

established seasons, in accordance with Federal, State, and local regulations. We prohibit target practice on the refuge (see §§ 27.42 and 27.43 of this chapter).

3. In areas posted and shown on maps as "No Entry—Sanctuary," we prohibit entry and upland game hunting at all times. In areas posted and shown on maps as "No Entry—Sanctuary October 1 to end of state duck hunting season," we allow upland game hunting beginning the day after the respective State duck hunting season until upland game season closure or March 15, whichever comes first, except we allow spring turkey hunting during State seasons. We describe these areas more fully in Condition A2.

4. In areas posted and shown on maps as "Area Closed" and "Area Closed—No Motors," we allow upland game hunting beginning the day after the respective State duck hunting season until upland game season closure or March 15, whichever comes first, except we allow spring turkey hunting during State seasons. We ask that you practice voluntary avoidance of these areas by any means or for any purpose from October 15 to the end of the respective State duck season. In areas also marked "Area Closed—No Motors," we prohibit the use of motors on watercraft from October 15 to the end of the respective State duck season. We describe these areas more fully in Condition A3.

5. In areas posted and shown on maps as "No Hunting Zone" or "No Hunting or Trapping Zone," we prohibit upland game hunting at all times. You must unload and encase firearms in these areas. We describe these areas more fully in Condition A4.

6. We prohibit hunting of upland game within 50 yards (45 m) of the Great River Trail at Thomson Prairie, within 150 yards (135 m) of the Great River Trail at Mesquaki Lake, and within 400 yards (360 m) of the Potter's Marsh Managed Hunt area, all in or near Pool 13, Illinois.

7. You may only use or possess approved nontoxic shot shells while in the field, including shot shells used for hunting wild turkey (see § 32.2(k)).

8. We prohibit the shining of a light to locate any animal on the refuge except at the point of kill for species specified in respective State night or artificial light hunting regulations (see § 27.73 of this chapter). You may use lights to find your way. We prohibit the distribution of bait or feed, the hunting over bait or feed, and the use or possession of any drug on any arrow for bow hunting (see § 32.2(g) and (h)). You must comply with all other hunt method regulations of the respective State on the refuge.

9. Conditions A6, A9, A10, and A12 through A17 apply.

C. *Big Game Hunting.* We allow hunting of big game on areas of the refuge designated by the refuge manager and shown on maps available at refuge offices in accordance with State regulations subject to the following conditions:

1. Conditions A1 and B2 apply.

2. In areas posted and shown on maps as "No Entry—Sanctuary," we prohibit entry and big game hunting at all times. In areas posted and shown on maps as "No Entry—Sanctuary October 1 to end of state duck hunting season," we allow big game hunting beginning the day after the respective State duck hunting season until big game season closure or March 15, whichever comes first. We describe these areas more fully in Condition A2.

3. In areas posted and shown on maps as "Area Closed" and "Area Closed—No Motors" we allow big game hunting beginning the day after the respective State duck hunting season until big game season closure or March 15, whichever comes first. We ask that you practice voluntary avoidance of these areas by any means or for any purpose from October 15 to the end of the respective State duck season. In areas also marked "Area Closed—No Motors," we prohibit the use of motors on watercraft from October 15 to the end of the respective State duck season. These areas are described more fully in Condition A3.

4. In areas posted and shown on maps as "No Hunting Zone" or "No Hunting or Trapping Zone," we prohibit big game hunting at all times. You must unload and encase firearms in these areas. We describe these areas more fully in Condition A4.

5. We prohibit hunting of big game within 50 yards (45 m) of the Great River Trail at Thomson Prairie, within 150 yards (135 m) of the Great River Trail at Mesquaki Lake, and within 400 yards (360 m) of the Potter's Marsh Managed Hunt area, all in or near Pool 13, Illinois.

6. Conditions A6, A9, A10, A12 through A17, and B7 apply.

D. *Sport Fishing.* We allow fishing on areas of the refuge designated by the refuge manager and shown on refuge maps available at refuge offices in accordance with State regulations subject to the following conditions:

1. In the Bertrom Island "No Entry—Sanctuary" area, Pool 11, Wisconsin we prohibit entry and fishing at all times.

2. In the Spring Lake "Area Closed" area, Pool 13, Illinois, we prohibit fishing from October 1 until the day

after the close of the State duck hunting season.

