Before the National Oceanic and Atmospheric Administration
U.S. Department of Commerce
WASHINGTON, D.C. 20230

In Re: Establishing Whale Safety Zones to Reduce Ship Strikes on Whales in U.S. Waters

Petition for Rulemaking Governing Vessel Speed and Navigation Practices Required to Prevent Collisions with Whales.

To the Secretary of Commerce and Administrator National Oceanic and Atmospheric Administration

From Public Employees for Environmental Responsibility and The Ocean Foundation

SUMMARY

This proposed rulemaking seeks to establish a minimum nationwide standard for all U.S. coastal waters to reduce the risk of ship strikes of whales. It proposes establishment of Whale Safety Zones in all waters from a U.S. port to the ocean entrance to the port and extending seaward to 30 nautical miles beyond the ocean entrance to the port, as well as all waters within National Marine Sanctuaries, Marine National Monuments, State and Internal waters, and the U.S. Territorial Sea (within 12 nautical miles of shore). The threshold level for acceptable whale casualties due to ship strikes should be zero. As a minimum nationwide standard, this rule would not restrict or limit the federal government establishing more stringent requirements where necessary and appropriate.

Within a Whale Safety Zone, all vessels greater than or equal to 65 feet (19.8 meters) in overall length and subject to the jurisdiction of the United States, including all vessels in transit to or from a port or place subject to the jurisdiction of the United States, and all vessels on Innocent Passage subject to the jurisdiction of the United States (transiting within the Territorial Sea of the United States) shall –

(a) Travel at a speed of 10 knots or less over ground in daytime, and 8 knots or less at night;

(b) Take the shortest route possible, consistent with navigational safety; and

(c) Post bow watches, and when whales are spotted along or near the vessel's course, the vessel must slow and take other reasonable evasive action to avoid colliding with the whale/s, consistent with navigational safety.

As whales can be present in the proposed Whale Safety Zones at any time of year, and the acceptable casualty rate from ship strikes should be set at zero in these zones, these ship requirements should be in-force year-round. These measures will also significantly reduce underwater noise, stack emissions, and risk of collisions with other vessels. Whale Safety Zones should be clearly marked on all nautical charts and issued as Notices to Mariners.

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Petition for Rulemaking: Whale Ship Strike Avoidance
Pursuant to the Administrative Procedures Act (16 U.S.C. 553 (e), Public Employees for Environmental Responsibility ("PEER"), and The Ocean Foundation hereby petition the National Oceanic and Atmospheric Administration (NOAA) of the Department of Commerce to issue regulations pursuant to its responsibilities under the Marine Mammal Protection Act (16 U.S.C. 1382(a)), and the Endangered Species Act (16 U.S.C. 1540(f)) designed to prevent needless mortality of global, national, and regional whale populations.

Standing to File. The Administrative Procedures Act directs that "[E]ach agency (of the Federal Government) shall give an interested person the right to petition for the issuance…of a rule." 5 U.S.C. 553. The filing organizations each has standing to file this rulemaking petition as an interested person" within the meaning of this statute:

PEER is an IRS 501(c)(3) non-profit organization incorporated under the laws of the District of Columbia. PEER serves the professional needs of the local, State, and federal employees – the scientists, hydrologists, biologists, and rangers – charged with the protection of America's environmental resources, including healthy, intact marine ecosystems.

The Ocean Foundation is also an IRS 501(c)(3) non-profit organization incorporated under the laws of the District of Columbia. TOF is a community foundation dedicated to reversing the trend of destruction of ocean environments around the world.

Argument in Support of Petition

I. WHALE SPECIES FACE EXTINCTION IN U.S. WATERS

While many whale populations were hunted to the brink of extinction in the 19th and early 20th century, few have regained pre-hunt status. Today, well into the 21st century, the survival of whale species in U.S. waters remains tenuous.

