generalized threat allegations that the Services’ admonish petitioners to avoid. And again, the SRT examined these exact potential threats and determined that they (and all the other threats discussed herein) would have minimum impact on green turtles’ strong upward trend in abundance. In fact, regulations already in place mitigate the impact of oil and gas industry operations. For example, as noted in the U.S. Department of the Interior’s Notice to Lessees and Operators of Federal Oil, Gas, and Sulphur Leases in the OCS, Gulf of Mexico OCS Region, No. 2012-G02 (“NTL 2012-G02”), NMFS already requires that seismic operators use ramp-up and visual observation procedures while conducting seismic surveys to protect marine mammals and sea turtles, and NTL 2012-G02 states that lessees and operators must report on these activities to demonstrate compliance.²²⁸ Additionally, NMFS’s Platform Removal Observer Program ensures that protected species observers are present on-site and help guide explosive activities during platform removal to protect sea turtles and marine mammals from the impacts of underwater explosives.²²⁹ Regulations and other measures currently in place are already mitigating the potential impacts of oil and gas activity.

The best scientific information available demonstrates that green turtles in the proposed North Atlantic DPS are abundant and increasing in abundance—and none of the factors identified in the Proposed Rule’s five-factor analysis are likely to reverse that strong upward trend. That is the conclusion that was reached by the Services’ experts on the SRT—there was a 0.3% probability that the North Atlantic population will fall below the trend reference point (50% decline) at the end of 100 years, and a 0% probability that this population will fall below the absolute abundance reference (100 females per year) within 100 years.

4. The Proposed North Atlantic DPS Has Recovered

The ESA establishes the factors for listing and delisting a species. Species are listed and delisted depending on whether they meet (or fail to meet) the ESA’s definitions of endangered or threatened species. That determination is based on the five-factor analysis and only when the best available scientific and commercial information supports the outcome of the analysis. Milestones identified in recovery plans do not trump the ESA’s listing and delisting standards. If a species does not meet the definition of an endangered or threatened species after examination of the five listing factors and best available information, it must be delisted regardless of whether the milestones in recovery plans are met.

To be clear, API is not suggesting that recovery plans are unimportant. Recovery plans reveal the Services’ understanding of the status of and threats to an individual species and outline what the Services believe is necessary to overcome those threats so that the species can be delisted.

²²⁸ U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF OCEAN ENERGY MANAGEMENT, NOTICE TO LESSEES AND OPERATORS OF FEDERAL OIL, GAS, AND SULPHUR LEASES IN THE OCS, GULF OF MEXICO OCS REGION (Joint NTL No. 2012-G02, Jan. 1, 2012), *available at* <http://www.boem.gov/2012-JOINT-G02/> (last visited July 24, 2015).

²²⁹ *Platform Removal Observer Program*, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, <http://www.galvestonlab.sefsc.noaa.gov/platforms/> (last visited July 24, 2015).

In 1991, the Services developed the recovery plan for green turtle in the Atlantic²³⁰ (“Recovery Plan”), which sets four conditions for delisting: (1) the Florida nesting level increases to an average of 5,000 nests per year for 6 years; (2) at least 25% of all available nesting beaches is in public ownership and encompasses more than 50% of nesting activity; (3) a reduction in stage class mortality is reflected in higher counts of individuals at foraging grounds; and (4) all priority one tasks in the Recovery Plan have been successfully implemented.²³¹ In August 2007, the Services concluded a five-year review of the green turtle (“Five-Year Review”) that showed that the species was meeting all goals outlined in the Recovery Plan.²³² Green turtles in the North Atlantic DPS—which contains all the U.S. population considered in the Recovery Plan—met all the delisting criteria according to the 2007 Five-Year Review. Now, eight years later, those delisting criteria have been met and exceeded by a significant measure.

a. Florida Nesting Levels Have Exceeded 5,000 Nests Per Year For A Decade

The Recovery Plan established as a measure of recovery “an average of 5,000 nests per year for at least six years” in the state of Florida. The Services’ 2007 Five-Year Review set the precedent for making this assessment. They used the average of Florida’s Statewide Nesting Beach Survey (“SNBS”) data for the 6-year period 2001–2006 to determine if the threshold had been met.²³³ The results showed that the average for that six-year period was 5,039, which met the recovery threshold. More complete data (1997–2014) are shown:²³⁴

²³⁰ While the proposed North Atlantic DPS was obviously not identified as such in the 1991 Recovery Plan, it covers the same population described herein.