3. In areas posted and shown on maps as "Area Closed" and "Area Closed—No Motors," we allow fishing; however, we ask that you practice voluntary avoidance of these areas by any means or for any purpose from October 15 to the end of the respective State duck season. In areas also marked "Area Closed—No Motors," we prohibit the use of motors on watercraft from October 15 to the end of the respective State duck season. We describe these areas more fully in Condition A3.

4. On Mertes Slough, Pool 5, Wisconsin, we allow only hand-powered boats or boats with electric motors.

5. For the purpose of determining length limits, slot limits, and daily creel limits, the impounded areas of Spring Lake, Duckfoot Marsh, and Pleasant Creek in Pool 13, Illinois, are part of the Mississippi River site-specific State regulations.

6. Conditions A10, and A13 through A17 apply.

* * * * *

5. Amend § 32.69 Wisconsin by revising Upper Mississippi River National Wildlife and Fish Refuge to read as follows:

§ 32.69 Wisconsin.

* * * * *

Upper Mississippi River National Wildlife and Fish Refuge

Refer to § 32.42 Minnesota for regulations.

* * * * *

Dated: June 19, 2007.

David M. Verhey,

Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. E7-12514 Filed 6-27-07; 8:45 am]

BILLING CODE 4310-55-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Parts 223 and 224

[Docket No. 070613193-7194-01; I.D. 121903C]

Endangered and Threatened Wildlife and Plants; Finding on Whether to List Eastern Oyster as a Threatened or Endangered Species

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of a listing determination and availability of a status review document.

SUMMARY: The eastern oyster biological review team (BRT) has prepared an Endangered Species Act (ESA) status review report for the eastern oyster (*Crassostrea virginica*) and submitted it to NMFS. After reviewing the best available scientific and commercial information, we (NMFS) have determined that listing the eastern oyster as threatened or endangered under the ESA is not warranted at this time.

DATES: This finding is effective on June 28, 2007.

ADDRESSES: The eastern oyster status review report and list of references are available by submitting a request to the Assistant Regional Administrator, Protected Resources Division, Northeast Region, NMFS, One Blackburn Drive, Gloucester, MA 01930. The status review report and other reference materials regarding this determination can also be obtained via the Internet at: http://www.nero.noaa.gov/prot_res/CandidateSpeciesProgram/index.html.

FOR FURTHER INFORMATION CONTACT: Kim Damon-Randall, NMFS, Northeast Region (978) 281-9300 x6535 or Marta Nammack, NMFS, Office of Protected Resources (301) 713-1401.

SUPPLEMENTARY INFORMATION:

Background

On January 11, 2005, we received a petition from Mr. Wolf-Dieter Busch (the petitioner), Ecosystem Initiatives Advisory Services, to list eastern oyster (*Crassostrea virginica*) as threatened or endangered under the ESA. After reviewing the information contained in the petition and that which was readily available to us, we determined that there was sufficient information to indicate that the petitioned action may be warranted. On May 18, 2005, we published a positive 90-day finding in the **Federal Register**, which initiated the status review process.

On October 19, 2005, we received a letter from the petitioner dated October 13, 2005, requesting the recall of the eastern oyster petition. In his letter, the petitioner indicated that his request to withdraw the petition was due to the public and industry's confusion over the petition and listing process. He noted the significant concerns of some that the species may be listed as endangered and thereby, create severe restrictions and regulations for this resource. He also expressed concern that, given the timeline of the review, NMFS may not have enough information to determine if

eastern oyster subspecies exist. He concluded that he hoped that we would continue with the review as he considers the status review report to be a comprehensive resource which will be of great value in focusing restoration activities for this resource.

We accepted this request and as a result, ceased the evaluation of the petition. However, a considerable amount of effort had been expended by the BRT at the point at which the withdrawal of the petition occurred. Also, the completed status review report is the most timely and comprehensive resource document for this species. As such, we determined that because the report is a useful tool in guiding future management decisions, the BRT would complete its report. We also decided to complete our evaluation of the status of the species under the ESA as stated in the **Federal Register** notice announcing the 90-day finding on the petition (70 FR 28510).