If current trends hold, the U.S. will earn the uniquely ignominious distinction of presiding over the extinction of three large whale species which largely or solely inhabit U.S. waters:

- Much has been written about the plight of the critically endangered North Atlantic right whale. With approximately only 350 individuals remaining, and fewer than 70 breeding females, North American right whales still face rising mortality from ship strikes, as well as entanglements with fishing gear.

- Less well known is the Gulf of Mexico (or Rice's) whale was only officially recognized as a separate subspecies in 2019, by which time is numbers have dwindled to only around 50 left. This whale lives entirely in U.S. waters. The biggest threats to the species include vessel strikes, ocean noise, energy exploration, development and production, oil spills and responses, entanglement in fishing gear, and ocean debris.[1] To date, there is no recovery plan or critical habitat designation for this highly endangered species.[2]

- The eastern North Pacific right whale is down to only about 30 individuals, yet those few

[1] https://www.fisheries.noaa.gov/feature-story/new-species-baleen-whale-gulf-mexico
[2] https://www.fisheries.noaa.gov/southeast/consultations/gulf-mexico

are increasingly vulnerable to ship strikes from expanded traffic in the warming Bering Sea and Gulf of Alaska waters. NOAA is currently considering a petition to enlarge the critical habitat area for this endangered whale population. These perils are exacerbated by opening of the Northern Sea Route and Northwest passage due to climate change, and increased ship traffic through the Aleutian Islands.

The extinction of any of these whales would be a black eye for American conservation while the loss of all three would inarguably be an historic disgrace.

Yet, the potential loss of whale species in U.S. waters is not confined to these three extreme jeopardy species:

- The blue whale is classified as endangered under the Endangered Species Act across its entire range.[3]

- The sperm whale is also endangered across its entire range,[4] as is the sei,[5] fin,[6] and bowhead whale.[7]

- Currently, four out of the 14 distinct humpback whale population segments are still protected as endangered, and one is listed as threatened.[8] Three humpback whale stocks in U.S. waters are designated as depleted under the Marine Mammal Protection Act.[9]

- The five beluga whale populations in Alaska are all at significant risk due to climate change, and the Cook Inlet distinct population segment has declined by 80 percent since 1979, from 1,300 to less than 280 individuals, is declining at 2.3% per year, and is listed as endangered under the ESA.[10]

- The eastern North Pacific gray whale population, currently suffering an Unusual Mortality Event (UME), has declined 38% since 2016, from an estimated population of 27,000 to less than 16,650 today. The Western Pacific gray whale population, now fewer than 300 individuals, is classified as critically endangered.[11]

- Even some populations of the ocean's top predator, the killer whale, are in dire straits in U.S. waters. The Southern Resident killer whales ranging from central California to southeast Alaska are classified as endangered.[12] One of the most significant causes of mortality in this population is ship-strikes. This population of resident killer whales has declined to 73 individuals. And the genetically distinct AT1 killer whale pod in Alaska's

[3] https://www.fisheries.noaa.gov/species/blue-whale#:
[4] https://www.fisheries.noaa.gov/species/sperm-whale
[5] https://www.fisheries.noaa.gov/species/sei-whale
[6] https://www.fisheries.noaa.gov/species/fin-whale
[7] https://www.fisheries.noaa.gov/species/bowhead-whale
[8] 81 FR 62259, September 2016
[9] See annual stock assessment report at https://www.fisheries.noaa.gov/species/humpback-whale#:
[10] https://www.fisheries.noaa.gov/species/beluga-whale
[11] https://iwc.int/about-whales/status
[12] https://www.fisheries.noaa.gov/species/killer-whale

Prince William Sound, decimated by the 1989 Exxon Valdez Oil Spill, now with only 7 remaining individuals, is expected to go extinct.[13]

In short, despite isolated recovery bright spots, the overall status of all whale populations in U.S. waters is far from robust. It is incumbent on the federal government to minimize preventable losses to these whale populations. Thus, the threshold level for acceptable whale casualties due to ship strikes should be set by the agency at zero.