²³¹ RECOVERY PLAN at 16.

²³² NATIONAL MARINE FISHERIES SERVICE AND U.S. FISH & WILDLIFE SERVICE, GREEN SEA TURTLE (*CHELONIA MYDAS*) 5-YEAR REVIEW: SUMMARY AND EVALUATION at 4 (Aug. 2007) [hereinafter FIVE-YEAR REVIEW].

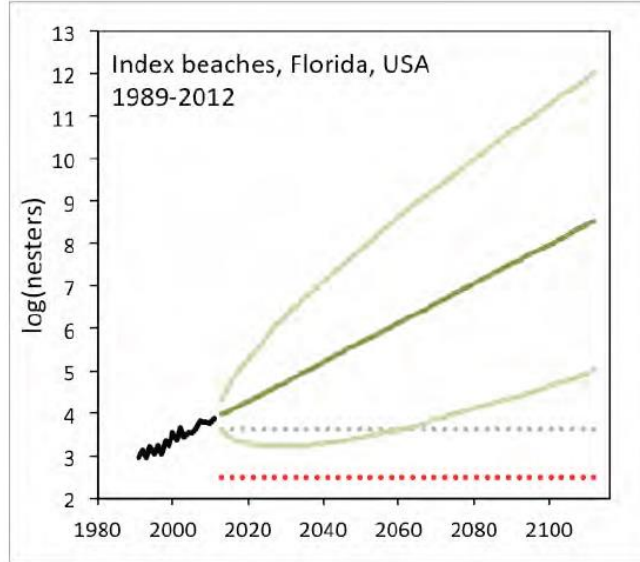
²³³ It is unclear what data the Services have considered in their analysis, but the figures API is providing are from the Florida Fish and Wildlife Conservation Commission, include the most recent counts, and are the best available evidence.

²³⁴ FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, FISH AND WILDLIFE RESEARCH INSTITUTE, STATEWIDE NESTING BEACH SURVEY PROGRAM, data provided by Beth Brost in e-mail to Benny J. Gallaway (July 7, 2015).

Statewide Nesting Beach Totals: Green Sea Turtle		
Year	Nests	Six-Year Average
1997	737	
1998	5,557	
1999	479	
2000	8,404	
2001	581	
2002	9,200	4,160
2003	2,262	4,414
2004	3,580	4,084
2005	9,642	5,612
2006	4,970	5,039
2007	12,751	7,068
2008	9,228	7,072
2009	4,462	7,439
2010	13,247	9,050
2011	15,369	10,005
2012	9,617	10,779
2013	36,195	14,686
2014	5,895	14,131

Note that the 5,000 nest per year threshold was first met for the 6-year period ending in 2005 and has been exceeded for each six-year period since 2005; i.e., for a decade. In 2013 and 2014, the six-year average nesting level has exceeded 14,000 nests per year.

Clearly, the Florida nesting level has met the Recovery Plan’s delisting threshold, and, in fact, has exceeded it by an enormous margin. The average annual nesting for 2009 through 2014—the most recent six-year period—is 14,131 nests, nearly three times the goal set out in the Recovery Plan. Not only has the green turtle Florida nesting level been above 5,000 for the past five years, it has been around two to three times that figure and in 2013 hit a recorded all-time high of 36,195—more than seven times the annual goal identified in the Recovery Plan. And, the trend for Florida nesting beaches is projected to continue to its extremely strong growth.



Source: NATIONAL MARINE FISHERIES SERVICE, STATUS REVIEW OF THE GREEN TURTLE (*CHELONIA MYDAS*) UNDER THE ENDANGERED SPECIES ACT at 89 fig.5.7 (March 2015).
 Black line is observed data, dark green line is the average of 10,000 simulations, green lines are the 2.5th and 97.5th percentiles, grey dotted line is trend reference, and red dotted line is absolute abundance reference.

b. More Than 25% of Nesting Beaches Containing More Than 50% of All Nests Are Under Public Ownership and Control

The Recovery Plan stated that 25% of green turtle nesting beaches—which it specifies as 105 kilometers of beach—must be in public ownership.²³⁵ It later clarified that these goals encompass either the acquisition of land or the assurance of the long-term protection of nesting beaches through control, regulation, management, or other means.²³⁶ Through acquisitions, control, and other means, government efforts in Florida have achieved this goal.