As part of the full evaluation of the status of the species under the ESA, we requested that the Center for Independent Experts provide three independent consultants to serve as peer reviewers. These reviewers were tasked with reading and reviewing the status review report and providing a written summary of their comments. Specifically, they were asked to address the following (at a minimum): (1) Are species and/or subspecies delineations supported by the information presented?; (2) Does the report include and cite the best scientific and commercial information available on the species and threats to it and its habitat?; (3) Are the scientific conclusions sound and derived logically from the results?; (4) Where available, are opposing scientific studies or theories acknowledged and discussed? The peer reviewers completed their task in October 2006 and specifically found that the status review report contained the best scientific and commercial information available.

Biology and Life History of the Eastern Oyster

The eastern oyster occurs naturally in a great diversity of habitats along the western Atlantic Ocean from the Canadian Maritime Provinces to the Gulf of Mexico, Panama, and the Caribbean Islands (Carlton and Mann, 1996; Abbott, 1974; MacKenzie, 1997a; Jenkins *et al.*, 1997; FAO, 1978). The eastern oyster has been transplanted outside of its natural range and now may be found in western Canada, western United States, western Mexico, Hawaii, Fiji, Tonga, Japan, Mauritius-

Indian Ocean, and possibly England (Ruesink *et al.*, 2005).

The eastern oyster is protandric, as individuals first mature as males then typically change to female later in life, and there is also evidence suggesting that the process is reversible later in life (Thompson *et al.*, 1996). Oysters may change sex in response to environmental, nutritional, and/or physiological stresses, or sex determination may be influenced by the sex and proximity of nearby oysters (Tranter, 1958, cited by Thompson *et al.*, 1996; Bahr and Hillman, 1967; Davis and Hillman, 1971; Ford *et al.*, 1990; Needler, 1932; Burkenroad, 1931; Smith, 1949; and Menzel, 1951, all cited by Thompson *et al.*, 1996). Estimates of fecundity range from 2 to 115 million eggs per female, depending on size and geographic location (Galtsoff, 1930, 1964; Davis and Chanley, 1956; Cox, 1988; Cox and Mann, 1992; all cited in Thompson *et al.*, 1996).

Spawning is initiated by a combination of factors including water temperature, salinity, and physiochemical interactions (Galtsoff, 1964; and Loosanoff, 1953, cited by Berrigan *et al.*, 1991; Hayes and Menzel, 1981; Hofstetter, 1977, 1983). Spawning is seasonal (summer) throughout the mid- to northern Atlantic portions of the species' range. In southern waters, spawning occurs in all but the coldest months (Berrigan *et al.*, 1991). Conditions generally required for spawning include water temperatures at or above 20 C and salinity higher than 10 parts per thousand (ppt).

After fertilization, oysters develop through several free-swimming larval stages before attaching to a hard substrate and becoming sessile. The mechanisms for larval dispersal and recruitment are still unclear (Epifanio, 1988). Larval dispersal is generally explained by "passive" transport induced by physical factors, by an "active" process involving larval swimming, or by a combination of both (Desksheniaks *et al.*, 1996). The first larval stage (trochophore) is formed 4 to 6 hours following fertilization and lasts approximately 1 to 2 days. The trochophore larva does not feed, but subsequent larval stages (veliger) are planktotrophic, feeding on small plants and animals (Kennedy, 1996). Veliger stages, lasting up to 2 months (Hopkins, 1931), include several morphological changes to the larvae resulting in fully developed larvae possessing a well-developed foot.

As oyster larvae become competent to settle they must locate a suitable substrate upon which to attach. Larvae may exhibit exploratory behavior in

locating a suitable substrate upon which to settle (Burke, 1983, as cited in Kennedy, 1996). Both environmental and internal cues are used in determining when and where veliger larvae will settle (Kennedy, 1996). Settlement is a behavioral response that can be repeated or reversed and is followed by metamorphosis, which results in morphological changes and is permanent (Kennedy, 1996). There is evidence that suggests metamorphosis is triggered by salinity and by chemicals given off by live oysters and bio-films on other suitable substrates (Hidu and Haskin, 1971; Keck *et al.*, 1971; Kennedy, 1996).

Temperature, salinity, and food availability greatly influence oyster growth, and, therefore, growth rates vary seasonally, with maximum growth occurring during the summer and fall. Eastern oysters have been reported to survive freezing temperatures in shallow-water habitats and after being exposed to temperatures in excess of 45° C in intertidal areas (Galtsoff, 1964; Shumway, 1996). However, exposures to temperatures above approximately 35° C will adversely affect pumping rate and thereby, feeding (Loosanoff, 1958; and Galtsoff, 1928, as cited by Shumway, 1996). Oysters can tolerate salinities from 0 to 42 ppt, although growth rates are affected by lower salinities (Quast *et al.*, 1988; Shumway, 1996).