II. SHIP STRIKES ARE A MAJOR CAUSE OF WHALE MORTALITY IN U.S. WATERS

Regardless of species, one of the greatest threats to whale survival in U.S. waters is collisions with ships. Precisely because they inhabit busy coastal areas, whales in U.S waters are at risk of being struck by passing vessels while they feed, play, migrate, rest, nurse, mate, give birth, and socialize.[14] Many whales use sound, including echolocation, to hunt for food, orient and communicate. Ship noise can mask whale calls and other soundings, effectively blinding the mammals.

Researchers estimate more than 80 endangered blue, humpback and fin whales are killed by ships each year along the West Coast.[15] Whale and Dolphin Conservation, Inc. estimates that more than 1 in 10 humpback whales in the southern Gulf of Maine has been struck by a passing vessel.[16]

It is the size and the speed of commercial shipping that drives the lethality of this threat. Due to their speed of passage, large ships are unlikely to see a whale. At the same time, a big ship creates a "bow null effect" that blocks engine noise by the bow, creating a quiet zone in front of the vessel, and leaving a whale unaware of the pending threat.[17]

For a 1,000-ft ship travelling at just 10 knots, the bow arrives at a point almost a full minute before the stern arrives. By contrast, at 20 knots, the bow arrives nearly a half-minute before the stern. So, even if a whale accurately localized the stern as the sound source, the bow arrives sooner, so the whale may still be struck by the ship.[18]

In addition, the risk of ship strikes grows substantially at night, when the absence of light appears to diminish the ability of both ship navigators and whales to avoid impacts.[19] This is of particular concern for whale species that tend to rest at or near the water surface during night hours.

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[13] Myers, Hannah, D.W.Olsen, C.O.Matkin, L.A. Horstmann, B.Konar, 2021. Passive acoustic monitoring of killer whales (Orcinus orca) reveals year-round distribution and residency patterns in the Gulf of Alaska, Scientific Reports, Nature.com

[14] https://sanctuaries.noaa.gov/protect/shipstrike/welcome.html#:

[15] July 2021, Cottonwood, et al, Frontiers in Marine Science "Modeling Whale Deaths From Vessel Strikes to Reduce the Risk of Fatality to Endangered Whales"

[16] https://us.whales.org/our-4-goals/create-healthy-seas/the-threat-from-vessel-strikes/

[17] Ibid

[18] 2017, Gabriele, National Park Service, Glacier Bay National Park "Whale strike Avoidance in Southeastern Alaska"

[19] 2019, Keen et al 2019Frontiers in Marine Science "Night and Day: Diel Differences in Ship Strike Risk for Fin Whales (Balaenoptera physalus) in the California Current System"

Speed Kills

Whales often seem to rely on last-second avoidance. Almost all ships are quieter at lower speeds. Quieter seas allow marine life more leeway to communicate for their essential life functions.[20] The cumulative probability of detecting one of the available "cues" of whale's presence (and direction of travel) decreases with increased ship-to-whale distances.[21]

Over the past few decades, the size and speed of containerships have steadily grown with speeds now averaging between 20 to 25 knots.[22]

In its 2008 North Atlantic right whale rule, NOAA summarized the science justifying a vessel speed reduction to 10 knots to reduce whale-strike risk, as follows:

> *"*NMFS examined the best available scientific information in determining that the use of speed restrictions would be an effective means to reduce the likelihood and severity of ship strikes, and has set the limit for the restrictions based upon this evidence. Based on inventories of all known collisions between ships and large whale species, including right whales (Knowlton and Kraus, 2001; Laist et al., 2001; Jensen and Silber, 2003), Vanderlaan and Taggart (2007) examined all records for which ship speed at the time of impact was known. Based on their analysis, these authors concluded that the probability of a collision causing a whale's death increased rapidly and in a non-linear manner as vessel speed increased. They found that between the speeds of 9 and 20 knots, the probability of collision causing a whale's death rose from 20 to 100 percent, respectively. The greatest increase occurred between the speeds of 10 and 14 knots. They determined that the probability of death occurring from a collision was approximately 35-40 percent at 10 knots, 45-60 percent at 12 knots, and 60-80 percent at 14 knots (Vanderlaan and Taggart, 2007). This analysis did not control for ship size. In an independent analysis using 64 records of ship strikes in which vessel speed was known, Pace and Silber (2005) tested speed as a predictor of the probability of a whale death or serious injury. They found strong evidence that the probability of death or serious injury increased rapidly with increasing vessel speed. Specifically, the predicted probability of serious injury or death increased from 45 percent to 75 percent as vessel speed increased from 10 to 14 knots, and exceeded 90 percent at 17 knots.
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> In a compilation of ship strikes of all large whale species that assessed ship speed as a factor in ship strikes, Laist et al. (2001) concluded that a direct relationship existed between the occurrence of a whale strike and the speed of the vessel. These authors indicated that most deaths occurred when a vessel was traveling at speeds of 14 knots or greater and that, as speeds declined below 14 knots, whales apparently had a greater opportunity to avoid oncoming vessels. Adding to the Laist et al. (2001) study, Jensen and Silber (2003) compiled 292 records of known or probable ship strikes of all large whale species from 1975 to 2002. Vessel speed at the time of the collision was reported for 58 of those cases. Operating speeds of vessels that struck various species of large

[20] Id
[21] 2019 Gende, et al *Frontiers in Marine Science* "Active Whale Avoidance by Large Ships: Components and Constraints of a Complimentary approach to Reducing Ship Strike Risk"
[22] https://transportgeography.org/contents/chapter5/maritime-transportation/evolution-containerships-classes/

whales ranged from 2-51 knots with an average speed of 18.1 knots. A large majority (85.5 percent) of these strikes occurred at vessel speeds of 10 knots or greater."

While applied in the context of the North Atlantic right whale, this analysis extends beyond this one whale species and reinforces the case for this proposed rulemaking.

Ships Getting Bigger

Since 2006, the size of the largest container ships has more than doubled. In fact, the growth in the size of the ships has even outpaced the tonnage carried, which has risen 155% by 2020.[23] As ship sizes have gone up faster than trade volumes and total deployed capacity, the ongoing increase in ship size will continue.[24]

These bigger ships carrying more cargo at greater speeds inevitably compound the prospects of collisions with whales.

Dramatic Vessel Traffic Increase

At the same time, global trade has grown almost exponentially driving a huge growth in ship traffic in the world's oceans. Today, there are an estimated four times as many ships at sea than in 1992, just three decades ago.[25]

With increasing global marine traffic, the problems created by thousands of massive ships crisscrossing waters that teem with ocean giants are expected to only worsen. For example, the Southern California shipping lanes to San Francisco cover the two busiest hubs in California and, not coincidentally, are also two epicenters of whale mortality from ship strikes.

Alaska's Growing Vulnerability

Alaskan waters today host one of the largest and most diverse profusion of whales on the planet. As the climate changes and vessel traffic increases, they will be increasingly vulnerable to ship strikes.

Climate change and retreating sea ice are creating a new navigable ocean in Arctic waters, with the Arctic Ocean projected to be ice-free for half of the year by the end of this century.[26] These increasingly open waters are attracting new ship traffic through the Bering Strait, Bering Sea and Chukchi Sea.[27] The Bering Sea and Bering Strait have already seen an estimated increase in ship traffic of 250 percent just between 2008 and 2015.[28] With trans-Pacific trade rebounding from the pandemic, shipping is also expected to increase along the Great Circle Route between the west coast of North America and Asia, on which thousands of ships each year transit important whale habitat in Alaska's Aleutian Islands.

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[23] 2021United Nations Conference on Trade and Development https://unctad.org/news/bigger-ships-and-fewer-companies-two-sides-same-coin

[24] https://www.researchgate.net/publication/265849880_On_the_ongoing_increase_of_containership_size#:~:text .

