

## 15.0 GLOSSARY, ACRONYMS, AND INDEX

### 15.1 Glossary

**Action agency:** The Federal agency charged with permitting, conducting, or funding the proposed activity serving as the basis for a consultation under the Endangered Species Act.

**Aldrin:** An organochlorine insecticide no longer registered for use in the United States.

**Algae:** Single-celled or simple multi-cellular photosynthetic organisms.

**ALWTRP gear:** Gear that is currently or potentially subject to the requirements of the Atlantic Large Whale Take Reduction Plan.

**Amortize:** To repay a debt with regular payments that cover both principal and interest.

**Anadromous:** Fish that spawn in fresh or estuarine waters and migrate to ocean waters.

**Anchored gillnet:** Any gillnet gear, including a sink gillnet or stab net, that is set anywhere in the water column and which is anchored, secured or weighted to the bottom of the sea. Also called a set gillnet.

**Anthropogenic:** Human made.

**Baleen whales:** Baleen whales (also known as Mysticeti, or mustached whales) are filter feeders that have baleen, a sieve-like device used for filter feeding krill, copepods, plankton, and small fish. They are the largest whales and have two blowholes. Baleen whales include blue, fin, gray, humpback, minke, bowhead, and right whales.

**Benthic:** The bottom habitat of any aquatic environment.

**Berried:** Carrying eggs.

**Bioaccumulation:** The ability of organisms to retain and concentrate substances from their environment. The gradual build-up of substances in living tissue; usually used in referring to toxic substances; may result from direct absorption from the environment or through the food-chain.

**Biological opinion:** Under the provisions of the Endangered Species Act, an opinion prepared by the Action agency as to whether or not a proposed action is likely to jeopardize the continued existence of a listed species, or adversely modify critical habitat.

**Biomagnification:** Increasing concentration of a substance in successive trophic levels of a food chain.

**Biomass:** The total mass of living matter in a given unit area or the weight of a fish stock or portion thereof.

**Biopsy:** The removal of a small piece of tissue for microscopic examination.

**Biotoxins:** Highly toxic compounds produced by harmful algal blooms (HABs).

**Bitter end:** The loose end of a line that has detached from a weak link.

**Bottom portion of the line:** For buoy lines, the portion of the line in the water column that is closest to the fishing gear.

**Breaking strength:** The highest tensile force that an object can withstand before breaking.

**Bridle:** The lines connecting a gillnet to an anchor or buoy line.

**Buoy line:** A line connecting fishing gear in the water to a buoy at the surface of the water.

**Bycatch:** Fish that are harvested in a fishery but are not sold or kept for personal use, including economic discards and regulatory discards, but not fish released alive under a recreational catch and release fishery management program.

**Carapace:** The shield-like exoskeleton plate that covers at least part of the anterior dorsal surface of many arthropods.

**Caudal peduncle:** The stalk of a whale or fish tail that connects the tail fins to the body.

**Cetaceans:** Aquatic mammals, including whales.

**Ciguatoxin:** A toxin produced by microorganisms living in algae found in reef areas. This compound accumulates up the food chain, reaching higher concentrations in top marine predators. Ciguatoxin is not destroyed by cooking, drying, salting, or freezing.

**Climate change:** The term “climate change” is sometimes used to refer to all forms of climatic inconsistency, but because the Earth’s climate is never static, the term is more properly used to imply a significant change from one climatic condition to another. In some cases, “climate change” has been used synonymously with the term, “global warming;” scientists, however, tend to use the term in the wider sense to also include natural changes in climate.

**Compliance costs:** All costs associated with adapting vessel operations to meet regulatory requirements.

**Copepods:** Microscopic crustaceans that are important members of the zooplankton.

**Critical habitat area:** The specific areas within the geographical area occupied by a threatened or endangered species, on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection.

**Crustacean:** Invertebrates characterized by a hard outer shell and jointed appendages and bodies. Higher forms of this class include lobsters, shrimp and crawfish; lower forms include barnacles.

**Days at sea (DAS) allocation:** The total days, including steaming time, that a boat is permitted to spend at sea fishing.

**DDT (dichloro-diphenyl-trichloroethane):** An organochlorine insecticide no longer registered for use in the United States.

**Decompression sickness:** A general term for all bubble-related problems arising from decompression. Decompression is the change from one ambient pressure to a lower ambient pressure that results in a reduction of gas pressures in the body.

**Depleted:** Under the provisions of the Marine Mammal Protection Act, any species or population stock below its optimum sustainable population as determined by the Secretary of Commerce after consultation with the Marine Mammal Commission (MMC) and the Committee of Scientific Advisors on Marine Mammals.

**Dieldrin:** An organochlorine insecticide no longer registered for use in the United States.

**Dinoflagellates:** A diverse assemblage of biflagellate unicellular organisms, which constitute an important component of marine, brackish, and fresh bodies of water.

**Driftnet:** A gillnet that is unattached to the ocean bottom and not anchored, secured or weighted to the bottom, regardless of whether attached to a vessel.

**Effluent:** Wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall.

**Endangered:** Any species that is in danger of extinction throughout all or a significant portion of its range.

**Endocrine system:** The endocrine system refers to all of the body's hormone-secreting glands. This system works in conjunction with the nervous system to control the production of hormones and their release into the circulatory system.

**Entanglement:** An event in the wild in which a living or dead marine mammal has gear, rope, line, net, or other material wrapped around or attached to it and is:

(a) on a beach or shore of the United States; or

(b) in waters under the jurisdiction of the United States (including any navigable waters).

**Epifaunal:** Animals and plants that live on the surface of the seafloor, attached to rocks or moving over the bottom.

**Essential Fish Habitat (EFH):** Those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. The EFH designation for most managed species is based on a legal text definition and geographical area that are described in the Habitat Omnibus Amendment (1998).

**Eutrophication:** A set of physical, chemical, and biological changes brought about when excessive nutrients are released into the water.

**Exclusive Economic Zone (EEZ):** A zone in which the inner boundary is a line coterminous with the seaward boundary of each of the coastal States and the outer boundary is a line 200 miles away and parallel to the inner boundary

**Exotic:** Plants or animals introduced into a community that are not native to the area.

**$F_{0.1}$ :** A conservative fishing mortality rate calculated as the  $F$  associated with 10 percent of the slope at origin of the yield-per-recruit curve.

**$F_{MAX}$ :** A fishing mortality rate that maximizes yield per recruit.  $F_{MAX}$  is less conservative than  $F_{0.1}$ .

**$F_{MSY}$ :** A fishing mortality rate that would produce the maximum sustainable yield (MSY) when the stock biomass is sufficient for producing MSY on a continuing basis.

**Fathom:** A measure of length, containing six feet; the space to which a man can extend his arms; used chiefly in measuring cables, cordage, and the depth of navigable water by soundings.

**Fecundity:** Fertility or ability to reproduce.

**Finfish:** Bony fishes such as bass, trout, salmon, goldfish, carp, etc; does not include sharks or rays.

**Fishery:** The Magnuson-Stevens Fishery Conservation and Management Act defines fishery as "one or more stocks of fish which can be treated as a unit for purposes of conservation and management and which are identified on the basis of geographical, scientific, technical, recreational, and economic characteristics; and...any fishing for such stocks."

**Fishery Management Plan (FMP):** A plan developed by a Regional Fishery Management Council, or the Secretary of Commerce under certain circumstances, to manage a fishery resource in the U.S. EEZ pursuant to the MFCMA (Magnuson Act).

**Fishing effort:** the amount of time and fishing power used to harvest fish. Fishing power is a function of gear size, boat size and horsepower.

**Fishing mortality (F):** A measurement of the rate of removal of fish from a population caused by fishing. This is usually expressed as an instantaneous rate ( $F$ ) and is the rate at which fish are harvested at any given point in a year. Instantaneous fishing mortality rates can be either fully recruited or biomass weighted. Fishing mortality can also be expressed as an exploitation rate or, less commonly, as a conditional rate of fishing mortality  $m$ , the fraction of fish removed during the year if no other competing sources of mortality occurred. (Lower case  $m$  should not be confused with upper case  $M$ , the instantaneous rate of natural mortality.)

**Float line:** The rope at the top of a gillnet from which the mesh portion of the net is hung.

**Food web:** The complete set of food links between species in an ecosystem.

**Fork length:** Length of a fish measured from the tip of the snout to the posterior end of the middle caudal rays. This measurement is used instead of standard length for fishes on which it is difficult to ascertain the end of the vertebral column, and instead of total length in fish with a stiff, forked tail, e.g., tuna. Mostly used in fishery biology and not in systematics.

**Gear conflict:** Interactions between the gear employed by commercial fishing vessels, such as the severing of a buoy line by a dragger.

**Gear fouling:** Snagging of buoy line or ground line on the ocean floor.

**Ghost fishing:** Continued ability of a piece of gear to capture target and non-target species after it is lost by its tender.