Oysters are filter feeders, feeding primarily on phytoplankton and suspended detritus (Langdon and Newell, 1996). *Crassostrea virginica* are capable of adjusting feeding rates depending on the size, type, and composition of the available food source (Baldwin, 1995; Baldwin and Newell, 1995a, 1995b, as cited in Kennedy, 1996).

The eastern oyster plays an important ecological role in the environment in which it inhabits. Self sustaining oyster populations form reefs that: (1) contribute to trophic dynamics by promoting species diversity; (2) provide structural integrity that supports community stability, enhances habitat values, and affects water circulation and flow patterns; and (3) perform ecological services which improve water quality and recycle nutrients.

Abundance

Abundance of the eastern oyster is known to have varied or declined in many estuaries in which it was previously known to be abundant. In some estuaries, abundance has declined due to one or more of the stressors discussed below. Some populations have declined dramatically (e.g., the

Hudson-Raritan Estuary). However, even in these locations, with effort, oysters can be found. The eastern oyster can be found as isolated individuals or clusters even in unlikely urbanized places, such as the Hackensack River, Arthur Kill, Harlem River, East River and the Bronx River (Steimle, 2005). However, these isolated survivors may currently exist at the thinnest of margins even though habitat quality has measurably improved and is currently suitable for good growth, as evidenced by oyster culturist results in this estuary complex.

The persistence of oysters in isolated areas at low abundance for perhaps decades, is not uncommon. Some local populations are now too widely dispersed to support enough successful spawning-fertilization and recruitment for natural repopulation (Pers. Comm. Luckenbach, 2005). The low abundance situation of the Hudson-Raritan area may exist in other urbanized estuaries where oyster population surveys have not been done for decades. Some shellfish surveys were conducted without proper oyster sampling gear and focus because the oyster was not considered part of a useful or manageable fishery resource any more. Also, local management agencies may not want to publicize the existence of oysters in some areas to avoid potential public health consequences because of bacterially contaminated water.

According to the BRT, the notable decline of the oyster abundance distributions from estimated historic abundance distribution levels seems to be most prevalent in the more urbanized northeast, e.g., Chesapeake Bay, the Hudson-Raritan Estuary, southern Long Island NY, and some New England estuaries. However, most of the data to document this decline comes from fishery-dependent sources, which is somewhat controlled by socio-economic, not ecological, factors (MacKenzie, 1996). This information base may not present an accurate picture of the abundance and status of oyster populations in many areas. Based upon numerous southern Atlantic/Gulf Coast state reports, the oyster distribution abundances south of Chesapeake Bay seem relatively stable, despite occasional major disturbances, such as hurricanes (Marsh, 2004; Perret, 2005).

Consideration as a "Species" Under the ESA

Under the ESA, the term "species" refers to "a species, subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which

interbreeds when mature." Distinct population segments of the eastern oyster cannot be listed under the ESA because it is an invertebrate. The term "subspecies," while identified as a term in the ESA's definition of "species," is not itself defined in the ESA. As a matter of science, however, subspecies delineations may rely on discernable morphological, behavioral, genetic, or physiological differences.

Due to extreme morphological plasticity, *C. virginica* has not yet been examined with the goal of identifying morphological differences between populations. However, in 1951, Loosanoff and Nomejko recognized the existence of physiological races along the latitudinal range of *C. virginica*. Since that time, most physiological differences have been found to be related to differences in environmental conditions. Whether additional physiological or morphological studies would be informative is questionable, as any differences between Gulf and Atlantic populations are more likely to be due to local environmental conditions rather than genetic differences (Gaffney, 1996).

