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[FR Doc. E9-119 Filed 1-13-09; 8:45 am]

BILLING CODE 6560-50-P

**DEPARTMENT OF DEFENSE****GENERAL SERVICES  
ADMINISTRATION****NATIONAL AERONAUTICS AND  
SPACE ADMINISTRATION****48 CFR Parts 2, 22, and 52**[FAC 2005-29, Amendment-1; FAR Case  
2007-013; Docket 2008-0001; Sequence 2]

RIN 9000-AK91

**Federal Acquisition Regulation; FAR  
Case 2007-013, Employment Eligibility  
Verification****AGENCIES:** Department of Defense (DoD),  
General Services Administration (GSA),  
and National Aeronautics and Space  
Administration (NASA).**ACTION:** Final rule; delay of effective and  
applicability dates.**SUMMARY:** The Department of Defense,  
General Services Administration, and  
National Aeronautics and Space  
Administration have agreed to delay the  
effective and applicability dates of FAR  
Case 2007-013, Employment Eligibility  
Verification, to January 19, 2009, and  
February 20, 2009, respectively.**DATES: Effective Date:** The effective date  
of FAC 2005-29, the final rule  
amending 48 CFR Parts 2, 22, and 52,  
published in the **Federal Register** on  
November 14, 2008, at 73 FR 67650, is  
delayed January 15, 2009, until January  
19, 2009.**Applicability Date:** The applicability  
date of FAC 2005-29 is delayed until  
February 20, 2009.Contracting officers shall not include  
the new clause at 52.222-54,  
Employment Eligibility Verification, in  
any solicitation or contract prior to the  
applicability date of February 20, 2009.On or after February 20, 2009,  
contracting officers—

- Shall include the clause in solicitations in accordance with the clause prescription at 22.1803; and
- Should modify, on a bilateral basis, existing indefinite-delivery/indefinite-quantity contracts in accordance with FAR 1.108(d)(3) to include the clause for future orders if the remaining period of performance extends beyond August 20, 2009, and the amount of work or number of orders expected under the remaining performance period is substantial.

**FOR FURTHER INFORMATION CONTACT:** The  
FAR Secretariat at (202) 501-4755 for  
further information pertaining to status  
or publication schedule. Please cite FAC  
2005-29 (delay of effective and  
applicability dates).**SUPPLEMENTARY INFORMATION:** This  
document extends to January 19, 2009,  
the effective date of the E-Verify rule, in  
order to comply with the Congressional  
Review Act (5 U.S.C. 801(a)(3)(A)).  
Although this rule was published in the  
**Federal Register** on November 14, 2008  
(73 FR 67650), it was not received by  
Congress until November 19, 2008.  
Because of pending litigation, the  
applicability date for the regulation is  
being extended until February 20, 2009.**Federal Acquisition Circular**Federal Acquisition Circular (FAC)  
2005-29, Amendment-1, is issued under  
the authority of the Secretary of  
Defense, the Administrator of General  
Services, and the Administrator for the  
National Aeronautics and Space  
Administration.The Federal Acquisition Regulation  
(FAR) contained in FAC 2005-29 is  
effective January 19, 2009, and  
applicable February 20, 2009.

Dated: January 9, 2009.

**Linda W. Neilson,***Acting Deputy Director, Defense Procurement  
(Defense Acquisition Regulations System).*

Dated: January 9, 2009.

**David A. Drabkin,***Senior Procurement Executive & Deputy Chief  
Acquisition Officer, U.S. General Services  
Administration.*

Dated: January 9, 2009.

**William P. McNally,***Assistant Administrator for Procurement,  
National Aeronautics and Space  
Administration.*

[FR Doc. E9-651 Filed 1-13-09; 8:45 am]

BILLING CODE 6820-EP-P

**DEPARTMENT OF COMMERCE****National Oceanic and Atmospheric  
Administration****50 CFR Part 224**

[Docket No. 071128765-81658-02]

RIN 0648-AW32

**Endangered and Threatened Wildlife  
and Plants; Endangered Status for  
Black Abalone****AGENCY:** National Marine Fisheries  
Service (NMFS), National Oceanic and  
Atmospheric Administration (NOAA),  
Commerce.**ACTION:** Final rule.**SUMMARY:** Following completion of an  
Endangered Species Act (ESA) status  
review for black abalone (*Haliotis  
cracherodii*), we, NOAA's National  
Marine Fisheries Service (NMFS),  
published a proposed rule to list black  
abalone as endangered on January 11,  
2008. After considering public  
comments on the proposed rule, we  
issue this final rule to list black abalone  
as endangered under the ESA. We also  
solicit information relevant to the  
designation of critical habitat for black  
abalone.**DATES:** Effective February 13, 2009.**ADDRESSES:** You may submit  
information by any of the following  
methods:

- Federal Rulemaking Portal:  
[www.regulations.gov](http://www.regulations.gov). Follow the  
instructions for submitting comments.
- Fax: 1-562-980-4027, Attention:  
Melissa Neuman.
- Mail: Submit written information to  
Chief, Protected Resources Division,  
Southwest Region, National Marine  
Fisheries Service, 501 West Ocean  
Blvd., Suite 4200, Long Beach, CA  
90802-4213.