Since the listing of the green turtle, a coalition of governments has acquired a substantial amount of land in order to protect the turtles. Their efforts include the Archie Carr National Wildlife Refuge (60% of which was acquired), Hobe Sound National Wildlife Refuge, Dry Tortugas National Park, Canaveral National Seashore, shorefront parts of military installation such as Patrick Air Force Base and Canaveral Air Force Station, and other lands.²³⁷ A listing of some of the protected land, along with an estimate of the amount of beach protected for each, is found below:

<u>Nesting Beach</u>	<u>Land Protected</u>
Archie Carr National Wildlife Refuge ²³⁸	33 kilometers

²³⁵ RECOVERY PLAN at 16.

²³⁶ *See id.* at 18.

²³⁷ 80 Fed. Reg. at 15,291.

²³⁸ FIVE-YEAR REVIEW at 4.

Canaveral National Seashore ²³⁹	39 kilometers
Hobe Sound National Wildlife Refuge ²⁴⁰	5.7 kilometers
Canaveral Air Force Station ²⁴¹	21 kilometers
Patrick Air Force Base ²⁴²	6.4 kilometers
Total	105.1 kilometers

It is clear from this information that by working together, federal, state, and local authorities have protected more than the 105 kilometers set as a goal in the Recovery Plan. This figure does not even include the many more kilometers of beach protected by state and local authorities. Acquisition and protection is taking place on more shoreline than ever before.

Using the Services' own data, in 2011 nesting reached a peak level in Florida with a total nest count of 15,352.²⁴³ Counting only the nests at two publicly-managed beaches—the Archie Carr National Wildlife Refuge, which had a green turtle nest count of 6,023,²⁴⁴ and the Canaveral National Seashore, which had a nest count of 1,374²⁴⁵—publicly owned, controlled, and managed beaches constituted nearly half of Florida's nest count and would likely exceed 50% if nests at all beaches were included. In 2013, Florida's total nesting count hit a new all-time high of 36,195;²⁴⁶ the Archie Carr National Wildlife Refuge also had a record year and a total green turtle nest count of 12,846;²⁴⁷ the Canaveral National Seashore had 4,152 nests.²⁴⁸ Once again,

²³⁹ *Canaveral National Seashore*, FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, <http://myfwc.com/viewing/where/by-region/east-central/canaveral-national-seashore/> (last visited July 24, 2015).

²⁴⁰ *Hobe Sound National Wildlife Refuge*, FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, <http://myfwc.com/viewing/where/by-region/east-central/hobe-sound/> (last visited July 24, 2015).

²⁴¹ Vincent P. Greenwade & Alexis R. Alicea, *Management of Endangered Sea Turtles Using GIS*, available at <http://proceedings.esri.com/library/userconf/proc00/professional/papers/PAP587/p587.htm>.

²⁴² *Natural Resources: Beach Management Restoration Projects*, BREVARD COUNTY, <http://www.brevardcounty.us/NaturalResources/Beaches/RestorationProjects> (last visited July 24, 2015).

²⁴³ 2015 STATUS REVIEW at 89.

²⁴⁴ *Archie Carr National Wildlife Refuge: Sea Turtle Nesting*, U.S. FISH & WILDLIFE SERVICE, <http://www.fws.gov/archiecarr/updates/> (last updated Sept. 17, 2015).

²⁴⁵ CANDACE CARTER & JOHN STEINER, 2013 MARINE TURTLE NESTING SUMMARY: CANAVERAL NATIONAL SEASHORE at 14 tbl.7 (Nov. 2013), available at http://www.nps.gov/cana/learn/nature/upload/2013_seaturtle_nesting_report.pdf.

²⁴⁶ Florida Fish and Wildlife Conservation Commission Fish and Wildlife Research Institute, Statewide Nesting Beach Survey Program: Green Turtle Nesting Data, 2010-2014, available at <http://myfwc.com/media/2988445/greenturtlenestingdata10-14.pdf>.