Populations of *C. virginica* were initially found to be homogenous in allozyme frequencies across a large portion of the species range. An early allozyme study by Buroker (1983) provided evidence of a uniform population from Cape Cod to Corpus Christi using 32 allozyme loci which exhibited estimated genetic similarities among populations of 99 percent. Several recent genetic studies have been undertaken to better understand the population structure of *C. virginica*, and these studies have found strong patterns of differentiation on the basis of different sequencing data. Studies indicate two separate populations, one within the Atlantic region and one within the Gulf of Mexico, with an intermediate zone between these populations found on the eastern coast of Florida in the general area of Cape Canaveral. *Crassostrea virginica* is not the only western Atlantic species with a notable genetic transition from the temperate Atlantic to subtropical Gulf regions. Similar genetic patterns of population subdivision between Atlantic and Gulf populations can be found in a wide variety of coastal and marine species (Avisé, 1992; 2000). Also, a genetically distinct population of *C. virginica* was found in the Laguna Madre area of Texas by different studies that have included samples from this general area (Groue and Lester, 1982; Buroker, 1983; Hedgecock and Okazaki, 1984; King *et al.*, 1994). Genetic differentiation of the Laguna Madre

eastern oyster population may be due to adaptation to hypersaline conditions (up to 35 ppt) created by low levels of precipitation and lack of river inflow, as well as selection or genetic drift due to isolation from oyster populations further north (King *et al.*, 1994).

Although the aforementioned studies indicate Atlantic/Gulf population structure, other studies have agreed with Buroker's conclusion of a panmictic population. MacDonald *et al.* (1996) found a lack of genetic structure among six anonymous nuclear DNA loci from oysters in Panacea, FL, and Charleston, SC. In 1998, Hare and Avise (1992) looked at oysters from Massachusetts to Louisiana and found no population structure at three nuclear loci.

Each peer reviewer was individually asked whether species/subspecies delineations existed for the eastern oyster as a matter of scientific fact. Two of the three felt that the existing information was not sufficient to definitively establish eastern oyster subspecies. The remaining reviewer felt that the available genetic information indicates that the Gulf and Atlantic populations of eastern oyster are "at a stage of incipient speciation and should probably be considered subspecies." The peer reviewers and the members of the BRT all agree that it is difficult to define and delineate subspecies under normal scientific definitions of the terms.

In summation, subspecies delineations often rely on discernable morphological, behavioral, or physiological differences. However, these differences are not readily apparent in an invertebrate species such as the eastern oyster. Thus, a subspecies delineation for the eastern oyster would have to rely predominantly on the available genetic data, which have provided mixed results. Because the data needed to support a subspecies delineation are inconclusive, we examined the listing potential for the eastern oyster both as a separate subspecies and as a single biological unit. Ultimately, we determined that in either case, the species/subspecies determination would not impact or alter the final listing determination. Accordingly, we note the genetic differences but do not make a subspecies delineation based on the present facts.

Species/Subspecies Status

The process for determining whether a species (as defined above) should be listed is based upon the best available scientific and commercial information. We must list a species if it is

endangered or threatened because of any of the following ESA section 4(a)(1) factors: (a) The present or threatened destruction, modification, or curtailment of its habitat or range; (b) overutilization for commercial, recreational, scientific, or educational purposes; (c) disease or predation; (d) inadequacy of existing regulatory mechanisms; and (e) other natural or manmade factors affecting the continued existence of the species. These factors are considered in the following sections.

The Present or Threatened Destruction, Modification, or Curtailment of its Habitat or Range

There are few data available regarding historic and current oyster reef acreage estimates, and available fisheries dependent and independent data are limited. In order to gather additional data to assess the status of the species, the BRT conducted a telephone survey of state resource managers and oyster experts. Respondents were asked to provide the following information for each estuary within their region/area: historic and current oyster acreage estimates; harvest rates and regulations; the sustainability of oyster populations with and without restoration; recruitment; and the primary stressors facing oyster populations. The survey indicated that the eastern oyster is widely distributed throughout its range and is currently present in all but one of the 71 estuaries represented. This wide distribution is beneficial in many ways in that it provides evidence of the species' resiliency and adaptability and makes the species less susceptible to extinction from a localized catastrophic event (e.g., a hurricane or oil spill). We, therefore, concluded that the one estuary without oysters, the upper Laguna Madre region, does not represent a large portion of the vast geographic range of the species/subspecies and is considered minor in terms of the biological significance to the species or hypothetical subspecies.