**Gillnet:** Fishing gear consisting of a wall of webbing (meshes) or nets, designed or configured so that the webbing (meshes) or nets are placed in the water column, usually approximately vertically. Gillnets are designed to capture fish by entanglement, gilling, or wedging. The term "gillnet" includes gillnets of all types, including but not limited to sink gillnets, other anchored gillnets (e.g., stab and set nets), and drift gillnets. Gillnets may or may not be attached to a vessel. The term is intended to include gillnets with or without tiedowns. Haul/beach seines have bunt/capture bags and wings, and are therefore not considered gillnets for the purposes of the ALWTRP. North Carolina beach-anchored gillnets, which are fished from shore and report their landings as part of the haul/beach seine fishery, are also not considered gillnets for the purposes of the ALWTRP. Nearshore gillnets, which are set from small vessels just off the beach, but are not attached to the beach, are considered gillnets and are regulated under the ALWTRP.

**Greenhouse gas:** Any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include, but are not limited to, water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrochlorofluorocarbons (HCFCs), ozone (O<sub>3</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

**Ground line:** With reference to lobster trap gear, a line connecting lobster traps in a lobster trap trawl; with reference to gillnet gear, a line connecting a gillnet or gillnet bridle to an anchor or buoy line.

**Groundfish:** Broadly, fish that are caught on or near the sea floor. The term includes a wide variety of bottom fishes, rockfishes, and flatfishes. However, NMFS sometimes uses the term in a narrower sense. In "Fisheries of the United States," the term applies to Atlantic and Pacific cod, hake, ocean perch, pollock, cusk, and haddock.

**Growth overfishing:** Fishing at an exploitation rate or at an age at entry that reduces potential yields from a cohort but does not reduce reproductive output (see recruitment overfishing).

**Harmful algal blooms (HABs):** The proliferation of toxic nuisance algae that cause a negative impact to natural resources or humans.

**Heavy metal:** A generic term for a range of metals with a moderate to high atomic weight (e.g., cadmium, mercury, lead). Although many are essential for life in trace quantities, in elevated concentrations most are toxic and bioaccumulate.

**Holding power:** The force an anchor can withstand before being dragged along or from the bottom.

**Hydrocarbons:** Organic compounds containing mainly hydrogen and carbon; the basic constituents of fossil fuels.

**Injury:** A wound or other physical harm. In whales, signs of injury include, but are not limited to, visible blood flow, loss of or damage to an appendage or jaw, inability to use one or more appendages, asymmetry in the shape of the body or body position, noticeable swelling or hemorrhage, laceration, puncture, or rupture of eyeball, listless appearance or inability to defend itself, inability to swim or dive upon release from fishing gear, or signs of equilibrium imbalance. Any animal that ingests fishing gear, or any animal that is released with fishing gear entangling, trailing, or perforating any part of the body is considered injured regardless of the absence of any wound or other evidence of an injury.

**International Maritime Organization:** The United Nations agency responsible for improving ship traffic and safety.

**Isobath:** Line connecting points of equal water depth on a chart; a seabed contour.

**Kyoto Protocol:** An international agreement struck by 159 nations attending the Third Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (held in December of 1997 in Kyoto, Japan) to reduce worldwide emissions of greenhouse gases. If ratified and put into force, individual countries have committed to reduce their greenhouse gas emissions by a specified amount.

**Landings:** The portion of the catch that is harvested for personal use or sold.

**Lead line:** The rope, weighted or otherwise, to which the bottom edge of a gillnet is attached.

**Limited access:** Describes a fishery or permit for which a vessel must meet certain criteria by a specified "control date" to participate.

**List of fisheries:** A list maintained by NMFS that places each commercial fishery into one of three categories. Fisheries are categorized according to the level of serious injury and mortality of marine mammals that occurs incidental to that fishery.

**Low risk gear:** Gear that is highly unlikely to cause death or serious injury to entangled whales.

**Marine Mammal Commission (MMC):** A scientific advisory board comprised of experts that oversees the administration of the Marine Mammal Protection Act.

**Marine Mammal Protection Act (MMPA):** An Act passed by the United States Congress in 1972 that prohibits the hunting, killing, harassing, or injuring of marine mammals by any person under U.S. jurisdiction; limited exceptions apply.

**Maximum Sustainable Yield (MSY):** The largest long-term average catch or yield that can be taken from a stock or stock complex under prevailing ecological and environmental conditions.

**Metric ton:** A unit of weight equal to a thousand kilograms (1kg. = 2.205 lb.). A metric ton is equivalent to 2,205 lb. A thousand metric tons is equivalent to 2.205 million lbs.

**Model vessel:** Representative of a group of vessels that share similar operating characteristics and would face similar requirements under a given regulatory alternative.

**Molting:** The regular shedding of an outer body covering such as fur, skin, feathers, or, in the case of crustaceans, a shell.

**Monofilament:** A twine composed of a single yarn.

**Multispecies:** The group of species managed under the Northeast Multispecies Fishery Management Plan. This group includes whiting, red hake and ocean pout plus the regulated species (cod, haddock, pollock, yellowtail flounder, winter flounder, witch flounder, American plaice, windowpane flounder, white hake and redfish).

**Natural mortality:** A measurement of the rate of death from all causes other than fishing, such as predation, disease, starvation, and pollution.

**Necrosis:** Localized death of tissue.

**Neonate:** A newborn baby in the first few months of life.

**Net panel:** Sheet of netting often comprising two or more sections joined together.

**Net string:** A series of two or more net panels linked together by lines, surface lines, and buoys being placed at intervals, or at the first and last net panel.

**Neutrally buoyant line:** Line with a specific gravity near that of sea water, so that the line neither sinks to the ocean floor nor floats at the surface, but remains close to the bottom.

**Night:** Any time between one-half hour before sunset and one-half hour after sunrise.

**No action alternative:** The status quo, i.e., the baseline set of ALWTRP requirements currently in place.

**Nonpoint source:** A pollution source that cannot be defined as originating from discrete points such as pipe discharge. Areas of fertilizer and pesticide applications, atmospheric deposition, manure, and natural inputs from plants and trees are types of nonpoint source pollution.

**Notice of intent:** A statement published by NMFS alerting the public to a forthcoming action.

**Observer:** any person required or authorized to be carried on a vessel for conservation and management purposes by regulations or permits under the MSA.

**Odontocetes:** The sub-order of whales that includes toothed-whales.

**Offal:** Dead and discarded catch and fish by-catch.

**Ongoing costs:** All costs related to gear modifications that fishermen would incur on an annual basis following full implementation of new ALWTRP requirements.

**Open access:** Describes a fishery or permit for which there are no qualification criteria to participate.

**Optimum sustainable population (OSP):** The number of animals which will result in the maximum productivity of the population or the species, keeping in mind the carrying capacity of the habitat and the health of the ecosystem of which they form a constituent element.

**Optimum Yield (OY):** The amount of fish which A) will provide the greatest overall benefit to the nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems; B) is prescribed as such on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant economic, social, or ecological factor; and C) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the maximum sustainable yield in such fishery.

**Organochlorine:** Synthetic organic compounds containing chlorine. As generally used, refers to compounds containing mostly or exclusively carbon, hydrogen, and chlorine. Examples include organochlorine insecticides, polychlorinated biphenyls, and some solvents containing chlorine.

**Organotins:** Chemical compounds used in anti-foulant paints to protect the hulls of boats and ships, buoys, and pilings from marine organisms such as barnacles.

**Overfished:** A condition defined when stock biomass is below minimum biomass threshold and the probability of successful spawning production is low.

**Overfishing:** A level or rate of fishing mortality that jeopardizes the long-term capacity of a stock or stock complex to produce MSY on a continuing basis.

**Ovigerous:** Lobsters that are carrying eggs; egg-bearing lobsters.

**Pelagic:** A term to describe fish that spend most of their life swimming in the open sea with little contact with or dependency on the ocean bottom.

**Phase-in costs:** The incremental gear conversion costs that fishermen would incur between promulgation of a final rule and full implementation of the rule's provisions several years later.

**Phocoenid:** A member of the porpoise family.

**Phytoplankton:** Microscopic marine plants or algae, which are responsible for most of the photosynthetic activity in the oceans.

**Pinnipeds:** A suborder of carnivorous marine mammals that includes the seals, walruses, and similar animals using finlike flippers for propulsion.

**Planktivorous:** Feeding on planktonic organisms.

**Poaching:** The illegal hunting or taking of wildlife out of its natural habitat.

**Point source:** A single identifiable source that discharges pollutants into the environment. Examples are smokestack, sewer, ditch, or pipe.

**Polychlorinated biphenyls (PCBs):** A group of industrial chemicals (of the chlorinated hydrocarbon class) that are commonly used and have become serious and widespread pollutants. They are extremely resistant to breakdown and have contaminated most of the earth's food chains, resulting in biomagnification at higher trophic levels. Known to cause cancer.

**Potential biological removal (PBR):** Maximum number of animals, not including mortalities, that can be removed from a stock while allowing that stock to reach its OSP.

**Prey availability:** The availability or accessibility of prey (food) to a predator. Important for growth and survival.

**Profile:** The outline of fishing line in the water column, i.e., the amount of line that lies in the water column.

**Protected Species:** As used in this document, protected species refers to any species protected by either the ESA or the MMPA, and which is under the jurisdiction of NMFS. This includes all threatened, endangered, and candidate species, as well as all cetaceans and pinnipeds excluding walruses.