²⁴⁷ *Archie Carr National Wildlife Refuge: Sea Turtle Nesting*, U.S. FISH & WILDLIFE SERVICE, <http://www.fws.gov/archiecarr/updates/> (last updated Sept. 17, 2015). So far, in 2015 green turtles at Archie Carr have already beaten their 2013 record year with a present total nest count of 13,916, showing that green turtle nesting at Archie Carr and in Florida continues to grow. *See id.*

²⁴⁸ CANDACE CARTER & JOHN STEINER, 2013 MARINE TURTLE NESTING SUMMARY: CANAVERAL NATIONAL SEASHORE at 14 tbl.7 (Nov. 2013), available at http://www.nps.gov/cana/learn/nature/upload/2013_seaturtle_nesting_report.pdf.

publicly owned, controlled, and managed beaches constituted nearly half of Florida's nest count and would likely exceed 50% if nests at all beaches were included. There are multiple other government-owned and managed protected shorelines that also have green turtle nesting activity that are not counted here. It is clear from this information that, not only have publicly owned and managed beaches developed a substantial and important foothold in Florida green turtle nesting, they are leading the state in growth and nesting numbers. Again, the Service's own measure of recovery has been far exceeded.

c. There Are Higher Counts of Individuals at Foraging Grounds

The Recovery Plan sets as a third goal a reduction in stage class mortality, which it expects would be reflected in higher counts of individuals on foraging grounds.²⁴⁹ The best available scientific information suggests that this milestone has also been exceeded by a great measure.

The available in-water studies at the Indian River Lagoon site in Florida have shown a 661% increase in green turtle captures (catch per unit effort) over 24 years. Similarly, at the St. Lucie Power Plant site, researchers found increases in annual rates of capture of immature green turtles over a 26-year period. Other surveying and scientific efforts have found increased numbers of juveniles in the neritic zones off the coast of Florida.²⁵⁰ All studies and surveys are showing growth in the juvenile stages and neritic zones. None show declines. Clearly, this milestone of recovery has been met and exceeded as well.

d. All Priority One Tasks in the Recovery Plan Have Been Implemented

Finally, the 1991 Recovery Plan set as a conservation goal the completion of all priority one tasks which included evaluating current laws on beach armoring; enforcing laws regulating coastal construction; acquiring nesting beaches between Melbourne and Wabasso Beach, Florida; monitoring trends in nesting activity; evaluating nest success and implementing nest protection measures; determining seasonal distribution, abundance, population characteristics status in inshore and nearshore waters; implementing and enforcing TED regulations; and assessing mortality and determining the etiology of fibropapillomatosis.²⁵¹

The 2007 Five-Year Review found that these priority one tasks have been met.²⁵² The Florida Index Nesting Beach Survey program monitors trends in nesting activity.²⁵³ National wildlife refuges and other beaches in the southeast United States and U.S. Caribbean evaluate

²⁴⁹ RECOVERY PLAN at 16.

²⁵⁰ See, e.g., William Redfoot & Llewellyn Ehrhart, *Trends in Size Class Distribution, Recaptures, and Abundance of Juvenile Green Turtles (Chelonia mydas) Utilizing a Rock Riprap Lined Embayment at Port Canaveral, Florida, USA, as Developmental Habitat*, 12 CHELONIAN CONSERVATION & BIOLOGY 252 (Dec. 2013).

²⁵¹ RECOVERY PLAN at 44–52.

²⁵² FIVE-YEAR REVIEW at 5.

²⁵³ *Id.*

nest success and implement nest protection measures.²⁵⁴ In-water population studies in the Atlantic and Caribbean are underway and have shown positive results, as discussed above.²⁵⁵ Regulations that require the use of TEDs are in place, and there have been further modifications to improve turtle exclusion.²⁵⁶ Research is currently being conducted on potential causes of and threats posed by fibropapillomatosis,²⁵⁷ and the proposed listing cites a large amount of information and recent studies on the subject.²⁵⁸ Additionally, there are now a number of acquired and protected beaches between Melbourne and Wabasso Beach, Florida, including the Archie Carr National Wildlife Refuge, Indian River Lagoon Preserve State Park, Sebastian Inlet State Park, and Pelican Island National Wildlife Refuge. The Recovery Plan notes that two of the goals—evaluating laws on beach armoring and enforcing laws on coastal construction—are maintenance-oriented, through their characterization as them being “routine.”²⁵⁹ The Proposed Rule notes that these efforts continue through studies and examination.²⁶⁰ It is clear from these developments that all priority one tasks for delisting have been met, and work on surpassing them continues to progress.

The 1991 Recovery Plan established four objectives that, if completed, would demonstrate green turtles would no longer be likely to be in danger of extinction now or within the foreseeable future. Every one of those objectives was either met or exceeded by a large measure. The best available information is that, by the Services’ own measure of recovery, the proposed North Atlantic DPS is not likely to be in danger of extinction now or in the foreseeable future.