The BRT reported that the eastern oyster displays a wide range of survival strategies as it is both a colonizer and an ecosystem engineer and has high reproductive potential. The species' ability to adapt to a wide range of environmental conditions (e.g., tolerance for low dissolved oxygen and wide ranges in salinity and temperature) makes it resilient. The eastern oyster inhabits a naturally-variable environment, and evidence suggests that past local extirpations and colonizations have been common over geological time. *Crassostrea virginica* is broadly distributed in the western North

Atlantic, and its distribution has not changed as threats have increased over time. This is significant because range contraction is often used as an indicator of a problem in many widely distributed marine species. While separating the species into the two potential subspecies reduces the range of each of the subspecies (as compared to the full species), Atlantic and Gulf Coast oyster populations are still widespread, occupying areas from Maine to eastern Florida and western Florida to Texas, respectively. Based on the available data, we concluded that oyster abundance throughout these areas is sufficient to sustain these populations and prevent extinction. While the survey indicated some habitat within the range of the eastern oyster has been degraded or lost, we were able to conclude based upon the available information, including the survey, that the species' ability to adapt to various environmental conditions and its vast geographic range results in habitat degradation being a minimal threat that will not affect the species/subspecies' continued existence.

Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

Information from the survey indicated that oyster harvests are at or near recent record low levels along the majority of the U.S. Atlantic coast; however, responding resource managers and independent experts considered overutilization (overharvesting) to currently be a minor threat to oyster populations. According to the BRT, areas along the Atlantic coast south of Cape Lookout and through the Gulf of Mexico appear to have avoided some of the extremely heavy historic utilization experienced by the area from Pamlico Sound to Long Island Sound. Harvest parameters in the Gulf of Mexico are currently less restrictive than those in the mid-Atlantic area, but oyster populations there appear to be effectively managed and monitored so that harvest impacts are not substantial (Marsh, 2004). Eastern oyster resources from Pamlico Sound to Long Island Sound appear to have suffered from long-term overutilization. State managers in this region have attempted to protect public oyster stocks by conducting stock assessments, setting conservative harvest quotas, lowering daily catch limits, limiting harmful gear use, and reducing harvest seasons. Attempts to restore oyster populations and rebuild the resource through general cultch planting, reef rebuilding, and oyster sanctuaries/reserves are also becoming common management tools in

this region. In the survey, overharvesting is listed as occurring only in seven estuaries out of the 71 estuaries assessed. These seven estuaries represent a limited portion of the large geographic range of the species/subspecies, and overutilization in these areas represents a localized issue. Recreational harvest and harvest for scientific purposes were not identified as significant stressors to the eastern oyster. Long-term overutilization in many areas of the eastern oyster's range was a significant contributing factor to the species' historical decline. However, survey respondents no longer consider this to be a significant threat to the eastern oyster in the majority of the species/subspecies' range. Thus, we conclude that overutilization is not a significant ongoing threat that affects the continued existence of the eastern oyster species/subspecies.

Disease or Predation

There are several predators on various life stages of the eastern oyster, including boring sponges and clams, mud worms, carnivorous gastropods, ctenophores, and a number of fish species. However, most of these predators exist as natural associations in the oyster reef community and, in general, most oysters in the population survive. Thus, these associations do not seem to be having an effect at the population level. The eastern oyster is affected primarily by two diseases - DERMO (a parasitic disease caused by the protozoan *Perkinsus marinus*) (Levine, 1978 = *Dermocystidium marinum*; Mackin *et al.*, 1950 = *Layrinthomyxa marina*; Quick and Mackin, 1971) and MSX (another parasitic disease caused by the protozoan *Haplosporidium nelsoni*) (Haskin *et al.*, 1966). The BRT reported that both of these diseases are capable of causing significant oyster mortalities. However, oysters infected by DERMO have the opportunity to spawn the first summer, and others may be able to spawn a second or third time before succumbing to an infection. With MSX, the salinity must be above 15 ppt to sustain an infection. Thus, infections during drought years are more prevalent. As drought conditions wane, survivors and their progeny may reproduce to re-establish oyster populations. During the wetter years that occurred during the 1970s, there was significant recovery of oyster populations that had been devastated during the 1950–1960 MSX epizootic in both Delaware and Chesapeake Bays. Oyster recovery management programs have concentrated on moderate to lower salinity areas that are less likely to

support the development of oyster diseases. Research has been ongoing for several years to develop oysters that are disease tolerant. Also, resource managers help to control the spread of DERMO by controlling/preventing the transplantation of infected oysters to areas not currently infected by the disease. Based on the available information, we conclude that while both predation and disease may have effects on localized populations, impacts to the entire species/subspecies vary both spatially and temporally, allowing some affected populations to recover and sustain the species/subspecies. Thus, we conclude that neither disease nor predation are significant threats that affect the continued existence of the eastern oyster species/subspecies.