**Qualified individual:** An individual ascertained by NMFS to be reasonably able, through training or experience, to identify a right whale. Such individuals include, but are not limited to, NMFS staff, U.S. Coast Guard and Navy personnel trained in whale identification, scientific research survey personnel, whale watch operators, naturalists, and mariners trained in whale species identification through disentanglement training or some other training program deemed adequate by NMFS.

**Quota:** A pre-determined total catch of a particular species allowed to be harvested in a season.

**Reasonable and prudent alternatives:** Alternative actions identified during a formal ESA consultation that (1) can be implemented in a manner consistent with the intended purpose of the action; (2) can be implemented consistent with the scope of the Action agency's legal authority and jurisdiction; (3) are economically and technically feasible; and (4) avoid the likelihood of jeopardizing the continued existence of listed species or resulting in the destruction or adverse modification of critical habitat.

**Recovery factor:** A factor used in calculating PBR. It accounts for endangered, depleted, or threatened stocks or stocks of unknown status relative to OSP.

**Recruitment:** The amount of fish added to the fishery each year due to growth and/or migration into the fishing area. For example, the number of fish that grow to become vulnerable to fishing gear in one year would be the recruitment to the fishery. "Recruitment" also refers to new year classes entering the population (prior to recruiting to the fishery).

**Recruitment overfishing:** Fishing at an exploitation rate that reduces the population biomass to a point where recruitment is substantially reduced.

**Scarification analysis:** An analysis to determine the cause or potential causes for scars found on a whale's body.

**Section 7 consultation:** The consultation with the Secretary of Commerce that occurs when a proposed Federal action may affect an ESA-listed marine species.

**Serious injury:** Any injury that is likely to result in mortality.

**Ship strike:** A collision between a ship and a whale.

**Sink gillnet or stab net:** Any gillnet, anchored or otherwise, that is designed to be, or is fished on or near the bottom in the lower third of the water column.

**Sinking line:** rope that sinks and does not float at any point in the water column. Polypropylene rope is not sinking unless it contains a lead core.

**Sound pressure level (SPL):** The basic measure of noise loudness, expressed in decibels.

**Spawning stock biomass (SSB):** The total weight of fish in a stock that are old enough to reproduce.

**Species:** As defined in the Endangered Species Act (ESA), a species, a subspecies, or, for vertebrates only, a distinct population.

**Specific gravity:** The ratio of the mass of a solid or liquid to the mass of an equal volume of distilled water at 4°C (39°F). Also called relative density.

**Splice:** A joint made by interweaving strands of line together.

**Standard length:** The measurement from the most anterior tip of the body to the midlateral posterior edge of the hypural plate (in fish with a hypural plate) or to the posterior end of the vertebral column (in fish lacking hypural plates).

**Stock:** A grouping of fish usually based on genetic relationship, geographic distribution and movement patterns. A region may have more than one stock of a species (for example, Gulf of Maine cod and Georges Bank cod). A species, subspecies, geographical grouping, or other category of fish capable of management as a unit.

**Stock assessment:** Study to determine the number (abundance/biomass) and status (life-history characteristics, including age distribution, natural mortality rate, age at maturity, fecundity as a function of age) of individuals in a stock.

**Straight set:** The deployment of gillnet in a straight line, as opposed to the deployment of gillnet in a circular manner, for example, around a school of fish.

**Stranding:** An event in which a marine mammal is dead on a beach, shore, or waters under U.S. jurisdiction; or alive on a beach or shore and unable to return to the water or in need of medical attention, or in waters under U.S. jurisdiction and unable to return to its natural habitat without assistance.

**Strategic stock:** Under the provisions of the MMPA, a marine mammal stock for which the level of direct human-caused mortality exceeds the potential biological removal level (PBR). Stock which, based on the best available scientific information, is declining and is likely to be listed as a threatened species under the ESA of 1973 in the foreseeable future; or which is listed as a threatened species or endangered species under the ESA of 1973; or is designated as depleted under the MMPA.

**Strikenet:** A gillnet that is designed so that, when deployed, it encircles or encloses an area of water either with the net or by utilizing the shoreline to complete encirclement.

**Subsistence whaling:** The catching of whales by indigenous people for local consumption.

**Substrate:** Ocean floor.

**Take:** As defined in the Marine Mammal Protection Act (MMPA), to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal.

**Territorial waters:** Waters generally extending three nautical miles from shore in which the state has jurisdiction.

**Threatened:** Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

**Tie loops:** The loops on a gillnet panel used to connect net panels to the buoy line, groundline, bridle or each other.

**Toggle:** A small buoy used to keep a net or line upright in the water column.

**Total allowable catch (TAC):** Value calculated by applying a target fishing mortality rate to exploitable biomass.

**Total length:** A fish's greatest length, as measured from the most anterior point of the body to the most posterior point, in a straight line, not over the curve of the body.

**Trawl:** A series of three or more pots linked together by lines, surface lines, and buoys being placed at intervals, or at the first and last pot.

**Trophic level:** The position of a species in a food chain, indicating its level of energy transfer in the ecosystem.

**Turbidity:** A measurement of the extent to which light passing through water is reduced due to suspended materials; relative water clarity.

**Turtle excluder device (TED):** An adaptation to a commercial shrimp net that permits caught sea turtles to escape.

**Up and down lines:** The line that connects the floatline and leadline at the end of each net panel.

**Useful life:** Under typical circumstances, the length of time a piece of gear can be used before replacement is necessary.

**Vessel Monitoring System (VMS):** Wireless information system that automatically reports fishing vessel position and activity to NMFS.

**Water column:** The open ocean environment that lies between the surface and the sea floor.

**Weak link:** A breakable component of gear that will part when subject to a certain tension load.

**Wet storage:** Leaving gear in the water for extended periods of time. ALWTRP regulations prohibit wet storage (i.e., require that lobster traps and anchored gillnet gear must be hauled out of the water at least once every 30 days).

**Zero mortality rate goal:** The requirement for commercial fisheries to reduce incidental mortality and serious injury of marine mammals to insignificant levels approaching a zero mortality and serious injury rate, as identified in the MMPA. An insignificance threshold has been established as 10 percent of the Potential Biological Removal (PBR) of a stock of marine mammals (See 69 FR 43338 for further details).

**Zooplankton:** *See Phytoplankton.* Small, often microscopic animals that drift in currents. They feed on detritus, phytoplankton, and other zooplankton. They are preyed upon by fish, shellfish, whales, and other zooplankton.

## 15.2 Acronyms

<b>ALWTRP</b>	Atlantic Large Whale Take Reduction Plan
<b>ALWTRT</b>	Atlantic Large Whale Take Reduction Team
<b>AOCTRP</b>	Atlantic Offshore Cetacean Take Reduction Plan
<b>ASMFC</b>	Atlantic States Marine Fisheries Commission
<b>ATOC</b>	Acoustic Thermometry of Ocean Climate
<b>BDTRP</b>	Bottlenose Dolphin Take Reduction Plan
<b>CC</b>	Cape Cod
<b>CEA</b>	Cumulative Effects Analysis
<b>CEQ</b>	Council on Environmental Quality
<b>CETAP</b>	Cetacean and Turtle Assessment Program
<b>CFR</b>	Code of Federal Regulations
<b>CHA</b>	Critical Habitat Area
<b>COLREGS</b>	Demarcation Line for the International Regulations for Preventing Collisions at Sea, 1972
<b>CWA</b>	Clean Water Act
<b>CZMA</b>	Coastal Zone Management Act
<b>DAM</b>	Dynamic Area Management
<b>DAS</b>	Days at Sea
<b>DDT</b>	Dichloro Diphenyl Trichloroethane
<b>DEIS</b>	Draft Environmental Impact Statement
<b>DHRA</b>	Dedicated Habitat Research Areas
<b>DMR</b>	(Maine) Department of Marine Resources
<b>DPS</b>	Distinct Population Segment
<b>DSEIS</b>	Draft Supplemental Environmental Impact Statement
<b>EEZ</b>	Exclusive Economic Zone
<b>EFH</b>	Essential Fish Habitat
<b>EIS</b>	Environmental Impact Statement
<b>EO</b>	Executive Order
<b>EPA</b>	Environmental Protection Agency
<b>ESA</b>	Endangered Species Act of 1973
<b>EWS</b>	Early Warning System
<b>F</b>	fishing mortality
<b>FA</b>	fathoms
<b>FEIS</b>	Final Environmental Impact Statement
<b>FMP</b>	Fishery Management Plan
<b>FR</b>	Federal Register
<b>FRFA</b>	Final Regulatory Flexibility Analysis
<b>FSEIS</b>	Final Supplemental Environmental Impact Statement
<b>FWS</b>	Fish and Wildlife Service
<b>FY</b>	Fishing Year
<b>GB</b>	Georges Bank
<b>GBS</b>	Georges Bank and South
<b>GMFMC</b>	Gulf of Mexico Fishery Management Council
<b>GOM</b>	Gulf of Maine