D. The Services Cannot Designate Critical Habitat for the Proposed North Atlantic DPS

As explained above, if finalized, the proposed North Atlantic DPS would not meet the ESA’s definitions of endangered or threatened species, and therefore should not be listed as such. Because there is no basis to list the proposed North Atlantic DPS, the Services cannot designate critical habitat for the proposed DPS. As the proposed rule requested comment on critical habitat, however, API provides these additional comments specific to critical habitat. Should the Services list the proposed North Atlantic DPS as a threatened or endangered species, and endeavor to designate critical habitat, they must provide additional opportunities to comment on any anticipated changes to critical habitat. API would use those opportunities to supplement the threshold concerns we outline below.

²⁵⁴ *Id.*

²⁵⁵ *Id.*

²⁵⁶ *Id.*

²⁵⁷ *Id.*

²⁵⁸ 80 Fed. Reg. at 15,289.

²⁵⁹ RECOVERY PLAN at 44.

²⁶⁰ *See* 80 Fed. Reg. at 15,290.

Should the Services decide to designate critical habitat for green turtles in the proposed North Atlantic DPS, however, significant evaluation of economic impacts of the type of restrictions attributable to critical habitat will be required.

The ESA provides:

The Secretary shall designate critical habitat, and make revisions thereto, under subsection (a)(3) of this section on the basis of the best scientific data available and after taking into consideration the economic impact . . . of specifying any particular area as critical habitat. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned.²⁶¹

The requirement to conduct an economic impact assessment of the effects of a critical habitat designation is not discretionary—it is mandatory.²⁶² The costs in the economic impact assessment are weighed against the benefits of the critical habitat designation. With respect to green turtles, those benefits are, at best, marginal. The majority of nesting beaches occur outside the United States and beyond the jurisdiction of a critical habitat designation. Those nesting beaches and waters within the United States are already protected by a number of important and overlapping state, federal, and municipal protections. Indeed, many of the most important nesting beaches are protected through acquisition or a comprehensive network of laws and regulations. In-water threats are addressed, and will continue to be addressed, through a wide variety of commercial and recreational restrictions, gear modifications, and spatial and geographic closures.

These programs would not be considered “benefits” against which to weigh the costs of the critical habitat designation because they are “baseline” economic impacts that are already in place. This lack of “benefit” must then be weighed against the economic impacts of the critical habitat designation, which, as discussed further below, could potentially be very large.

1. Economic Impact of Designation Could Be Substantial

While a critical habitat designation would likely have significant economic impacts in the Northwest Atlantic, from an energy perspective, the most significant economic impacts would be in the GoM. The scope and magnitude of the economic activity in the northern GoM is tremendous and mostly, but not exclusively, attributable to energy exploration and development. Currently, the GoM accounts for over a quarter of all U.S. domestic oil production, and the new

²⁶¹ 16 U.S.C. § 1533(b)(2).

²⁶² See *Bennett v. Spear*, 520 U.S. 154, 172 (1997) (“[T]he fact that the Secretary’s ultimate decision is reviewable only for abuse of discretion does not alter the categorical requirement that, in arriving at his decision, he ‘tak[e] into consideration the economic impact, and any other relevant impact,’ and use ‘the best scientific data available.’”) (quoting 16 U.S.C. § 1533(b)(2)) (second alteration in original).

five-year drilling program is expected to expand the economic benefits the industry already provides. For example, BOEM has determined that over a 40-year period, this new drilling plan will result in an *annual* “addition of between 20,025 and 51,825 jobs” and that “[b]etween \$1,050 million and \$2,180 million in income would be produced.”²⁶³

The following table, reproduced from a report prepared in 2011 by Quest Offshore Resources, Inc. for API and the National Ocean Industries Association,²⁶⁴ shows the vast economic importance of this industry, both regionally and nationally:

Table 1: Estimated Historical and Projected Capital and Operational Spending, GDP Impacts, and Employment¹ Supported by the Offshore Gulf of Mexico Oil and Natural Gas Industry (2008-2013)*

(\$billions)	Historical			Projected		
	2008	2009	2010	2011	2012	2013
Operating Expenditures	\$16.7	\$17.2	\$17.7	\$21.6	\$25.0	\$25.7
Capital Expenditures	\$11.9	\$9.7	\$6.5	\$8.9	\$10.4	\$15.7
GDP Impacts	\$30.8	\$29.1	\$26.1	\$32.9	\$38.2	\$44.5
Total Employment	306,870	285,042	242,317	311,023	356,174	429,208

*Projected spending, GDP, and employment contingent on returning to pre-Macondo permitting rates.