Inadequacy of Existing Regulatory Mechanisms

The BRT indicated that regulatory mechanisms for eastern oyster are most logically defined as habitat resource protection (preventative measures), fishery-specific, and conservation/replenishment based. The eastern oyster is not a federally managed species. As such, each state is responsible for controlling harvest, protecting habitat, and conserving or replenishing oyster populations. This results in many different types of regulations to protect oysters throughout their range.

Habitat measures are those defined at the Federal, state, or local level designed to protect aquatic resources (including benthic reef habitat and water quality) from various direct or indirect development impacts (e.g., impacts of channel dredging, onshore development, point-source runoff, etc.). Harvest measures are those intended to control or regulate the commercial or recreational catch of the species, and may or may not be resource conservation based. Conservation/replenishment measures are those intended to ensure the continuance of the fishery or habitat resource through various measures including setting aside no-harvest areas, requiring culling of shell during harvest, setting up programs to return shells from harvested product back to reef areas, or natural seed movement programs intended to support either habitat or fishery restoration.

State shellfish control agencies are responsible for managing shellfish harvesting areas for public health protection, which may result in permanent or temporary closures due to the presence of toxic algal blooms, elevated fecal coliforms and/or *Vibrio* spp., or chemical contamination.

According to the Environmental Protection Agency (<http://www.epa.gov/maia/html/es-condition.html>), shellfishing was prohibited from 3 percent (3,660,000 acres, or 1,481,149 hectares) of the classified shellfish areas in the estuaries in the mid-Atlantic in 2006, restricted in 5 percent (179,000 acres, or 72,438 hectares), and conditionally closed in 2 percent (67,000 acres, or 27,113 hectares). Similar closures occur in the Northeast, Southeast, and Gulf of Mexico, varying spatially and temporally. These restrictions may have the ancillary benefit of protecting some populations in chronically contaminated areas from harvest.

Restoration and enhancement efforts for fisheries and conservation are occurring throughout the species' range, but are more common in the north and mid-Atlantic. According to the survey responses, in estuaries where restoration and enhancement efforts are occurring they are considered necessary to sustain populations in roughly half the estuaries in the mid- and south Atlantic regions (presumably, to support commercially viable populations). In the North Atlantic (specifically, Connecticut and Rhode Island) and the Gulf of Mexico, restoration and enhancement efforts are not necessary to sustain biologically viable populations but are considered important to maintaining a fishery and conserving ecosystem services. Many restoration efforts throughout the species' range have been ongoing for many years and have proven successful in maintaining oyster populations. Due to the longevity and success of many of these efforts, they are expected to continue into the future. Consequently, measures to regulate the eastern oyster have been determined to be adequate. Thus, we conclude that the inadequacy of existing regulatory mechanisms is not a significant threat that affects the continued existence of the eastern oyster species/subspecies.

Other Natural or Manmade Factors Affecting the Continued Existence of the Species

Finally, hurricanes, harmful algal blooms, and non-native introductions have been identified as other possible factors affecting the eastern oyster throughout its range. However, none of these stressors are thought to have a significant impact throughout all or a significant portion of the range of either the eastern oyster species or hypothetical subspecies. Thus, we conclude that there are no other natural or manmade factors considered to be significant threats that affect the

continued existence of the eastern oyster species/subspecies.

Summary and Synthesis of Analysis of the Factors Identified in ESA Section 4(a)(1)

While eastern oyster abundance has declined from historic highs, especially in the northern portion of the species' range, the eastern oyster is still present in all areas throughout its historic distribution. According to the survey results, even at the low abundance levels in some areas, recruitment is sufficient to maintain the viability of eastern oyster populations throughout the species' range except in a portion of the mid-Atlantic (e.g., Long Island Sound, Peconic Bay, Hudson Raritan Estuary). This area represents a small portion of the large geographic range of the species and/or hypothetical subspecies and would not be expected to significantly impact or impede larval transport and exchange to and from more productive areas to the north or south. The area also represents a minor percentage of the overall potential oyster biomass and of the total spawning potential of the species/hypothetical subspecies. We conclude that recruitment in other portions of the range is more than sufficient to maintain the continued existence of the species and/or hypothetical subspecies.