<b>GRT</b>	gross register tons
<b>HAB</b>	Harmful Algal Blooms
<b>HAPC</b>	Habitat Areas of Particular Concern
<b>HCH</b>	Hexachlorocyclohexane
<b>HMS</b>	Highly Migratory Species
<b>HPTRP</b>	Harbor Porpoise Take Reduction Plan
<b>ICES</b>	International Council for the Exploration of the Sea
<b>IMO</b>	International Maritime Organization
<b>IRFA</b>	Initial Regulatory Flexibility Analysis
<b>ISFMP</b>	Interstate Fishery Management Plan
<b>ITQ</b>	individual transferable quota system
<b>ITS</b>	Incidental Take Statement
<b>IUCN</b>	International World Conservation Union
<b>IWC</b>	International Whaling Commission
<b>LCMA</b>	Lobster Conservation Management Area
<b>LCMT</b>	Lobster Conservation Management Teams
<b>LCS</b>	Large Coastal Sharks
<b>LIS</b>	Long Island Sound
<b>LMA</b>	Lobster Management Area
<b>LOF</b>	List of Fisheries
<b>MAFMC</b>	Mid-Atlantic Fishery Management Council
<b>MBDS</b>	Massachusetts Bay Disposal Site
<b>MCZM</b>	Massachusetts Coastal Zone Management
<b>MMC</b>	Monkfish Monitoring Committee
<b>MMPA</b>	Marine Mammal Protection Act
<b>MMS</b>	Minerals Management Service
<b>MPRSA</b>	Marine Protection, Research, and Sanctuaries Act
<b>MSA</b>	Magnuson-Stevens Act of 1976
<b>MSR</b>	Mandatory Ship Reporting
<b>MSY</b>	maximum sustainable yield
<b>MT</b>	metric tons
<b>NATO</b>	North Atlantic Treaty Organisation
<b>NEFMC</b>	New England Fishery Management Council
<b>NEFSC</b>	Northeast Fisheries Science Center
<b>NEOP</b>	Northeast Fisheries Observer Program
<b>NEPA</b>	National Environmental Policy Act of 1969
<b>NERO</b>	(NMFS) Northeast Regional Office
<b>NFMA</b>	Northern Fishery Management Area
<b>NGO</b>	Non-Governmental Organization
<b>NMFS</b>	National Marine Fisheries Service
<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>NRC</b>	National Research Council
<b>NRDC</b>	Natural Resource Defense Council
<b>OCS</b>	Outer Continental Shelf
<b>OPA</b>	Oil Pollution Act
<b>OSP</b>	Optimum Sustainable Population

<b>OTP</b>	Other Trap/Pot
<b>OY</b>	Optimum Yield
<b>PBB</b>	Polybrominated Biphenyls
<b>PBDE</b>	Polybrominated diphenyl ethers
<b>PBR</b>	Potential Biological Removal
<b>PCB</b>	Polychlorinated Biphenyl
<b>PCDF</b>	Polychlorinated Dibenzo Furan
<b>PCN</b>	Polychlorinated Napthalenes
<b>PPRFFAs</b>	Past, Present, and Reasonably Foreseeable Future Actions
<b>RFA</b>	Regulatory Flexibility Act
<b>RFMC</b>	Regional Fishery Management Councils
<b>RIR</b>	Regulatory Impact Review
<b>SAFE</b>	Stock Assessment and Fishery Evaluation
<b>SAFMC</b>	South Atlantic Fishery Management Council
<b>SAM</b>	Seasonal Area Management
<b>SAR</b>	Stock Assessment Report
<b>SARC</b>	Stock Assessment Review Committee
<b>SAS</b>	Sighting Advisory System
<b>SCCLIS</b>	South of Cape Cod to Long Island Sound
<b>SCS</b>	Small Coastal Sharks
<b>SEFSC</b>	Southeast Fisheries Science Center
<b>SERO</b>	(NMFS) Southeast Regional Office
<b>SEUS</b>	Southeast United States
<b>SFMA</b>	Southern Fishery Management Area
<b>SIA</b>	Social Impact Assessment
<b>SL</b>	Standard Length
<b>SNE</b>	Southern New England
<b>SOFA</b>	Southern Offshore Fishing Association
<b>SPL</b>	Sound Pressure Level
<b>SPR</b>	Spawning Potential Ratio
<b>SSB</b>	spawning stock biomass
<b>STSSN</b>	Sea Turtle Stranding & Salvage Network
<b>SURTASS LFA</b>	Surveillance Towed Array Sensor System Low Frequency Active
<b>TAC</b>	total allowable catch
<b>TED</b>	Turtle Excluder Device
<b>TEWG</b>	Turtle Expert Working Group
<b>TL</b>	Total Length
<b>TRP</b>	Take Reduction Plan
<b>TSS</b>	Traffic Separation Scheme
<b>USCG</b>	United States Coast Guard
<b>VEC</b>	Valued Ecosystem Component
<b>VMS</b>	Vessel Monitoring System
<b>VTR</b>	Vessel Trip Report
<b>WNA</b>	Western North Atlantic
<b>WTP</b>	willingness to pay
<b>YONAH</b>	Years of the North Atlantic Humpback

### 15.3 Index

American lobster fishery, 1-1, 1-4, 2-6, 2-12, 2-40, 4-20, 4-21, 4-23, 4-91, 9-111, 10-4, 10-8, 11-4, 11-5, 11-17

Atlantic Large Whale Take Reduction Plan (ALWTRP), 1-1, 1-2, 1-4, 1-5, 1-6, 1-7, 1-8, 1-9, 1-10, 1-11, 1-12, 1-13, 1-14, 1-15, 1-16, 1-17, 1-18, 1-19, 1-20, 1-21, 1-22, 1-23, 1-26, 1-27, 1-29, 1-30, 1-32, 1-33, 2-1, 2-3, 2-5, 2-6, 2-7, 2-8, 2-9, 2-12, 2-13, 2-14, 2-16, 2-18, 2-19, 2-25, 2-27, 2-29, 2-39, 2-40, 2-41, 2-43, 2-44, 2A-1, 3-1, 3-2, 3-3, 3-5, 3-6, 3-8, 3-9, 3-10, 3-11, 3-12, 3-13, 3-15, 3-16, 3-17, 3-18, 3-19, 3-21, 3-24, 3-25, 3-28, 3-29, 3-36, 3-37, 3-38, 3-40, 3-41, 3-42, 3-43, 3-44, 3-45, 3-46, 3-47, 3-48, 3-49, 3-50, 3-51, 3-52, 3-53, 3-54, 3-55, 3-57, 3A-2, 3A-3, 3A-4, 3A-5, 3A-6, 3A-7, 3A-9, 3A-10, 3A-11, 3B-1, 3B-2, 3C-1, 3C-2, 4-1, 4-17, 4-19, 4-20, 4-21, 4-26, 4-27, 4-28, 4-29, 4-30, 4-31, 4-32, 4-33, 4-34, 4-37, 4-39, 4-41, 4-42, 4-44, 4-45, 4-46, 4-47, 4-48, 4-49, 4-50, 4-51, 4-52, 4-53, 4-54, 4-55, 4-56, 4-57, 4-59, 4-60, 4-62, 4-66, 4-68, 4-70, 4-71, 4-72, 4-73, 4-74, 4-78, 4-79, 4-84, 4-91, 4-95, 4A-5, 5-1, 5-2, 5-3, 5-4, 5-5, 5-6, 5-7, 5-8, 5-9, 5-10, 5-11, 5-16, 5-21, 5-22, 5-23, 5-25, 5-27, 5-30, 5-33, 5-36, 5-37, 5-38, 5-39, 5-40, 5-41, 5-42, 5-45, 5-46, 5-47, 5-48, 5-49, 5-50, 5-52, 5-54, 5-55, 5-57, 5-58, 5-59, 5-60, 5-61, 5-62, 5-63, 5-64, 5-65, 5-66, 5-68, 5-69, 5-70, 5-72, 5-74, 5-76, 5-78, 5-79, 5-80, 5-81, 5-82, 5-83, 5-84, 5-85, 5-86, 5-87, 5-88, 5-89, 5-90, 6-1, 6-2, 6-3, 6-4, 6-5, 6-6, 6-7, 6-8, 6-9, 6-10, 6-11, 6-12, 6-15, 6-16, 6-17, 6-18, 6-20, 6-21, 6-22, 6-24, 6-25, 6-26, 6-27, 6-28, 6-29, 6-30, 6-31, 6-32, 6-34, 6-35, 6-36, 6-37, 6-38, 6-39, 6A-2, 6A-9, 6B-2, 6B-3, 6B-4, 6B-5, 6B-6, 6B-7, 6B-8, 6B-9, 6B-10, 6D-2, 6D-5, 6G-1, 6G-3, 6G-4, 6G-5, 6G-6, 6G-7, 6G-9, 6H-1, 6H-2, 6H-3, 6J-2, 6J-3, 6J-5, 6J-7, 7-1, 7-2, 7-3, 7-4, 7-5, 7-6, 7-7, 7-8, 7-9, 7-10, 7-16, 7-17, 7-18, 7-19, 7-22, 7-23, 7-24, 7-25, 7-26, 7-28, 7-29, 7-32, 7-33, 7A-2, 7A-3, 7A-4, 8-1, 8-2, 8-4, 8-5, 8-6, 8-7, 8-8, 8-9, 8-10, 8-11, 9-1, 9-2, 9-3, 9-4, 9-11, 9-19, 9-27, 9-30, 9-32, 9-34, 9-35, 9-37, 9-39, 9-42, 9-43, 9-48, 9-58, 9-59, 9-60, 9-62, 9-67, 9-72, 9-75, 9-77, 9-78, 9-81, 9-82, 9-84, 9-85, 9-90, 9-91, 9-93, 9-95, 9-103, 9-110, 9-122, 9-134, 9-135, 9-137, 9-138, 9-139, 9-140, 9-141, 9-142, 9-143, 9-144, 9-145, 9-146, 9-147, 10-1, 10-2, 10-3, 10-4, 10-7, 10-8, 10-9, 10-10, 10-11, 10-13, 10-14, 10-15, 10-17, 10-18, 10-19, 10-21, 10-22, 10-23, 10-24, 10-25, 10-26, 10-27, 10-29, 10-30, 10-31, 10-32, 10-33, 10-34, 10-35, 10-36, 10-37, 10-38, 10-39, 10-40, 11-1, 11-3, 11-4, 11-5, 11-6, 11-7, 11-8, 11-9, 11-10, 11-12, 11-13, 11-14, 11-16, 11-17, 11-18, 11-19, 11-20, 11-22, 11-27, 12-1, 12-2, 12-3, 12-4, 12-5, 12-6, 12-7