Reference materials regarding this  
determination can be obtained via the  
Internet at: [http://  
www.swr.nmfs.noaa.gov](http://www.swr.nmfs.noaa.gov) (go to "Latest  
News"/"News Archives"/January 2008).  
A request may also be submitted to the  
Assistant Regional Administrator,  
Protected Resources Division,  
Southwest Region, NMFS, 501 West  
Ocean Blvd., Suite 4200, Long Beach,  
CA 90802-4213.**FOR FURTHER INFORMATION CONTACT:**  
Melissa Neuman, NMFS, Southwest  
Region (562) 980-4115; or Lisa  
Manning, NMFS, Office of Protected  
Resources (301) 713-1401.**SUPPLEMENTARY INFORMATION:****Background**Black abalone was added to the  
National Marine Fisheries Service's  
(NMFS') Candidate Species List on June  
23, 1999 (64 FR 33466), and transferred  
to the NMFS' Species of Concern List on  
April 15, 2004 (69 FR 19975). We  
initiated an informal ESA status review  
of black abalone on July 15, 2003, and  
formally announced initiation of a  
status review on October 17, 2006 (71  
FR 61021), at the same time soliciting  
information from the public on the  
status of and threats facing black  
abalone. On December 27, 2006, we  
received a petition from the Center for  
Biological Diversity (CBD) to list black  
abalone as either an endangered or  
threatened species under the ESA and to  
designate critical habitat for the species  
concurrently with any listing

determination. We published a 90-day finding on April 13, 2007 (72 FR 18616), stating that the CBD petition presented substantial scientific information indicating that the petitioned actions may be warranted.

In June 2007, we assembled a Status Review Team (SRT) to review the available information, assess the extinction risk and threats facing the species, and produce an ESA status review report for black abalone. The status review report (VanBlaricom *et al.*, 2007) provides a thorough account of black abalone biology and natural history, and assesses demographic risks, threats and limiting factors, and overall extinction risk.

The NMFS Southwest Region initiated a technical peer review of the draft status review report on January 9, 2008. A proposal to list black abalone as endangered, a solicitation for public comment on the proposed rule, and solicitation for additional information regarding black abalone status and habitat needs were published in the **Federal Register** on January 11, 2008 (73 FR 1986). Technical comments received from reviewers and public comments received on or before April 10, 2008, are addressed in the final status review report and this rule.

### **Biology and Life History of Black Abalone**

A thorough account of black abalone biology and life history may be found in the status review report (VanBlaricom *et al.*, 2008) and in the proposed rule to list black abalone as endangered under the ESA (73 FR 1986; January 11, 2008).

### **Statutory Framework for ESA Listing Determinations**

Section 4 of the ESA (16 U.S.C. 1533) and implementing regulations (50 CFR part 424) set forth the procedures for adding species to the Federal list of threatened and endangered species. Section 4 requires that listing determinations be based solely on the best scientific and commercial data available, without consideration of possible economic or other impacts of such determinations, after conducting a status review of the species and considering conservation efforts being made to protect the species. After assessing a species' level of extinction risk and identifying factors, listed in section 4(a)(1), that have led to its decline, we assess efforts being made to protect the species to determine if those measures ameliorate the risks faced by the species. In judging the efficacy of existing protective efforts, we rely on the joint NMFS/U.S. Fish and Wildlife Service "Policy for Evaluation of

Conservation Efforts When Making Listing Decisions" ("PECE;" 68 FR 15100; March 28, 2003).

### **Summary of Comments Received in Response to the Proposed Rule**

A joint NMFS/U.S. Fish and Wildlife Service policy requires us to solicit independent expert review from at least three qualified specialists (59 FR 34270; July 1, 1994). The Office of Management and Budget (OMB) Information Quality Bulletin for Peer Review (December 2004) further establishes minimum peer review standards, a transparent process for public disclosure of peer review planning, and opportunities for public participation. The OMB Bulletin, implemented under the Information Quality Act (Public Law 106-554), is intended to enhance the quality and credibility of the Federal Government's scientific information and applies to influential or highly influential scientific information disseminated on or after June 16, 2005. Pursuant to our 1994 policy and the OMB Bulletin, we solicited the expert opinions of ten appropriate and independent specialists regarding pertinent scientific or commercial data and assumptions relating to the taxonomic, genetic, biological and ecological information supporting the proposal to list black abalone. We conclude that these expert reviews satisfy the requirements for "adequate peer review" under the OMB Bulletin and the requirements of the joint 1994 peer review policy. All of the independent experts found that the scientific information supported listing of black abalone as an endangered species.

No public hearings were requested during the 90-day public comment period on the proposed rule to list the black abalone as an endangered species, and no hearings were held. During the public comment period, however, we received seven written comments on the proposed rule: three from private citizens, three from non-governmental organizations, and one from a local government agency. Of the seven comments we received, four clearly stated their support for listing black abalone as an endangered species. Other commenters felt that the protections provided to black abalone from an ESA listing, namely habitat protection and protection from harvesting, would not benefit the species and that more emphasis needs to be placed on the treatment of withering syndrome, a fatal abalone disease. One commenter expressed concern over the methodology used to estimate the risk of black abalone extinction within the next 30 years and suggested that the risk

analysis be reviewed by epidemiologists with expertise in the spread of and resistance to infectious diseases. A summary of the comments and the responses thereto are presented here.

*Comment 1:* Several commenters indicated that listing black abalone as endangered is not enough to ensure survival of the species and questioned how active management will halt the progression of withering syndrome.

*Response:* The final listing of black abalone as endangered under the ESA offers protection to the species by prohibiting all of the activities outlined in section 9 of the ESA (e.g., importation, exportation, take, possession, sale, and delivery) that directly or indirectly affect endangered species. These prohibitions apply to all individuals, organizations, and agencies subject to U.S. jurisdiction. Section 7(a)(2) of the ESA requires Federal agencies to consult with NMFS to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat.