Source: Quest Offshore Resources, Inc.

These impacts are the result not just of activities occurring on the water but of the myriad shore-based businesses that offshore energy exploration and development support. These include everything from refineries and pipeline operations, metal superstructure and pipe fabricators, analysts, parts and goods suppliers to small-scale “mom-and-pop” marine transport companies. All told, some 72% of oil and gas companies’ spending and capital investments in 2010, or about \$17.5 billion, occurred in Texas, Louisiana, Mississippi, and Alabama.²⁶⁵

While improper designation of critical habitat for green turtles in the proposed North Atlantic DPS would not “zero out” all the economic benefits of the offshore oil and gas industry in the GoM, it would require consultation on all federally-permitted activities, such as the leasing program or routine amendments to federal fishery management plans, under Section 7 of the ESA to determine if the activity will result in “adverse modification of critical habitat.”²⁶⁶ These

²⁶³ U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF OCEAN ENERGY MANAGEMENT, OUTER CONTINENTAL SHELF OIL AND GAS LEASING PROGRAM: 2012-2017 FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT, OSC ESIA/EA BOEM 2012-030, at 4-488 (July 2012), available at http://www.boem.gov/uploadedFiles/BOEM/Oil_and_Gas_Energy_Program/Leasing/Five_Year_Program/2012-2017_Five_Year_Program/2012-2017_Final_PEIS.pdf.

²⁶⁴ QUEST OFFSHORE RESOURCES, INC., UNITED STATES GULF OF MEXICO OIL AND NATURAL GAS INDUSTRY ECONOMIC IMPACT ANALYSIS: THE ECONOMIC IMPACTS OF GOM OIL AND NATURAL GAS DEVELOPMENT ON THE U.S. ECONOMY, i (June 2011), available at <http://www.api.org/~media/Files/Policy/Jobs/QuestGoMEconomicAnalysis7-11-2011.pdf>.

²⁶⁵ *Id.* at 8.

²⁶⁶ 16 U.S.C. § 1536(a)(2), (4).

determinations are particularly susceptible to legal challenge and would undoubtedly result in delay in future oil and gas development—and more litigation and permitting costs—with little or no added conservation benefit to green turtles.

2. Impacts on Small Business Need to be Carefully Considered

In addition to the required economic analysis under the ESA, the Regulatory Flexibility Act (“RFA”) also requires assessment of such impacts that disproportionately impact small businesses for actions, like a critical habitat designation, that require notice and comment under the Administrative Procedure Act (“APA”).²⁶⁷ Within the oil and gas industry, numerous businesses meet the Small Business Administration’s (“SBA”) size standards as small entities in their respective fields. These include firms operating offshore supply vessels, geophysical engineering firms, exploratory companies, and many others. Beyond this industry, fishermen, marine transportation companies, and others likewise qualify as small entities under SBA guidelines.

Similarly, in his memorandum of January 18, 2011, on Regulatory Flexibility, Small Business and Job Creation, President Obama declared that his “Administration is firmly committed to eliminating excessive and unjustified burdens on small businesses, and to ensuring that regulations are designed with careful consideration of their effects, including their cumulative effects, on small businesses.”²⁶⁸ This memorandum emphasized the importance of regulatory flexibility and the need for careful analysis and clear justifications of need in the rulemaking context. These considerations echoed the provisions of Executive Order 13563, Improving Regulation and Regulatory Review, which was issued the same day.²⁶⁹ Executive Order 13563 provides that the regulatory system must “promote predictability and reduce uncertainty . . . and take into account benefits and costs, both quantitative and qualitative.”²⁷⁰

The ESA, RFA, and Administration policy all require that economic impacts found in the critical habitat inquiry, particularly on small business, be carefully considered and justified. In the context of the GoM oil and gas industry, these entities would likely suffer the most from projects delayed or forgone. As such, the Services must fully and thoroughly assess the universe of affected small entities and the impacts a green turtle critical habitat designation would have on their operations. Under any reasonable assessment, the marginal benefits such designation would have for green turtles in the proposed North Atlantic DPS would not outweigh those impacts.