Atlantic Large Whale Take Reduction Team (ALWTRT), 1-4, 1-6, 1-13, 1-30, 2-3, 2-20, 2-41, 2-43, 3-2, 3-37, 3-54, 3A-7, 3A-9, 4-43, 5-25, 10-2, 10-9, 11-2, 11-3, 11-5, 11-15, 11-17

Atlantic States Marine Fisheries Commission (ASMFC), 4-19, 4-20, 4-21, 4-32, 4-35, 4-40, 4-53, 4-99, 6-21, 6-24, 9-62, 9-63, 9-65, 9-66, 9-77, 9-85, 9-86, 9-87, 9-94, 9-95, 9-98, 9-111, 9-126, 9-133, 9-149, 9-150, 9-156, 9-157

Bottlenose Dolphin Take Reduction Plan (BDTRP), 2-7, 4-69, 9-59, 9-81, 9-140, 9-142, 9-144, 10-8, 10-33, 10-36, 10-39

Bottlenose Dolphin Take Reduction Team (BDTRT), 4-69, 4-103, 4-109, 9-160

Biological opinion, 2-4, 2-5, 2-6, 4-110, 5-92, 9-17, 9-28, 9-57, 9-159, 9-160, 10-3, 11-3, 11-4, 12-2

Black sea bass, 1-6, 1-9, 2-40, 2-41, 3-6, 3-10, 3-44, 3-45, 3-53, 4-17, 4-40, 4-41, 4-42, 4-43, 4-44, 4-45, 4-50, 4-108, 4-110, 4-114, 5-70, 5-92, 6-3, 6-23, 6-37, 6A-2, 6A-6, 6A-7, 6A-8, 6D-4, 6E-2, 6G-5, 6H-2, 7-13, 7-14, 7-16, 7-17, 7-18, 7-22, 9-2, 9-85, 9-86, 9-87

9-88, 9-89, 9-90, 9-94, 9-99, 9-103, 9-108, 9-110, 9-126, 9-127, 9-128, 9-129, 9-130, 9-135, 9-142, 9-145, 9-149, 9-156, 9-157, 9-158, 9A-6, 9A-7, 10-4, 10-10, 10-14, 10-36, 10-37, 10-40, 11-5, 11-6, 11-9, 11-22, 11-24, 11-26, 12-2

Coastal migratory pelagic species, 4-17, 4-37, 4-38, 4-39, 4-88, 4-104, 4-114, 9-82, 9-84, 9-98, 9-108, 9-109, 9-110, 9-124, 9-125, 9-135, 9-142, 9-144, 10-36, 10-39

Coastal Zone Management Act (CZMA), 9-20, 9-21, 9-30, 9-105, 9-110, 9-142, 10-31, 10-35, 12-3

Conch, 1-6, 1-9, 2-28, 3-6, 3-10, 3-44, 3-45, 4-17, 4-43, 4-47, 4-52, 4-54, 4-55, 4-56, 4A-2, 6-3, 6-37, 6A-6, 6A-8, 6D-4, 6E-2, 6G-5, 6G-6, 6H-2, 7-13, 7-14, 9-2, 9-53, 9-97, 9-99, 9-110, 9-135, 9-142, 9-145, 10-10, 10-14, 10-36, 10-40, 11-6, 11-8, 11-24, 11-25

Critical Habitat, 2-3, 2-4, 2-5, 2-6, 2-19, 3-18, 3-33, 3-52, 3-57, 3A-4, 4-2, 5-9, 5-42, 6B-8, 9-12, 9-17, 9-23, 9-24, 9-81, 10-3, 11-3, 12-2, 12-7

Critical Habitat Area (CHA), 3-39, 3-48, 3-52, 9-3, 9-23

Directed shark gillnet, 4-34, 4-37, 4-100, 4-103, 6-18, 9-77, 9-122, 9-123, 9-151

Draft Environmental Impact Statement (DEIS), 1-6, 1-7, 1-12, 1-15, 1-16, 1-19, 1-25, 1-26, 1-28, 1-29, 1-33, 3-1, 3-2, 3-4, 3-9, 3-10, 3-19, 3-28, 3-31, 3-56, 3A-2, 3A-3, 3A-4, 3A-6, 3A-7, 3A-9, 5-4, 5-6, 5-8, 5-10, 5-12, 5-14, 5-16, 5-17, 5-21, 5-25, 5-32, 5-33, 5-36, 5-45, 5-46, 5-48, 5-58, 5-60, 5-61, 5-67, 5-68, 5-76, 5-77, 6-15, 6-16, 6-25, 6-27, 6-28, 6-30, 6-31, 6-32, 6-34, 6-35, 6-36, 6-37, 6-38, 6B-3, 6B-5, 6B-7, 6B-9, 6F-3, 6F-5, 6G-3, 6G-6, 6G-9, 6I-1, 6I-2, 6J-3, 6J-4, 6J-6, 6J-7, 7-31, 8-4, 8-5, 8-7, 8-13, 8-14, 8-15, 9-136, 9-139, 9-140, 9-141, 9-142, 9-145, 10-4, 10-12, 10-17, 10-23, 10-28, 10-32, 10-33, 10-35, 10-36, 10-40, 10-41, 11-12, 11-13, 11-15, 11-16

Dynamic Area Management (DAM), 1-4, 1-5, 1-6, 1-7, 1-8, 1-9, 1-10, 1-14, 1-16, 1-22, 1-25, 1-28, 1-30, 2-5, 2-6, 2-7, 2-13, 2-25, 2-26, 2-27, 2-39, 2-44, 3-5, 3-6, 3-7, 3-10, 3-25, 3-40, 3-41, 3-42, 3-43, 3-44, 3-45, 3-46, 3-47, 3-48, 3-49, 3-50, 3-51, 3-52, 3-53, 3-56, 5-6, 5-19, 5-25, 5-39, 5-40, 5-49, 5-50, 5-51, 5-56, 5-58, 5-62, 5-63, 5-64, 5-83, 5-84, 6-9, 6B-5, 7-25, 7-26, 7-31, 8-2, 8-4, 8-11, 8-13, 10-4, 10-9, 10-10, 10-11, 10-13, 10-14, 10-15, 10-27, 10-29, 11-4, 11-5, 11-6, 11-7, 11-8, 11-9, 11-10

Endangered, 1-1, 1-2, 1-3, 1-26, 2-2, 2-3, 2-5, 2-19, 3A-2, 3A-4, 3A-7, 3A-9, 4-1, 4-2, 4-9, 4-10, 4-12, 4-14, 4-15, 4-57, 4-58, 4-59, 4-60, 4-77, 4-79, 4-80, 4-81, 4-83, 4-101, 4-111, 4-112, 4-116, 5-1, 5-2, 5-47, 5-48, 5-49, 5-50, 5-52, 5-53, 5-54, 5-68, 5-76, 5-77, 5-92, 6A-2, 7-26, 7-33, 8-14, 9-2, 9-3, 9-5, 9-11, 9-17, 9-24, 9-28, 9-32, 9-33, 9-38, 9-48, 9-50, 9-57, 9-88, 9-90, 9-95, 9-139, 9-140, 9-151, 9-155, 9-161, 9-163, 9-164, 9A-7, 10-2, 10-3, 10-4, 10-5, 10-18, 10-21, 10-30, 10-32, 10-33, 10-34, 10-37, 10-44, 11-2, 11-3, 11-4, 11-13, 12-1