We acknowledge that managing the threat of withering syndrome will be difficult, especially because the etiology of the pathogen that causes the disease is unknown. However, the ESA requires that we evaluate all of the threats that a species faces and base our listing determination on that evaluation. Individual threats will be addressed in a recovery plan and through a critical habitat designation, both of which will be developed subsequent to this final rule. The recovery plan and subsequent rulemaking to designate critical habitat will incorporate the best available scientific information on methods to minimize the threat of withering syndrome in areas that have been exposed to it and halt further progression of the disease to areas that remain unaffected.

*Comment 2:* Several commenters urged NMFS to initiate a multi-step recovery plan. It was suggested that a large part of the recovery process needs to be focused on how to treat and eliminate withering syndrome because that is the major cause for the species' decline. One commenter provided information that there are disease-resistant abalone present at San Nicolas Island and felt that these should be used in a breeding program as part of a recovery plan. Another commenter suggested that the recovery plan identify the Channel Islands as an area for restoration activities because the islands historically supported high abundances of black abalone, are protected from certain stressors because of their

isolation from the mainland, have an additional law enforcement presence, and currently support a well-established abalone research and monitoring program.

*Response:* We recognize the urgent need for a recovery plan and will assemble a team of abalone experts to assist in the development of a recovery plan for the species. This recovery plan will specify recovery actions that should be carried out (e.g., disease treatment and elimination, restoration, enhancement); the geographic scope of recovery actions; and demographic, threats-based and long-term monitoring criteria that must be met in order to remove black abalone from the endangered species list. If the existence of withering syndrome-resistant black abalone is confirmed, we will consider incorporating their use into a captive propagation and enhancement program. The Channel Islands area should be emphasized in the recovery plan both in terms of continued monitoring and research and new restoration activities.

*Comment 3:* Two commenters were concerned about the threats of anthropogenic green house gas emissions, sea level rise, elevated water temperatures and ocean acidification to black abalone. One commenter was concerned about the entrainment and/or impingement risks posed by activities that involve the intake of seawater (e.g., desalination plants, coastal power generating facilities, and liquefied natural gas terminals). These commenters asserted that the proposed rule failed to identify and assess these threats adequately.

*Response:* Sea level rise and elevated water temperatures, induced by long-term climate change, were identified as threats to black abalone in the draft status review report that supported our proposed rule (VanBlaricom *et al.*, 2007). On a scale ranging from low to high overall threat level, sea level rise was assigned a medium threat level and elevated water temperature was assigned a high threat level. A few studies have examined the effects of rising sea surface temperature on abalone at the individual level and indicate that elevated temperatures are likely to have negative consequences on those abalone species associated with cooler water temperatures and on abalone species that are particularly susceptible to withering syndrome. For example, when red abalone were held at elevated laboratory water temperatures over the course of a year (Vilchis *et al.*, 2005), growth and reproduction halted and mortality due to withering syndrome rose significantly. We are not aware of any studies that have examined

the potential effects of sea level rise on abalone. While the extent of future impacts resulting from sea level rise remains uncertain, sea level rise may result in loss of suitable black abalone habitat in preferred depth range because of increased erosion, turbidity and siltation.

We have revised the threat assessment in the status review report to analyze the impacts of ocean acidification resulting from the elevated carbon dioxide levels in the world's oceans (VanBlaricom *et al.*, 2008). Ocean acidification was assigned an overall threat level of medium. A few studies have examined the effects of elevated ocean acidity on marine gastropods and the coralline algae they graze upon at settlement. Reduced growth and survivorship resulted when marine gastropods were exposed to a small pH reduction over the course of six months (Shirayama and Thornton, 2005), and calcification rates dropped by as much as 40% in coralline algae exposed to increased partial pressure of CO<sub>2</sub> (Feely *et al.*, 2004). Thus, although the magnitude and timing of ocean acidification remain uncertain, reduced ocean pH levels may result in mortality, lower reproductive potential, and reduced individual growth of black abalone.

While we recognize that long-term climate change in coastal marine systems will result in a number of abiotic shifts that could affect black abalone, the biological responses to these shifts at the population, species and ecosystem levels are complex and not yet predictable. Thus, the magnitude and timing of the risks associated with long-term climate change remain uncertain and require future studies and better predictive models (Harley *et al.*, 2006). However, the overall threat rankings assigned to sea level rise, elevated water temperatures, and reduced pH levels are correct according to the criteria used in the threats assessment and described in more detail in the status review report (VanBlaricom *et al.*, 2008).

We acknowledge that entrainment or impingement of young stages of black abalone is possible when activities that require intake of seawater are conducted (e.g., desalination plants, coastal power generating facilities, and liquefied natural gas terminals) and have revised the threats assessment in the status review report accordingly (VanBlaricom *et al.*, 2008). Entrainment and/or impingement were assigned an overall threat level of low, because their severity and geographic scope were considered to be low and because there is a high degree of uncertainty regarding

whether this threat affects black abalone. We are unaware of any studies that have assessed the historic, current or future effects of entrainment and/or impingement on abalone. However, certain aspects of the life history of black abalone suggest that entrainment/impingement risk could be relatively low. Larvae and juveniles are not likely to be in close proximity to seawater intakes because black abalone adults are believed to spawn in relatively protected and confined rocky crevices and cracks, larval dispersal time is limited (about 3–10 days before settlement and metamorphosis; McShane, 1992), larvae may disperse over distances of only a few meters (Chambers *et al.*, 2005), and genetic analyses support minimal gene flow among populations and a low degree of interchange via larval dispersal (Hamm and Burton, 2000).