[25] https://www.livescience.com/48788-ocean-shipping-big-increase-satellites.html

[26] https://www.uaf.edu/caps/our-work/arctic-ocean-transit-project-files/increased-maritime-traffic-in-the-arctic-paper-final-9Dec2019.pdf

[27] https://www.scientificamerican.com/article/amid-ice-melt-new-shipping-lanes-are-drawn-up-off-alaska/#

[28] Uaf, edu. Op.cit.

Overall, it appears that the peril to whale populations in U.S. waters is quite substantial, yet the magnitude of this threat is undoubtedly undercounted. Crews of large ships that strike whales are often not even aware of these incidents. Moreover, the carcasses of whales killed by vessels often sink to the ocean floor or bottom or decompose on a remote beach to the point where the cause of death cannot be established.[29]

Further, there is no legal requirement that a ship must report a collision with a whale to any governmental entity.[30] Thus, while this source of mortality is quite significant, an accurate toll is difficult to ascertain.

Regardless of the exact dimensions of the ship strike losses, every indication is that this risk to whales in U.S. waters is substantial, and is expected to grow.

III. THE U.S. LACKS A COHERENT POLICY TO PREVENT WHALE SHIP STRIKES

Despite looming extinctions of whale populations and increasing vulnerability of whales to ship strikes in U.S. waters, NOAA lacks a coherent strategy for avoidance of these collisions. Instead, the U.S. has a piecemeal approach, limited by certain species and in certain areas.

For example, it is illegal to approach a North Atlantic right whale closer than 500 yards with some exceptions for vessels "restricted in her ability to maneuver."[31] In Alaska, all vessels must operate at a "slow, safe speed when near a humpback whale."[32] This regulation assumes that a ship's captain must know that a whale is nearby, and what a safe speed is in such a situation.

Other regulation is tied to a particular waterbody. For example, a vessel in Alaska's Glacier Bay must "immediately slow the vessel to ten knots or less without shifting into reverse" and "direct or maintain the vessel on as steady a course as possible away from the whale until at least 1/4 nautical mile of separation is established."[33] This regulation may be practicable for small boats but may be much more difficult for large ships to comply, particularly in tight navigational situations.

Others link a particular area to a particular whale species. Thus, on the Eastern Seaboard, traffic separation schemes (shipping lanes) and Areas to be Avoided have been established in both the U.S. and Canada to route ships around high use North Atlantic right whale habitats.[34] Such routing measures are not possible in transit to and from many U.S. ports.

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[29] https://www.science.org/content/article/blue-whales-being-struck-ships

[30] See https://media.fisheries.noaa.gov/dam-migration/reduce-whale-strikes-top5things.pdf

[31] 50 CFR §224.103 and 50 CFR §224.103. See also 2019 Gende, et al *Frontiers in Marine Science* "Active Whale Avoidance by Large Ships: Components and Constraints of a Complimentary approach to Reducing Ship Strike Risk

[32] 50 CFR §223.214

[33] 36 CFR §13.1170

[34] https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-vessel-strikes-north-atlantic-right-whales#dynamic-management-areas

These regulatory fragments cannot be characterized as a comprehensive strategy for avoiding ship strikes on all whale species in U.S. waters. Their origin appears to serve a political rather than a biological function.

Nonetheless, they demonstrate that the U.S. has the authority to compel whale avoidance techniques across the board in U.S waters.

IV. A MANDATORY NATIONAL POLICY IS NEEDED TO STEM WHALE SHIP STRIKES

In the absence of mandatory restrictions in much of U.S. waters, NOAA and other authorities have depended on voluntary measures, with mixed success.