Endangered Species Act (ESA), 1-2, 1-28, 2-1, 2-2, 2-3, 2-4, 2-5, 2-6, 2-19, 2-27, 2-32, 2-40, 3-2, 4-2, 4-9, 4-10, 4-13, 4-14, 4-15, 4-29, 4-56, 4-57, 4-59, 4-65, 4-66, 4-78, 4-79, 4-80, 4-112, 5-2, 5-68, 5-92, 9-2, 9-3, 9-14, 9-15, 9-17, 9-24, 9-32, 9-48, 9-50, 9-57, 9-62, 9-159, 9-160, 10-1, 10-2, 10-3, 10-4, 10-5, 10-30, 11-1, 11-2, 11-3, 11-4, 12-1, 12-2, 12-3

Environmental Protection Agency (EPA), 9-17, 9-20, 9-21, 9-27, 12-7

Essential Fish Habitat (EFH), 1-15, 4-35, 4-84, 4-85, 4-87, 4-89, 4-95, 4-96, 4-99, 4-109, 4-110, 4-111, 4-114, 5-1, 5-2, 5-61, 5-62, 5-85, 5-86, 5-89, 8-2, 9-3, 9-74, 9-83, 9-99, 9-100, 9-101, 9-103, 9-105, 9-106, 9-107, 9-108, 9-109, 9-110, 9-141, 9-147, 10-35, 12-1

Final Regulatory Flexibility Analysis (FRFA), 1-33, 11-1, 12-6

Groundfish, 4-25, 4-26, 4-27, 4-28, 4-65, 4-72, 4-75, 4-109, 6A-2, 9-35, 9-36, 9-41, 9-45, 9-67, 9-68, 9-69, 9-70, 9-71, 9-72, 9-75, 9-76, 9-91, 9-94, 9-101, 9-102, 9-107, 9-113, 9-114,

9-115, 9-117, 9-118, 9-119, 9-120, 9-130, 9-137, 10-34, 12-7

Hagfish, 1-6, 1-9, 2-28, 3-6, 3-10, 3-45, 3-46, 4-17, 4-42, 4-45, 4-46, 4-47, 4-51, 4-53, 4-55, 4-109, 4A-2, 6-13, 6-23, 6A-6, 6A-7, 6A-8, 6D-4, 6E-2, 6H-2, 7-13, 7-16, 7-18, 9-2, 9-90, 9-91, 9-99, 9-103, 9-110, 9-135, 9-142, 9-145, 10-10, 10-14, 10-36, 10-37 10-40, 11-6, 11-9, 11-22, 11-24

Harbor Porpoise Take Reduction Plan (HPTRP), 2-7, 4-29, 4-65, 4-66, 9-36, 9-59, 9-72, 9-88, 9-90, 9-95, 9-99, 9-135, 9-140, 9-142, 9-144, 9-145, 10-8, 10-36, 10-37, 10-39, 10-40

Highly Migratory Species (HMS), 4-35, 4-36, 4-37, 4-87, 4-110, 5-14, 5-15, 5-46, 5-77, 5-92, 6-19, 6-39, 6F-5, 6F-6, 9-9, 9-10, 9-35, 9-37, 9-40, 9-41, 9-42, 9-43, 9-44, 9-57, 9-59, 9-60, 9-61, 9-78, 9-79, 9-80, 9-81, 9-140, 9-159, 9-160, 9A-7, 10-33, 12-2

Incidental take, 1-4, 2-3, 4-65, 4-74, 9-10, 9-36, 9-37, 9-44, 9-45, 9-48, 9-49, 9-51, 9-57, 9-58, 9-59, 9-67, 9-72, 9-75, 9-77, 9-81, 9-84, 9-88, 9-90, 9-93, 9-95, 9-139, 9-140, 9A-7, 10-2, 10-9, 10-32, 10-33 11-2

Initial Regulatory Flexibility Analysis (IRFA), 11-1, 11-16

Jonah crab, 1-6, 1-9, 3-6, 3-10, 3-46, 3-47, 4-17, 4-52, 4-53, 4-54, 4-93, 4-94, 4-95, 4-110, 4A-2, 5-91, 6H-3, 9-2, 9-95, 9-96, 9-99, 9-103, 9-103, 9-135, 9-142, 9-145, 9A-7, 10-10, 10-14, 10-36, 10-40, 11-6, 11-9, 11-17

List of Fisheries (LOF), 1-12, 2-7, 2-8, 2-12, 3-2, 3-9, 3-10, 3-55, 3-57, 4-56, 4-67, 5-22, 6D-5, 9-37, 9-48, 9-59, 9-133, 10-7, 10-8, 10-17, 11-12

Magnuson-Stevens Fishery and Conservation Act (Magnuson-Stevens Act or MSA), 2-19, 4-21, 4-29, 4-32, 4-47, 4-84, 4-110, 5-87, 7-3, 9-4, 9-51, 9-57, 9-62, 9-69, 9-74, 9-75, 9-99, 9-101, 9-107, 9-110, 9-159, 12-1

Marine Mammal Commission (MMC), 4-103, 4-111, 4-113, 9-26, 9-153, 9-161

Monkfish Monitoring Committee (MMC), 9-74, 9-75

Marine Mammal Protection Act (MMPA), 1-2, 1-4, 1-28, 2-1, 2-2, 2-3, 2-7, 2-19, 2-27, 2-40, 3-2, 3-57, 4-6, 4-10, 4-14, 4-15, 4-56, 4-66, 4-67, 4-69, 4-74, 5-2, 5-68, 7-1, 9-2, 9-3, 9-4, 9-24, 9-25, 9-32, 9-35, 9-37, 9-45, 9-59, 9-62, 9-159, 10-1, 10-2, 10-3, 10-4, 10-7, 10-9, 10-30, 11-1, 11-2, 11-3, 12-3, 12-6

Maximum Sustainable Yield (MSY), 9-80, 9-82, 9-84, 9-92, 9-123

Mid-Atlantic Fishery Management Council (MAFMC), 4-29, 4-32, 4-35, 4-38, 4-40, 4-50, 4-86, 4-108, 5-34, 9-62, 9-75, 9-76, 9-77, 9-83, 9-84, 9-85, 9-94, 9-100, 9-108, 9-111, 9-118, 9-121, 9-126, 9-127, 9-133, 9-156, 9-157, 9-158, 9-160, 11-16

Monkfish, 2-5, 2-6, 2-40, 4-17, 4-29, 4-30, 4-31, 4-108, 5-92, 7-8, 9-2, 9-50, 9-51, 9-72, 9-73, 9-74, 9-75, 9-98, 9-103, 9-106, 9-107, 9-110, 9-118, 9-119, 9-120, 9-135, 9-142, 9-144, 9-157, 9-158, 9-159, 9A-6, 9A-7, 10-3, 10-4, 10-36, 10-37, 10-39, 11-3, 11-4, 12-2

National Environmental Policy Act (NEPA), 4-1, 5-1, 7-1, 9-1, 9-14, 9-24, 9-58, 9-112, 9-151, 10-30, 12-1, 12-4, 12-7

**National Marine Fisheries Service (NMFS)**, 1-1, 1-2, 1-4, 1-5, 1-7, 1-13, 1-26, 1-27, 1-28, 1-29, 1-30, 1-31, 1-32, 1-33, 1-34, 2-1, 2-2, 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, 2-15, 2-17, 2-18, 2-19, 2-25, 2-26, 2-27, 2-28, 2-29, 2-30, 2-32, 2-34, 2-40, 2-41, 2-42, 2-43, 3-1, 3-2, 3-3, 3-4, 3-10, 3-13, 3-28, 3-31, 3-39, 3-56, 3-57, 3A-2, 3A-3, 3A-4, 3A-5, 3A-6, 3A-7, 3A-8, 3A-9, 3A-10, 3A-11, 3D-2, 4-1, 4-2, 4-4, 4-5, 4-6, 4-9, 4-13, 4-14, 4-17, 4-18, 4-19, 4-21, 4-23, 4-24, 4-27, 4-28, 4-29, 4-30, 4-31, 4-33, 4-34, 4-36, 4-37, 4-38, 4-39, 4-40, 4-41, 4-42, 4-44, 4-45, 4-46, 4-47, 4-48, 4-49, 4-50, 4-51, 4-52, 4-53, 4-54, 4-55, 4-56, 4-58, 4-60, 4-61, 4-62, 4-63, 4-65, 4-66, 4-68, 4-69, 4-71, 4-72, 4-73, 4-74, 4-75, 4-76, 4-77, 4-79, 4-80, 4-81, 4-82, 4-83, 4-84, 4-85, 4-87, 4-96, 4-97, 4-