Therefore, in addition to the extensive comments describing how the proposed North Atlantic DPS of green turtles cannot be listed under the ESA, API herein specifically cautions the Services against the substantial costs that would be imposed through an unnecessary critical habitat designation.

²⁶⁷ 5 U.S.C. Ch. 6.

²⁶⁸ 76 Fed. Reg. 3,821, 3,827 (Jan. 21, 2011).

²⁶⁹ *Id.* at 3,821.

²⁷⁰ *Id.*

E. The Services Have Not Made Available Supporting Documentation for the Rulemaking

Adequate opportunity for public participation not only improves agency rulemaking, it is *required* by the APA.²⁷¹ Further, in signing Executive Order 13563, President Obama recognized that effective public participation in an increasingly web-savvy society requires that important rulemaking information be electronically available. More precisely, Executive Order 13563 directs each agency to provide “for both proposed and final rules, timely online access to the rulemaking docket on regulations.gov, including relevant scientific and technical findings, in an open format that can be easily searched and downloaded.”²⁷² Not only did the Executive Order give the public the right to electronic access for purposes of commenting on the proposals, it also required “an opportunity for public comment on all pertinent parts of the rulemaking docket, including relevant scientific and technical findings.”²⁷³

Despite the fact that Proposed Rule suggests threatened and endangered status for DPSs of a species that resides in multiple oceans and nesting beaches in more than forty countries, the Services failed to provide any supporting documents in the Regulations.gov docket, and only made available the Status Review on the NMFS website. While the Services did provide a list of Literature Cited for the Status Review, it is inconceivable that, for rulemakings of this magnitude, the Services would not make critical docket materials available electronically.

The Proposed Rule fails each of these requirements and stands in stark contrast to this Administration’s commitment to open government and transparent processes.²⁷⁴ Moreover, as NMFS is taking steps to improve their assessment of various sea turtle stocks and seeking partners for doing so, API believes it is particularly important that the Services view proposals such as these as opportunities for increased collaboration through transparency. API and its members share the Services’ interest in sea turtle conservation, and we would like to collaborate with the Services in their research and conservation efforts. Such a cooperative dialogue, however, requires the Services to provide greater transparency in their listing/DPS designation processes and the data underlying those actions. API hopes that the Services recognize the conservation value of taking a transparent and collaborative approach to working with the industries operating in the habitat they are seeking to conserve.

III. CONCLUSION

Green turtles in the North Atlantic DPS have recovered, and are not likely to become extinct within the foreseeable future. Observers note that “the scope of [sea turtles’] recovery is virtually unprecedented for an endangered species in the United States.”²⁷⁵ Scientist and

²⁷¹ 5 U.S.C. §§ 552(a), 553(c).

²⁷² Exec. Order No. 13,463, 3 C.F.R. § 13456, at § 2(b).

²⁷³ *Id.*

²⁷⁴ See Memorandum from Peter Orszag, Director, Office of Management and Budget, For the Head of Executive Departments and Agencies: Open Government Directive (Dec. 8, 2012).

²⁷⁵ Robert Siegel & Amy Green, *Florida Sea Turtles Stage Amazing Comeback*, NATIONAL PUBLIC RADIO (July 14, 2015 4:42 PM), <http://www.npr.org/2015/07/13/422672962/florida-sea-turtles-stage-amazing-comeback>.

researcher Lou Ehrhart of the University of Central Florida has stated that sea turtles' recovery is "really quite extraordinary," and that "the green turtle's recovery is especially astounding."²⁷⁶ This is because threats to the green turtle, including those considered in the ESA's five-factor analysis, have been mitigated or eliminated through regulatory mechanisms and conservation efforts. Progress in the green turtle's recovery is so advanced that all the Recovery Plan goals that the Services set for green turtles in the Atlantic have been met. For these reasons, the Services should not list the proposed North Atlantic DPS of the green turtle as threatened or endangered, and should not designate critical habitat. If the Services do proceed to designate critical habitat, they must carefully examine the economic impacts that such action would have. Finally, the Services are obligated to and should make available all supporting documentation and data that form the basis for the Proposed Rule.

API appreciates the opportunity to provide comments on the Proposed Rule.

Sincerely,

A handwritten signature in blue ink that reads "Andy Radford".

Andy Radford
American Petroleum Institute
Sr. Policy Advisor – Offshore
(202) 682-8584
Radforda@api.org

²⁷⁶ *Id.*