A new analysis of automated ship tracking data shows that nearly 90 percent of vessels transiting mandatory speed zones to protect endangered North Atlantic right whales are violating the speed limits. The highest level of compliance (approximately one third of ships) was documented in the Off Race Point seasonal management area, near Cape Cod, Massachusetts, where NOAA regularly announces speed restrictions to protect migrating whales. While the lowest levels of compliance — with nearly 90 percent of vessels breaking the 10-knot speed limit — was off the coast between Wilmington, N.C., and Brunswick, Ga., along the approaches to the high-volume ports of Charleston and Savannah.[35]

National Marine Sanctuaries have had a better track record with the Voluntary Speed Reduction Zones established in both San Francisco Region and Southern California waters. While compliance with these voluntary measures has ticked upward in recent years, the overall level of noncompliance remains high:[36]

Region	2017	2018	2019	2020	2021
SF Bay Region	45%	45%	58%	64%	63%
SoCal Region	18%	23%	50%	54%	59%

In the San Francisco area, cooperation rates with NOAA's speed limits have been hovering around 62 percent for the last three years, with compliance varying by company.[37] Maersk, one of the world's largest shipping companies, has slowed down 79 percent of the time in the Santa Barbara Channel. But ships operated by Matson, a major Pacific shipper, slowed only 16 percent of the time.

In Alaskan waters "planned, temporary speed reductions in known areas of whale aggregations, particularly in navigationally constrained areas" offer a range of options for avoidance but rely upon real-time sharing of whale sighting data by mariners.[38] Last year, Alaska oil tanker owners agreed to consider a proposed voluntary vessel speed reduction in Prince William Sound to reduce whale-strike risk but, after being presented the science and

[35] https://www.nationalfisherman.com/national-international/report-finds-most-ships-breaking-u-s-right-whale-speed-limits
[36] 2022 Hastings, Channel Islands National Marine Sanctuary, NOAA "Addressing Vessel Strikes of Cetaceans off Caliornia"
[37] Saving Whales From Ship Collisions With Warnings and Letter Grades - The New York Times (nytimes.com)
[38] Gende op.cit.

justification for such in a NOAA-sponsored workshop in October 2022, have not adopted any additional voluntary risk reduction measures.

These voluntary efforts demonstrate that application of active whale avoidance techniques by large ships is feasible. Yet the effectiveness of these measures requires some form of mandatory enforcement to ensure widespread compliance.

In Title CXIII – Environment Subtitle A-Marine Mammals of the National Defense Authorization Act for FY 2023, which became law on Dec. 23, 2022, Congress directed NOAA to establish a near real-time monitoring and mitigation program to reduce the risk to large cetaceans posed by vessel strikes. This proposed rule directly responds to this congressional direction.

Conclusion

Under the Endangered Species Act, NOAA is charged by law "to provide a program for the conservation of [...] endangered species" and "the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species [...] and shall utilize their authorities in furtherance of the purposes of [the Endangered Species Act]."[39] Yet with regard to protecting threatened and endangered whale populations from mortality from ship strikes NOAA has not fulfilled this mandate.

The Marine Mammal Protection Act (MMPA) obligates NOAA to ensure that whales and other marine mammals are "not be permitted to diminish beyond the point at which they cease to be a significant functioning element in the ecosystem of which they are a part, and, consistent with this major objective, they should not be permitted to diminish below their optimum sustainable population." The MMPA further directs that measures "should be immediately taken" to protect these animals from "the adverse effect of man's actions."[40]

Further, the U.S. has the legal ability to impose speed restrictions set in this rulemaking petition consistent with international law to ships entering or departing U.S. ports. As a legal matter, the U.S. has neither limited this authority geographically nor by the type of legitimate interest being protected. International law recognizes the interest of nations in protection of its living marine resources, including rare and endangered species.[41]

This proposed rulemaking would establish Whale Safety Zones in all waters from a U.S. port to the ocean entrance to the port and extending seaward to 30 nautical miles beyond the ocean entrance to the port, as well as all waters within National Marine Sanctuaries, Marine National Monuments, State and Internal waters, and the U.S. Territorial Sea (within 12 nautical miles of shore). Within these zones, all vessels greater than or equal to 65 feet in length would be required to abide by speed restrictions and other measures to avoid collisions with whales. As whales can be present in the proposed Whale Safety Zones at any time of year, and the acceptable casualty rate from ship strikes should be set at zero in these zones, these ship requirments should be in-force year round.