98, 4-100, 4-102, 4-103, 4-104, 4-107, 4-109, 4-110, 4-111, 4-112, 4-115, 4A-5, 4B-5, 5-1, 5-2, 5-14, 5-17, 5-19, 5-20, 5-21, 5-24, 5-25, 5-26, 5-27, 5-30, 5-31, 5-32, 5-33, 5-34, 5-36, 5-37, 5-40, 5-41, 5-42, 5-44, 5-45, 5-46, 5-47, 5-48, 5-49, 5-52, 5-53, 5-54, 5-68, 5-69, 5-70, 5-71, 5-74, 5-75, 5-76, 5-77, 5-78, 5-79, 5-80, 5-82, 5-83, 5-87, 5-90, 5-91, 5-92, 6-3, 6-7, 6-9, 6-10, 6-12, 6-13, 6-14, 6-18, 6-19, 6-20, 6-21, 6-23, 6-24, 6-26, 6-29, 6-39, 6A-2, 6A-3, 6A-5, 6A-8, 6A-11, 6C-2, 6C-3, 6C-4, 6D-3, 6D-5, 6E-2, 6F-5, 6G-4, 6G-6, 6G-9, 6I-2, 6J-3, 7-3, 7-10, 7-16, 7-20, 7-21, 7-22, 7-27, 7-33, 7A-2, 7A-3, 7A-4, 8-14, 8-15, 9-6, 9-10, 9-11, 9-12, 9-13, 9-14, 9-15, 9-17, 9-22, 9-24, 9-25, 9-26, 9-30, 9-31, 9-32, 9-33, 9-35, 9-36, 9-37, 9-38, 9-39, 9-40, 9-41, 9-42, 9-43, 9-44, 9-45, 9-46, 9-47, 9-48, 9-49, 9-50, 9-51, 9-52, 9-53, 9-54, 9-55, 9-56, 9-57, 9-58, 9-59, 9-60, 9-61, 9-65, 9-67, 9-68, 9-69, 9-70, 9-71, 9-72, 9-73, 9-74, 9-75, 9-76, 9-78, 9-79, 9-80, 9-81, 9-85, 9-86, 9-87, 9-90, 9-92, 9-98, 9-99, 9-100, 9-105, 9-106, 9-107, 9-108, 9-111, 9-112, 9-114, 9-119, 9-120, 9-122, 9-124, 9-125, 9-126, 9-127, 9-128, 9-130, 9-134, 9-140, 9-141, 9-149, 9-150, 9-151, 9-153, 9-154, 9-155, 9-156, 9-157, 9-158, 9-159, 9-160, 9-161, 9-162, 9-163, 9-164, 9-165, 9A-5, 9A-7, 10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 10-7, 10-8, 10-9, 10-10, 10-12, 10-18, 10-20, 10-31, 10-35, 10-41, 10-42, 10-43, 11-1, 11-2, 11-3, 11-4, 11-5, 11-6, 11-13, 11-15, 11-16, 11-17, 11-19, 11-21, 12-1, 12-2, 12-3, 12-4, 12-5

New England Fishery Management Council (NEFMC), 4-25, 4-26, 4-28, 4-29, 4-32, 4-45, 4-46, 4-47, 4-48, 4-58, 4-85, 4-86, 4-108, 4-109, 4B-5, 4B-6, 5-92, 9-29, 9-62, 9-63, 9-68, 9-75, 9-76, 9-77, 9-90, 9-92, 9-100, 9-106, 9-107, 9-108, 9-110, 9-111, 9-113, 9-114, 9-115, 9-116, 9-117, 9-118, 9-127, 9-141, 9-156, 9-157, 9-158, 9-159, 9A-10

No action alternative (Alternative 1 (No Action)), 1-5, 1-12, 1-14, 1-18, 1-19, 1-24, 3-2, 3-3, 3-4, 3-9, 3-11, 3A-2, 5-2, 5-3, 5-4, 5-5, 5-8, 5-9, 5-10, 5-11, 5-12, 5-13, 5-14, 5-15, 5-25, 5-36, 5-41, 5-57, 5-62, 5-69, 5-73, 5-79, 5-84, 5-86, 5-88, 5-89, 6-27, 6B-3, 6B-4, 6B-7, 6B-8, 6B-9, 6B-10, 6F-3, 6F-4, 6F-5, 6F-6, 8-3, 8-6, 8-7, 9-4, 9-137, 9-146, 10-10, 10-17, 10-23, 10-24, 10-30, 10-31, 10-37, 11-6, 11-12, 11-14

Northeast Multispecies, 2-5, 2-40, 4-25, 4-26, 4-27, 4-28, 4-29, 4-64, 4-70, 4-71, 4-72, 4-73, 4-74, 4-75, 4-76, 4-77, 4-108, 4-109, 4B-1, 4B-2, 4B-6, 5-92, 9-39, 9-40, 9-41, 9-42, 9-43, 9-45, 9-46, 9-47, 9-67, 9-68, 9-69, 9-70, 9-72, 9-75, 9-91, 9-98, 9-106, 9-107, 9-110, 9-113, 9-114, 9-116, 9-117, 9-135, 9-142, 9-144, 9-157, 9-159, 9A-7, 9A-8, 9A-10, 10-3, 10-4, 10-8, 10-36, 10-39, 11-4, 12-2

Observer, 1-3, 1-11, 1-12, 1-27, 2-7, 2-9, 2-18, 2-37, 2-42, 3-8, 3-9, 3-12, 3-13, 3-18, 3-31, 3-32, 3-33, 3-51, 4-37, 4-68, 4-69, 4-70, 4-71, 4-72, 4-73, 4-74, 4-75, 4-76, 4-77, 4-78, 5-3, 5-10, 5-11, 5-14, 5-15, 5-38, 5-42, 5-43, 5-44, 5-45, 5-46, 5-47, 5-74, 5-75, 5-76, 5-77, 5-78, 6-3, 6-4, 6-19, 6A-2, 6A-3, 6A-9, 6A-11, 6A-12, 6A-14, 6B-9, 6B-10, 6F-5, 6F-6, 7-27, 9-28, 9-31, 9-36, 9-38, 9-39, 9-41, 9-43, 9-45, 9-46, 9-47, 9-51, 9-52, 9-53, 9-78, 9-81, 9-90, 9-106, 9A-8, 10-6, 10-7, 10-16, 10-17, 11-11, 11-12

Optimum Sustainable Population (OSP), 1-2, 2-2, 4-2, 4-6, 4-10, 4-77, 10-2, 10-5, 11-2, 12-3

Potential Biological Removal (PBR), 1-2, 2-2, 2-3, 2-7, 2-39, 2-40, 4-2, 4-6, 4-10, 4-14, 4-15, 4-16, 4-66, 4-68, 4-69, 4-70, 4-71, 4-72, 4-73, 4-74, 4-75, 4-76, 4-77, 4-111, 9-9, 9-39, 9-42, 9-43, 9-44, 9-45, 9-60, 9-61, 9-81, 9-160, 10-2, 10-5, 10-7, 10-8, 11-2

Preferred alternative (Alternative 6 Final (Preferred)), 1-1, 1-7, 1-12, 1-13, 1-14, 1-15, 1-16, 1-18, 1-19, 1-23, 1-24, 1-25, 1-26, 1-27, 3-1, 3-9, 3-19, 3-28, 3-31, 3-32, 3-34, 3-35, 3-38, 3A-2, 3A-6, 3A-7, 3A-9, 3A-10, 3A-11, 3A-12, 3C-1, 3C-2, 5-1, 5-3, 5-4, 5-5, 5-6, 5-7, 5-8, 5-9, 5-10, 5-11, 5-12, 5-13, 5-14, 5-15, 5-17, 5-18, 5-19, 5-24, 5-25, 5-26, 5-29, 5-30, 5-32, 5-33, 5-34, 5-36, 5-37, 5-38, 5-41, 5-43, 5-44, 5-45, 5-46, 5-47, 5-48, 5-49, 5-51, 5-58, 5-59, 5-61, 5-67, 5-71, 5-73, 5-74, 5-75, 5-76, 5-78, 5-80, 5-52, 5-83, 5-88,

6-6, 6-9, 6-15, 6-16, 6-25, 6-27, 6-28, 6-30, 6-31, 6-32, 6-33, 6-34, 6-35, 6-36, 6-37, 6-38, 6B-2, 6B-4, 6B-6, 6B-8, 6B-10, 6D-3, 6D-4, 6F-2, 6F-4, 6F-6, 6G-6, 6G-9, 6I-2, 6J-3, 6J-4, 6J-5, 6J-6, 6J-7, 7-3, 7-11, 7-12, 7-13, 7-15, 7-17, 7-18, 7-19, 7-28, 7-29, 7-30, 7-31, 7-32, 8-3, 8-4, 8-5, 8-6, 8-7, 8-12, 8-13, 8-14, 8-15, 9-138, 9-139, 9-140, 9-141, 9-142, 9-143, 9-144, 9-145, 9-146, 9-147, 9-148, 10-12, 10-17, 10-23, 10-24, 10-26, 10-28, 10-29, 10-32, 10-33, 10-34, 10-35, 10-36, 10-38, 10-39, 10-40, 10-41, 10-42, 11-1, 11-5, 11-6, 11-12, 11-13, 11-15, 11-16, 11-17, 11-19, 11-22, 11-23, 11-24, 11-26, 11-27, 12-1, 12-2, 12-3, 12-5

Public comment, 1-1, 1-28, 1-29-1-33, 3A-6, 3A-7, 3A-8, 4-65, 4-99, 6-10, 9-70, 9-80, 9-84, 11-1, 11-15, 12-3, 12-5