In all cases, the analysis of all five factors indicate that the continued existence of the species or hypothetical subspecies is not at risk now or in the foreseeable future. While threats that may be significant at a regional or local level to the species exist, we do not consider any to be overwhelmingly dominant or advancing at a significant rate which would result in the species or hypothetical subspecies becoming threatened or endangered.

Listing Determination

The ESA defines an endangered species as any species in danger of extinction throughout all or a significant portion of its range, and a threatened species as any species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Section 4(b)(1) of the ESA requires that the listing determination be based solely on the best scientific and commercial data available, after conducting a review of the status of the species and after taking into account those efforts, if any, that are being made to protect such species. After reviewing the best available scientific and commercial information for the eastern oyster, we have determined that neither the species nor

the potential subspecies warrants listing as threatened or endangered at this time.

While listing the species or hypothetical subspecies under the ESA is not warranted at this time, the BRT and the peer reviewers identified specific research and/or monitoring needs that are considered very important to the long-term conservation and preservation of the eastern oyster. These include the following: fishery independent surveys (quantitative stock assessments for the entire range); effective population size estimates; monitoring of the effectiveness of conservation/restoration efforts; additional genetic analyses to determine population structure with a focus on local or regional adaptations; research on proximity-recruitment relationship; research on effects of combined and chronic stresses including changes due to climate change; continued research on disease susceptibility and development of selectively bred disease tolerant strains; emerging role of endocrine disrupting pollutants; delineation of oyster habitat; compatibility of existing information; continued ecological risk associated with other oyster or other alien species introductions; control and abatement of threats from all sources; development of a standard monitoring protocol on a local or regional level; and research on the effects of changes in coastal development and demographics.

Authority: 16 U.S.C. 1531 *et seq.*

Dated: June 22, 2007.

Samuel D. Rauch III,
*Deputy Assistant Administrator for
Regulatory Programs, National Marine
Fisheries Service.*

[FR Doc. E7-12564 Filed 6-27-07; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 229

[Docket No. 070417093-7109-01]

RIN 0648-AV54

List of Fisheries for 2008

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: The National Marine Fisheries Service (NMFS) is publishing its proposed List of Fisheries (LOF) for

2008, as required by the Marine Mammal Protection Act (MMPA). The proposed LOF for 2008 reflects new information on interactions between commercial fisheries and marine mammals. NMFS must categorize each commercial fishery on the LOF into one of three categories under the MMPA based upon the level of serious injury and mortality of marine mammals that occurs incidental to each fishery. The categorization of a fishery in the LOF determines whether participants in that fishery are subject to certain provisions of the MMPA, such as registration, observer coverage, and take reduction plan requirements.

DATES: Comments must be received by August 27, 2007.

ADDRESSES: Send comments to Chief, Marine Mammal and Sea Turtle Conservation Division, Attn: List of Fisheries, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910. Comments may also be sent via e-mail to 2008LOF.comments@noaa.gov, via fax to 301-427-2522, or to the Federal eRulemaking portal: <http://www.regulations.gov> (follow instructions for submitting comments).

Comments regarding the burden-hour estimates, or any other aspect of the collection of information requirements contained in this proposed rule, should be submitted in writing to Chief, Marine Mammal and Sea Turtle Conservation Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910, or to David Rostker, OMB, by fax to 202-395-7285 or by e-mail to David_Rostker@omb.eop.gov.

See **SUPPLEMENTARY INFORMATION** for a listing of all Regional offices.

FOR FURTHER INFORMATION CONTACT: Melissa Andersen, Office of Protected Resources, 301-713-2322; David Gouveia, Northeast Region, 978-281-9328; Nancy Young, Southeast Region, 727-551-5607; Elizabeth Petras, Southwest Region, 562-980-3238; Brent Norberg, Northwest Region, 206-526-6733; Bridget Mansfield, Alaska Region, 907-586-7642; Lisa Van Atta, Pacific Islands Region, 808-944-2257.

Individuals who use a telecommunications device for the hearing impaired may call the Federal Information Relay Service at 1-800-877-8339 between 8 a.m. and 4 p.m. Eastern time, Monday through Friday, excluding Federal holidays.

SUPPLEMENTARY INFORMATION:

Availability of Published Materials

Information regarding the LOF and the Marine Mammal Authorization Program, including registration