[39] 16 U.S.C. 1531(b),(c)
[40] 16 U.S.C. 1361
[41] United Nations Convention on the Law of the Sea Articles 27(2) and 28(3)

In summation, NOAA has the legal obligation to protect whale populations from ship strikes in U.S. waters. It also has the legal authority, and now direction from Congress, to do so. All that is further required is the political will to act.

Appendix - Proposed Rule

Proposed Rule

The authority citation for 50 CFR part 224 continues to read as follows: Authority: 16 U.S.C. 1531–1543 and 16 U.S.C. 1361 et seq.

In part 224, a new § 224.106 is added to read as follows:

§ 224.106 Minimum measures to protect Whales, and to reduce underwater noise, vessel stack emissions, and risk of collisions with other vessels in coastal waters:

(a) The following restrictions apply to all vessels greater than or equal to 65 feet (19.8 meters) in overall length and subject to the jurisdiction of the United States, including all vessels in transit to or from a port or place subject to the jurisdiction of the United States, and all vessels on Innocent Passage subject to the jurisdiction of the United States (transiting within the Territorial Sea of the United States).

(b) All waters from port to the ocean entrance to the port and extending seaward to 30 nautical miles beyond the ocean entrance to the port are designated as Whale Safety Zones. All waters within National Marine Sanctuaries, Marine National Monuments, State and Internal waters, and the U.S. Territorial Sea (within 12 nautical miles of shore), are also designated as Whale Safety Zones.

(c) Vessels transiting Whale Safety Zones shall travel at a speed of 10 knots or less over ground during daytime, and at dark - from one hour after local sunset until one hour before local sunrise – vessels shall travel at a speed of 8 knots or less over ground.

(d) Vessels transiting Whale Safety Zones must post bow watches, and when whales are spotted along or near the vessel's course, the vessel must slow and take other reasonable evasive action to avoid colliding with the whale/s, consistent with navigational safety (as in section (g)).

(e) Vessels transiting Whale Safety Zones must take the shortest route possible, consistent with navigational safety (as in section (g)).

(f) Except as noted in paragraph (g) of this section, it is unlawful under this section for any vessel subject to the jurisdiction of the United States, including those entering or departing a port or place under the jurisdiction of the United States or those on Innocent Passage, to violate any restriction established in paragraphs (a), (b), (c), (d), and (e) of this section.

(g) A vessel may operate at a speed and route necessary to maintain navigational safety, instead of the required 10 knots (or 8 knots at dark) and taking whale avoidance maneuvers, only if justified because the vessel is in an area where oceanographic, hydrographic and/or meteorological conditions severely restrict the maneuverability of

the vessel and the need to operate at such speed and course is confirmed by the pilot on board or, when a vessel is not carrying a pilot, the master of the vessel.

If a vessel master decides that a deviation from the 10 knot (or 8 knot at dark) speed limit or taking whale avoidance maneuvers is necessary for navigational safety, the specific reasons for the deviation, the speed and course at which the vessel is operated, the latitude and longitude of the area, and the time and duration of such deviation shall be entered into the logbook of the vessel. The master of the vessel shall attest to the accuracy of the logbook entry by signing and dating it.

(h) These restrictions shall not apply to U.S. vessels owned or operated by, or under contract to, the Federal Government. This exemption extends to foreign sovereign vessels when they are engaging in joint exercises with the U.S. Department of the Navy. In addition, these restrictions do not apply to law enforcement vessels of a State, or political subdivision thereof, when engaged in law enforcement or search and rescue duties.

(i) All Whale Safety Zones must be clearly marked on nautical charts, and issued as Notices to Mariners.

(j) As a national minimum standard, nothing in this rule shall limit or restrict the agency from establishing more stringent requirements as necessary and appropriate.

(k) No later than January 1, 2025, the National Marine Fisheries Service will publish and seek comment on a report evaluating the conservation value and economic and navigational safety impacts of this section, including any recommendations to minimize burden of such impacts.

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