Reasonable and Prudent Alternatives (RPA), 2-4, 2-5, 4-52, 10-3, 10-4, 12-2

Red crab, 1-6, 1-9, 3-6, 3-10, 3-45, 3-57, 4-17, 4-47, 4-48, 4-49, 4-109, 4-113, 5-27, 5-50, 6A-7, 7-7, 7-13, 7-16, 9-2, 9-91, 9-92, 9-93, 9-99, 9-103, 9-107, 9-110, 9-130, 9-131, 9-132, 9-135, 9-142, 9-145, 9-162, 9A-7, 10-10, 10-14, 10-36, 10-40, 11-17, 11-22, 11-24

Regulatory Flexibility Act (RFA), 1-33, 11-1, 12-4, 12-6

Regulatory Impact Review (RIR), 1-33, 4-114, 7-26, 9-157, 10-1, 12-4, 12-6

Restricted Area, 1-5, 1-7, 1-8, 1-9, 1-10, 1-11, 1-14, 1-16, 1-27, 2-9, 2-14, 2-15, 2-16, 2-17, 2-18, 2-20, 2-21, 2-22, 2-26, 3-8, 3-10, 3-11, 3-12, 3-18, 3-21, 3-24, 3-28, 3-31, 3-32, 3-33, 3-41, 3-42, 3-45, 3-46, 3-47, 3-49, 3-51, 3-52, 3-56, 5-3, 5-4, 5-5, 5-6, 5-8, 5-9, 5-11, 5-16, 5-18, 5-23, 5-24, 5-27, 5-35, 5-38, 5-39, 5-40, 5-41, 5-42, 5-43, 5-44, 5-45, 5-46, 5-47, 5-49, 5-55, 5-56, 5-58, 5-62, 5-63, 5-64, 5-65, 5-66, 5-67, 5-71, 5-73, 5-74, 5-75, 5-76, 5-77, 5-78, 5-79, 5-80, 5-87, 5-88, 6-12, 6-18, 6A-10, 6A-11, 6B-2, 6B-3, 6B-4, 6B-5, 6B-7, 6B-8, 6B-10, 8-2, 8-4, 9-67, 9-72, 9-81, 9-108, 9-143, 10-11, 10-13, 10-14, 10-16, 10-38, 11-8, 11-9, 11-11, 11-13

Scoping, 1-26, 1-29, 1-33, 3-2, 3-39, 3-57, 5-25, 6-10, 8-13, 9-58, 10-40, 11-13, 11-15, 12-3

Scup, 1-6, 1-9, 2-40, 2-41, 3-6, 3-10, 3-44, 3-45, 4-17, 4-40, 4-49, 4-50, 4-51, 4-52, 4-108, 4-110, 4A-2, 4A-4, 5-92, 6A-6, 6A-7, 6A-8, 6D-4, 6E-2, 6G-5, 6G-6, 6H-2, 7-13, 7-14, 9-2, 9-85, 9-93, 9-94, 9-95, 9-99, 9-108, 9-110, 9-114, 9-127, 9-133, 9-134, 9-135, 9-142, 9-145, 9-149, 9-150, 9-156, 9-157, 9A-6, 9A-7, 10-4, 10-10, 10-14, 10-36, 10-40, 11-5, 11-6, 11-9, 11-24, 11-25, 12-2

Sea Turtle Stranding and Salvage Network (STSSN), 4-78, 4-81, 4-82, 5-70, 5-92, 9-53, 9-55, 9-158

Seasonal Area Management (SAM), 1-4, 1-5, 1-6, 1-7, 1-8, 1-9, 1-10, 1-11, 1-13, 1-14, 1-15, 1-16, 1-17, 1-18, 1-21, 1-23, 1-26, 1-28, 1-30, 2-5, 2-6, 2-7, 2-13, 2-15, 2-17, 2-19, 2-20, 2-21, 2-22, 2-23, 2-24, 2-25, 2-39, 3-4, 3-5, 3-6, 3-7, 3-8, 3-9, 3-10, 3-18, 3-21, 3-23, 3-24, 3-25, 3-33, 3-39, 3-40, 3-41, 3-42, 3-43, 3-45, 3-46, 3-47, 3-48, 3-49, 3-51, 3-52, 3-55, 3-56, 5-4, 5-5, 5-6, 5-7, 5-8, 5-9, 5-18, 5-19, 5-21, 5-23, 5-24, 5-25, 5-26, 5-29, 5-38, 5-39, 5-40, 5-41, 5-49, 5-50, 5-51, 5-56, 5-57, 5-58, 5-60, 5-61, 5-62, 5-63, 5-64, 5-65, 5-66, 5-67, 5-71, 5-78, 5-79, 5-83, 5-84, 5-88, 5-89, 5-91, 6-6, 6-7, 6-11, 6-12, 6-13, 6-14, 6-15, 6-16, 6-23, 6-28, 6-29, 6A-2, 6A-3, 6A-4, 6A-5, 6A-7, 6A-10, 6B-2, 6B-3, 6B-4, 6B-5, 6B-6, 6B-7, 6B-8, 6D-3, 6D-4, 6J-4, 6J-5, 6J-7, 7-11, 7-19, 7-22, 7-25, 7-29, 7-33, 8-2, 8-4, 8-5, 8-6, 8-9, 8-11, 8-14, 9-139, 9-140, 9-141, 9-143, 9-146, 9-147, 10-3, 10-4, 10-9, 10-10, 10-11, 10-13, 10-14, 10-15, 10-16, 10-22, 10-23, 10-26, 10-27, 10-32, 10-33, 10-35, 10-38, 10-41, 11-4, 11-5, 11-6, 11-7, 11-8, 11-9, 11-10, 11-11, 11-14, 11-15, 11-27

Section 7, 1-29, 2-3, 2-4, 2-5, 2-6, 4-52, 5-92, 9-14, 9-15, 9-159, 9-160, 9-163, 10-3, 11-3, 11-4,

12-1, 12-2

South Atlantic Fishery Management Council (SAFMC), 4-38, 4-40, 4-43, 4-87, 4-88, 4-104, 4-108, 4-114, 9-62, 9-83, 9-88, 9-89, 9-100, 9-108, 9-109, 9-110, 9-111, 9-128, 9-129, 9-141, 9-156, 9-157, 9-162, 10-35

Spiny dogfish, 2-5, 2-6, 2-40, 4-17, 4-32, 4-33, 4-34, 4-35, 4-36, 4-99, 9-2, 9-51, 9-75, 9-76, 9-77, 9-78, 9-98, 9-108, 9-110, 9-120, 9-121, 9-122, 9-135, 9-142, 9-144, 9-150, 9-157, 9A-6, 9A-7, 10-3, 10-4, 10-36, 10-39, 11-3, 11-4, 12-2

Stock assessment, 1-34, 2-2, 2-29, 2-32, 2-44, 4-13, 4-43, 4-69, 4-100, 4-105, 4-111, 4-114, 4-115, 5-68, 5-93, 6A-2, 9-3, 9-4, 9-57, 9-63, 9-64, 9-65, 9-66, 9-73, 9-74, 9-75, 9-77, 9-78, 9-79, 9-80, 9-83, 9-87, 9-89, 9-93, 9-95, 9-118, 9-122, 9-128, 9-152, 9-157, 9-158, 9-159, 9-163, 9-162, 9-164, 9A-5, 10-2, 10-44, 11-2

Stock Assessment and Fishery Evaluation (SAFE), 4-57, 9-75, 9-93, 9-118, 9-119, 9-157, 9-158, 9-159, 9-160

Stock Assessment Review Committee (SARC), 4-45, 9-158

Strategic stock, 1-2, 2-2, 2-3, 4-15, 4-66, 4-67, 5-2, 5-68, 9-35, 9-81, 10-2, 10-4, 10-30, 11-2

Threatened, 1-2, 2-2, 2-5, 4-10, 4-15, 4-57, 4-60, 4-65, 4-77, 4-80, 4-83, 4-112, 5-2, 5-68, 9-3, 9-28, 9-33, 9-38, 9-48, 9-50, 9-57, 9-67, 9-140, 9-155, 10-2, 10-3, 10-5, 10-30, 10-33, 11-2, 11-3, 12-1

Valued Ecosystem Component (VEC), 9-4, 9-139, 9-140, 9-141, 9-142, 9-143, 10-30, 10-32, 10-33, 10-34, 10-35, 10-36, 10-38

Whelk, 1-6, 1-9, 2-28, 3-6, 3-10, 3-44, 3-45, 4-17, 4-54, 4-55, 4-80, 4A-2, 5-70, 6-3, 6-37, 6A-6, 6A-7, 6A-8, 6D-4, 6E-2, 6H-2, 7-13, 7-14, 9-2, 9-53, 9-97, 9-99, 9-135, 9-142, 9-145, 9A-6, 10-10, 10-14, 10-36, 10-40, 11-6, 11-9, 11-24, 11-25

Year of the North Atlantic Humpback (YONAH), 4-10

Zero mortality rate goal, 2-3