*Comment 4:* Two commenters felt that designating critical habitat should be a top priority and urged NMFS to consider designating critical habitat throughout the historic range of black abalone. One commenter suggested that sufficient higher elevation areas should be considered as critical habitat to account for rising sea level. Another commenter proposed that the Channel Islands should be included in a critical habitat designation for black abalone.

*Response:* NMFS solicits information on critical habitat features and intends to proceed with a proposed designation in a subsequent rulemaking. A team of experts will be convened to evaluate the best scientific information available on geographical areas occupied by black abalone at the time of listing, including areas of the Channel Islands, that contain physical or biological features essential to the conservation of the species and which may require special management considerations or protection. The team will also evaluate whether areas outside the geographical area occupied by the species at the time of listing, including some areas of the Channel Islands, areas within the historic range of the species, and higher elevation areas along the coast, are essential for the conservation of the species.

*Comment 5:* One commenter felt that the proposed rule was not an accurate assessment of the extinction risk to black abalone, and to get an accurate assessment, epidemiologists with expertise in withering syndrome would need to be consulted. The commenter also questioned whether withering syndrome should be considered the primary threat to near-term extinction of black abalone given that recent literature suggests that infectious

diseases play a limited role in promoting extinction of species.

*Response:* The methods used for evaluating extinction risk in black abalone provide an accurate assessment of the probability of near-term extinction. The SRT used a simple quantitative model, incorporating uncertainty, to assess the risk that withering syndrome poses to black abalone. The method relies on the expert opinions of the SRT members and quantitative information presented in the status review report. First, a range of categorical probabilities was established for two scenarios: (1) that the spread of withering syndrome will cease, and (2) that black abalone will develop resistance to withering syndrome over the next 30 years. After considering the data collected and analyzed in previous sections of the status review report, SRT members adjusted the probabilities according to how certain they were that a particular probability category would occur. Finally, a single belief-weighted overall probability of effective extinction in 30 years of 96 percent was determined. All of the status review team members were certain that the probabilities of scenario (1) or (2) occurring were very low (less than 15 percent).

Although the commenter refers to recent literature suggesting that infectious diseases play a limited role in promoting extinction, the conclusions reached in the cited literature do not apply in the case of black abalone, as is well documented in the status review report. Specifically, the correlation between increased spread and manifestation of withering syndrome with elevated water temperatures, evidence of a variety of factors that can lead to rising ocean temperatures over large geographic scales, and the unequivocal empirical record of large scale population declines and little evidence of local recovery all suggest that withering syndrome will continue to play a significant role in determining the future of black abalone. In addition, there is now substantial concern among scientists and marine resource managers about the emergence of virulent diseases in marine organisms on a global scale in association with ocean warming in recent decades (e.g., Harvell *et al.*, 1999; Harvell *et al.*, 2002). Recent surveys of the literature suggest that the frequency of reporting of new diseases has increased for several major marine taxa, including mollusks (e.g., Ward and Lafferty, 2004).

The commenter questioned whether the status review team members were experts in disease ecology and, if not, was concerned that the team might not

be qualified to assess the species' risk of extinction due to withering syndrome. Currently, we are not aware of any epidemiologists that specialize in withering syndrome, as it is a fairly new disease. Because the etiology of the pathogen that causes the disease is unknown and no epidemiological expertise exists, a team of scientists and resource managers familiar with the demography and ecology of black abalone and its decline was sufficient to assess the near-term risk that withering syndrome poses to the species. While our team members may not have had expertise in the evolution of disease resistance, the team's assessment of near-term extinction risk due to withering syndrome is the best scientific information available and an appropriate basis upon which to list black abalone as endangered because: (1) the team considered all of the relevant data on risks associated with the spread of withering syndrome and the disease's prevalence; and (2) emergence of widespread disease resistance within the next 30 years is unlikely given that it has not occurred during the previous 20 years of marked recorded decline.

#### Consideration as a "Species" Under the ESA

The ESA defines a species as "any species or subspecies of wildlife or plants, or any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." Black abalone is a marine invertebrate and is not a subspecies; therefore, we list black abalone at the species level.

#### Status of Black Abalone

Black abalone has experienced major declines in abundance that prompted closure of the commercial and recreational fisheries in 1993 and resulted in local extinctions and low local densities in the majority of long-term monitoring studies in California (Tissot, 2007). These declines have been particularly severe in the Channel Islands which were major foci for the commercial fishery from 1970–1993 and where abalone densities were high (greater than 40 m<sup>-2</sup>) as late as the mid-1980s. Although the geographic range of black abalone extends to northern California, the vast majority of abalone populations have historically occurred south of Monterey, particularly in the Channel Islands (Cox, 1960; Karpov *et al.*, 2000). Thus, black abalone populations have been severely reduced in areas that comprised the majority of the adult abalone populations in California.

Natural recovery of severely reduced abalone populations can be a very slow process (e.g., Tegner, 1992). This is largely due to the low reproductive success of widely dispersed adult populations coupled with short larval dispersal distances (see "Reproduction and Spawning Density" in VanBlaricom *et al.*, 2008). Therefore, severely reduced populations, in addition to providing few reproductive adults, also experience reduced success of fertilization and recruitment of larval abalone.

Moreover, many studies have shown that abalone larvae are generally not widely dispersed. For example, Prince *et al.* (1988) and McShane (1992) showed a strong correlation between the abundances of adult and newly recruited abalone at several sites in South Australia, which suggests that larvae are not dispersed very far from their point of origin. Similarly, Tegner (1992) showed that recruitment of juvenile green abalone was rare in Palos Verdes, California, where adult abalone were very uncommon even though abundant adult stocks were found less than 30 km away in the Channel Islands. Thus, although more abundant black abalone populations occur in central and perhaps northern California, decimated stocks in southern California are unlikely to receive significant recruitment from these distant populations (Hamm and Burton, 2000).

Studies indicate that a local adult density "threshold" exists and influences local recruitment. Below the critical threshold density gametes released by males and females into the water column do not meet successfully and fertilization does not take place. Recovery will largely depend on the density of local brood stocks and whether this density is below the critical value necessary for successful recruitment (Tegner, 1992). Based on empirical data from three long-term studies of black abalone in California, recruitment failure occurred below adult densities of 0.75–1.10 m<sup>-2</sup> (Tissot, 2007). Given that the majority of populations south of Cayucos in central California are below this threshold, many significantly so, it seems unlikely that these populations will be able to recover naturally to their former abundances, at least in the near future. Moreover, given the continued decline of most populations and the continued northward expansion of withering syndrome with warming events (Raimondi *et al.*, 2002), it seems likely that black abalone populations will continue to decline across their range.

## Assessment of Risk of Extinction

### Analysis of Demographic Risk

The demographic risks that black abalone face were assessed by considering four demographic criteria (abundance, growth rate/productivity, spatial structure/connectivity, and genetic diversity) and other key risks (e.g., threats). The SRT unanimously viewed black abalone as being at high risk of extinction throughout all or a significant portion of its range due to low abundance, low growth and productivity, compromised spatial structure and population connectivity, low genetic diversity, and the continued manifestation and spread of withering syndrome. This assessment is presented in more detail in the status review report (VanBlaricom *et al.*, 2008) and in the proposed rule to list black abalone as endangered under the ESA (73 FR 1986; January 11, 2008).

### Quantitative Representation of Expert Opinion Incorporating Uncertainty

VanBlaricom *et al.* (2008) calculated the probability of extinction with time using a simple formula that accounts for the main threat that black abalone faces: withering syndrome. The probability of extinction is considered as a function of two parameters (R=the probability that the northward spread of withering syndrome will cease very soon and S=the probability that resistance will emerge very soon in the host). If this threat alone results in a high risk of extinction in a short time (i.e. 30 years—the expected life span of black abalone), then analysis of that factor alone may suffice to evaluate whether the species is in danger of extinction currently or in the foreseeable future. Assuming R and S are independent, the overall probability of functional extinction (i.e. the reproductive potential of isolated survivors is zero and no viable populations remain) in 30 years based on the SRT members' best professional judgment was 96 percent.

### Summary of Factors Affecting the Species

According to section 4 of the ESA, the Secretary of Commerce (Secretary) determines whether a species is threatened or endangered as a result of any (or a combination) of the following factors: the present or threatened destruction, modification, or curtailment of its habitat or range; overutilization for commercial, recreational, scientific or educational purposes; disease or predation; inadequacy of existing regulatory mechanisms; or other natural or man-made factors affecting its continued

existence. Collectively, these are often referred to as “factors for decline” or “listing factors.”

To determine the species' present vulnerability to extinction, we considered the historic, current, and/or potential impact of the listing factors on black abalone, as these relate to current species distribution and abundance, and the other demographic factors discussed above.

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

Elevated water temperatures are likely to have contributed to the decline of black abalone and pose a serious threat to the ability of the species to persist, because elevated water temperatures are correlated with accelerated rates of withering syndrome transmission and disease-induced mortality. Water temperatures can become elevated because of anthropogenic sources of thermal effluent and long and short-term climate change (e.g., global climate change and El Niño Southern Oscillation). Although there is no explicitly documented causal link between the existence of withering syndrome and long-term climate change, patterns observed over the past three decades suggest that progression of ocean warming associated with large-scale climate change may facilitate further and more prolonged vulnerability of black abalone to effects of withering syndrome.

Other activities leading to substrate destruction, such as coastal development, recreational access, cable repairs, nearshore military operations and benthic community shifts, have a narrow geographic scope, uncertain or indirect effects on black abalone, or occur infrequently. Some exceptions may exist in the cases of sedimentation and sea level rise, because these threats have the potential to produce more widespread impacts; but the certainty that these factors will affect black abalone are low. For example, sea level rise may result in loss of suitable habitat in a preferred depth range because of increased erosion, turbidity and siltation; but we currently lack information to determine whether these habitat changes will be important factors for further decline.

Finally, reduced food quality and quantity were classified as having a relatively low impact. Studies have shown that reductions and increases in kelp abundance are not correlated with black abalone abundance (e.g., Friedman *et al.*, 1997). Thus, reduced food quality and quantity has likely not played an important role in the overall

decline of black abalone, and unless new information surfaces, this factor is not believed to pose a significant threat in the future.

### Overutilization for Commercial, Recreational, Scientific or Educational Purposes

Throughout most of the species' range, local densities are below the critical threshold density required for successful spawning and recruitment. These low densities have occurred in part because of overutilization for commercial and recreational purposes prior to the California fishery closure in 1993. (The other major cause for these mass mortalities is withering syndrome. See *Disease or Predation* below). Data from abalone fisheries in California and Baja California, Mexico indicate a decline in landings of at least 93 percent during the 1990s. These reductions, however, may not be indicative of population declines due only to fishing activities because mass mortalities due to withering syndrome had begun in many locations at approximately the same time. Rogers-Bennett *et al.* (2002) estimate that the California abalone fisheries may have contributed up to a 99 percent reduction in black abalone abundance in the USA, but the population may have already been declining due to the effects of withering syndrome (see *Status of Black Abalone* above). Thus, the estimated take of 3.5 million black abalone in California's commercial and recreational abalone fisheries likely contributed to the decline of local densities. This threat no longer exists in California because the black abalone fisheries were closed in 1993. The limited information we have from Mexico makes it difficult to ascertain the relative importance of fishing to overall species decline.

### Disease or Predation

Withering syndrome in black abalone is caused by a Rickettsia-like prokaryotic organism, “*Candidatus Xenohalictis californiensis*” (Gardner *et al.*, 1995; Friedman *et al.*, 1997; Friedman *et al.*, 2000; Friedman *et al.*, 2002). *Candidatus Xenohalictis californiensis* (hereafter “abalone rickettsia”) occurs in epithelial cells of the gastrointestinal tract. Infected symptomatic animals are unable to transfer digested food materials from the gut lumen into the epithelial cells and beyond, resulting in malnutrition, dramatic loss of tissue mass, and eventual death. The same pathogen is known to cause symptoms of withering syndrome in red abalone, and mortality rate is positively associated with water temperature in both red and black

abalone (Moore *et al.*, 2000a, b; Vilchis *et al.*, 2005).

The first reported occurrence of significant numbers of black abalone with symptoms of withering syndrome on the California mainland was in San Luis Obispo County in 1988 (Steinbeck *et al.*, 1992). Afflicted animals were found primarily within a cove receiving warmed effluent seawater from the cooling system of a nearby nuclear power plant. A mass mortality of black abalone occurred at the site between 1988 and 1989, with mortality rates correlating well to local patterns of sea temperature elevation associated with power plant effluent (Steinbeck *et al.*, 1992).

In wild animals symptomatic for withering syndrome, weakness resulting from the disease may cause the individual to lose the typically secure grip on the rocky substratum in response to wave impacts, allowing attack by predators or scavengers before the individual succumbs to the disease itself. Transfer of pathogens from animal to animal is fecal to oral on a local scale, and is therefore likely facilitated by aggregation of abalone in natural habitats. Transmission pathways on large spatial scales are entirely unknown at present. The pathogen for withering syndrome is now reported to be endemic to all the coastal marine waters of central (Friedman and Finley, 2003) and southern California (Moore *et al.*, 2002) south of San Francisco.

In the vast majority of cases where long-term monitoring data are available, the appearance of animals symptomatic for withering syndrome in a population lead inevitably to rapid and dramatic declines in population size, most often in excess of 90 percent (Tissot, 2007). The pattern has been documented for black abalone populations throughout the range in California. Reports indicate similar trends for black abalone populations in Mexico. Exceptions exist at San Miguel Island, where rates of decline at some long-term study sites have been atypically slow, and at one location each on Santa Cruz and San Nicolas islands. These exceptions suggest the potential for resilience and recovery in populations reduced dramatically by withering syndrome. However, Tissot (2007) describes the negative impacts of withering syndrome in multiple locations across the entire range of the species, coupled with evidence of increasing geographic scope of impact. Tissot (2007) indicates that withering syndrome continues to damage the size and sustainability of black abalone populations on a large scale.

We conclude that withering syndrome has been and continues to be the primary threat contributing to the decline of black abalone. The disease has caused mass mortality and near extirpation of populations throughout most of the species' range and the disease continues to spread to populations in Monterey County and to the north. The rate at which the disease is spreading northward will likely be exacerbated by warmer water temperatures that may result due to a variety of factors.

Abalone face predatory pressure from a number of consumer species such as gastropods, octopuses, lobsters, sea stars, fishes and sea otters (Ault, 1985; Estes and VanBlaricom, 1985; Shepherd and Breen, 1992). Despite the large number of identified abalone predators, we are aware of no studies that estimate mortality rates of black abalone in association with the predator species that have been identified. In the past black abalone populations were much more robust and able to absorb losses due to predation without compromising viability. Now that the few remaining populations are smaller, more isolated, and still declining throughout the range, predation may pose risk to the future survival of the species. In addition, non-anthropogenic predation could limit the effectiveness of future recovery efforts by interacting with other limiting factors.

#### *Inadequate Regulatory Mechanisms*

Although withering syndrome is spread largely by factors other than aquaculture, there is evidence suggesting that aquaculture operations provide a pathway for the spread of the disease (Friedman and Finley, 2003). Past State and federal regulations were not adequate to prevent the spread of withering syndrome within and outside the United States through the transfer of infected animals from one aquaculture facility to another and outplanting of infected animals from aquaculture facilities to the wild.

Recent State regulations to carefully monitor the health of abalone at aquaculture facilities and control the importation/exportation of abalone among facilities will likely reduce the threat that the aquaculture industry poses in the future. Currently, the State monitors aquaculture facilities for introduced organisms and disease on a regular basis. There is also a restriction on out-planting abalone from facilities which have not met certification standards. If new State regulations to carefully monitor aquaculture facilities are effective, the future threat that they pose to black abalone will be limited. In

fact, aquaculture may emerge as an important, and possibly the only effective recovery tool for restoring black abalone populations through captive propagation and outplanting efforts.

Purposeful illegal harvest, typically termed poaching, has been a source of mortality for black abalone throughout their range since the establishment of harvesting regulations by the State of California (Taniguchi, unpublished data). Since the closure of the California black abalone fishery in 1993, a number of black abalone poaching cases along the California mainland coast, particularly in the northern portion of black abalone's geographic range, have been documented by the California Department of Fish and Game (CDFG) from 1993–2003 (Taniguchi, unpublished data). The chronic virtual absence of black abalone populations from highly accessible intertidal habitats near human population centers in California during the twentieth century also supports the conclusion that poaching has been a source of abalone mortality.

Enforcement effort has varied over the ten-year time period of 1993–2003, and was increased in 2000 because of coordinated efforts between CDFG marine and coastal regions and planned overflights along the Central California coast during low tides. The problem of poaching persists, and existing regulatory mechanisms have not yet effectively reduced the risks posed by illegal take.

#### *Other Natural or Man-made Factors*

Environmental pollutants and toxins are likely present in areas where black abalone have occurred and still occur, but evidence suggesting causal and/or indirect negative effects on black abalone due to exposure to pollutants or toxins is limited (e.g., Martin *et al.*, 1977; Miller and Lawrenz-Miller, 1993). There is ongoing concern that accidentally spilled oil from offshore drilling platforms or various types of commercial vessels could occur near shore in California and could affect a significant proportion of black abalone habitat; however, at this time we are uncertain how such an event would impact the species' overall status. The overall risk that environmental pollutants and toxins have posed is probably low given their limited geographic scope and uncertain effects on black abalone; however, a single event, depending on where it occurs, could irreparably damage one or more of the few remaining viable populations of black abalone.

A small number of studies have examined the effects of elevated ocean acidity on marine gastropods and the coralline algae they graze upon at settlement. Although the magnitude and timing of ocean acidification remain uncertain and no direct linkages have been established between ocean acidification and black abalone, reduced pH levels have the potential to result in mortality, lower reproductive potential, and reduced individual growth.

Entrainment or impingement of young stages of black abalone may result when activities that require intake of seawater are conducted (e.g., desalination plants, coastal power generating facilities, and liquefied natural gas terminals). Entrainment or impingement risk is likely to be relatively low because larvae and juveniles are spatially and temporally restricted (McShane, 1992; Chambers *et al.*, 2005, Hamm and Burton, 2000). Thus, the potential for large numbers of young black abalone to be present in a volume of water that becomes entrained at a sea water intake is likely low. However, until studies examine the potential for traditional and new power generating methods to entrain or impinge early life stages of black abalone, the effects of these activities on the species remain highly uncertain.

#### **SRT Assessment of Overall Extinction Risk**

The SRT concluded unanimously that black abalone is in danger of extinction throughout all of its range. The spread of withering syndrome poses imminent and significant risk to the species and exacerbates the high levels of demographic risk to which black abalone are subject as a result of extremely low local densities, low levels of growth and productivity, limited spatial structure and connectivity, and loss of genetic diversity. In addition, the SRT estimated that there is approximately a 96 percent probability that black abalone will suffer functional extinction throughout its range within the next 30 years.

#### **Efforts Being Made to Protect the Species**

When considering the listing of a species, section 4(b)(1)(A) of the ESA requires consideration of efforts by any State, foreign nation, or political subdivision of a State or foreign nation to protect such species. Such efforts would include measures by Native American tribes and organizations and local governments, and may also include efforts by private organizations. Also, Federal, tribal, state, and foreign recovery actions developed pursuant to

16 U.S.C. 1533(f) constitute conservation measures. On March 28, 2003, NMFS and the U.S. Fish and Wildlife Service (USFWS) published the final Policy for Evaluating Conservation Efforts (PECE)(68 FR 15100). The PECE provides guidance on evaluating current protective efforts identified in conservation agreements, conservation plans, management plans, or similar documents (developed by Federal agencies, state and local governments, tribal governments, businesses, organizations, and individuals) that have not yet been implemented or have been implemented but have not yet demonstrated effectiveness. The PECE establishes two basic criteria for evaluating current conservation efforts: (1) the certainty that the conservation efforts will be implemented, and (2) the certainty that the efforts will be effective. The PECE provides specific factors under these two basic criteria that direct the analysis of adequacy and efficacy of existing conservation efforts. As evaluated pursuant to PECE, the protective efforts described below do not as yet, individually or collectively, provide sufficient certainty of implementation and effectiveness to counter the extinction risk assessment conclusion that the species is in danger of extinction throughout its range.

#### *National Marine Fisheries Service Programs*

Black abalone was added to NMFS= Candidate Species List on June 23, 1999 (64 FR 33466), and remained on this list after we redefined the term "candidate species" on April 15, 2004 (69 FR 19975). Candidate species are those petitioned species that are actively being considered for listing as endangered or threatened under the ESA, as well as those species for which we have announced initiation of an ESA status review in the **Federal Register**. Black abalone was also added to the NMFS' Species of Concern List, which was created on April 15, 2004 (69 FR 19975). Species of concern are those species about which we have some concerns regarding status and threats, but for which insufficient information is available to indicate a need to list the species under the ESA. . Neither the "candidate species" nor "species of concern" classification carries any procedural or substantive protections under the ESA.

#### *National Marine Sanctuaries Program*

Three coastal national marine sanctuaries in California contain intertidal habitat suitable for black abalone: Channel Islands National Marine Sanctuary (CINMS), Monterey

Bay National Marine Sanctuary (MBNMS), and Gulf of the Farallones National Marine Sanctuary (GFNMS). These sanctuary sites, administered by NOAA, are protected by federal regulations pursuant to the National Marine Sanctuaries Act of 1972 as amended (16 U.S.C. 1431 *et seq.*). See 15 CFR parts 922.71, 922.132, and 922.91, respectively. The regulations, which are similar at all three sites, provide protection against some of the threats to black abalone. At all three sanctuaries, the inshore boundary extends to the mean high water line, thus encompassing intertidal habitat.

Direct disturbance to or development of black abalone intertidal habitat is regulated at all three national marine sanctuaries. The regulations at all three sanctuaries require permits for the alteration of, construction upon, drilling into, or dredging of the seabed (including the intertidal zone), with exceptions for anchoring, installing navigation aids, special dredge disposal sites (MBNMS only), harbor-related maintenance, and bottom tending fishing gear in areas not otherwise restricted.

Water quality in black abalone habitat is regulated by strict discharge regulations at all three national marine sanctuaries. The regulations require permits for the discharge or deposit of pollutants within or into sanctuaries, except for the discharge or deposit of effluents required for normal boating operations (e.g., vessel cooling waters and effluents from marine sanitation devices, fish wastes and bait).

In addition to the permit requirement for the disturbance of the submerged lands of any sanctuary resource, which would be necessary to take black abalone, networks of marine reserves and marine conservation areas have been established by the CDFG and NOAA within the CINMS and by CDFG along portions of the MBNMS. Within these areas, especially within CINMS where the protected areas have been in place since 2003 and are within the Channel Islands National Park, multi-agency patrols provide elevated levels of enforcement presence and increased protection against poaching of black abalone.

We conclude that these regulations do not sufficiently ameliorate the extinction risk facing the species. Though the regulations may help slow the rate at which withering syndrome, the main risk facing the species, is progressing, they are unlikely to stop the progression of withering syndrome in the near future.

### State/Local Programs

The depleted condition of abalone resources prompted the California Fish and Game Commission to close all abalone fisheries south of San Francisco by 1997, beginning with the black abalone fishery in 1993. The southern abalone fishery was closed indefinitely with the passage of the Thompson bill (AB 663) in 1997. This bill created a moratorium on taking, possessing, or landing abalone for commercial or recreational purposes in ocean waters south of San Francisco, including all offshore islands. The Thompson bill also mandated the creation of an Abalone Recovery and Management Plan (ARMP), which was finalized in December 2005. The bill further required the Fish and Game Commission to undertake abalone management in a manner consistent with the ARMP.

The CDFG's ARMP provides a cohesive framework for the recovery of depleted abalone populations in southern California, and for the management of the northern California fishery and future fisheries. All of California's abalone species are included in this plan: red, green, pink, white, pinto (*Haliotis kamtschatkana*, including *H.k. assimilis*), black, and flat abalone (*H. walallensis*). The ARMP provides a mechanism for helping to slow the progression of disease and invasive/exotic species through better monitoring of aquaculture facilities; however, this effort may only make a relatively small difference to the threat that disease poses given that spread of withering syndrome is due largely to factors other than aquaculture operations. The ARMP also provides a framework for restoring black abalone populations through translocation and captive propagation and enhancement programs; however, detailed plans and methodologies have neither been drafted nor tested and therefore their effectiveness for conserving black abalone remains uncertain.

### International Conservation Efforts

The International Union for Conservation of Nature and Natural Resources (IUCN) publishes a Red List of species that are at high risk of extinction and, when data are sufficient, categorizes species as either Extinct, Extinct in the Wild, Critically Endangered, Endangered, Vulnerable, Near Threatened, or of Least Concern (IUCN, 2001). In 2003 the IUCN, based on an assessment by Smith *et al.* (2003), placed black abalone on the Red List as Critically Endangered under criterion A4e. Under criterion A4e, a species may

be classified as Critically Endangered, Endangered, or Vulnerable when its population size, measured over the longer of 10 years or three generations, has declined greater than or equal to 80, 50, or 30 percent respectively, due to an "observed, estimated, inferred, projected or suspected population reduction (up to a maximum of 100 years) where the time period must include both the past and the future, and where the causes of reduction may not have ceased or may not be understood or may not be reversible, based on the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites" (IUCN, 2006). Inclusion on the IUCN Red List does not carry any regulatory weight with regard to conserving black abalone.

### Final Listing Determination

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, being made by any state or foreign nation to protect and conserve the species. We have reviewed the petition, the draft status report and the public comments, considered protective efforts being made and other available published and unpublished information, and consulted with species experts and other individuals familiar with black abalone. On the basis of the best available scientific and commercial information, we conclude that black abalone is presently in danger of extinction throughout all of its range. This endangered determination is based on a suite of risks that black abalone face especially: (1) the spread of and mortality caused by a disease called withering syndrome; (2) low adult densities below the critical threshold density required for successful spawning and recruitment; (3) elevated water temperatures that have accelerated the spread of withering syndrome; (4) reduced genetic diversity that will render extant populations less capable of dealing with both long- and short-term environmental or anthropogenic challenges; and (5) illegal harvest. The principal threat to black abalone is withering syndrome and associated conditions that may promote the spread of the disease (e.g., suboptimal water temperatures and introduction of infected animals into previously unaffected areas). Withering syndrome has caused mass mortality and near extirpation of populations in the recent past, and the spread of withering syndrome threatens the species with a very high probability (96

percent) of extinction within the next 30 years. This threat is unlikely to be ameliorated sufficiently by current conservation efforts.

### Prohibitions and Protective Measures

Section 9 of the ESA prohibits certain activities (e.g., importation, exportation, take, sale, and delivery) that directly or indirectly affect endangered species. These activities would constitute a violation of section 9, and prohibitions apply to all individuals, organizations, and agencies subject to U.S. jurisdiction. Sections 10(a)(1)(A) and (B) of the ESA authorize NMFS to grant exceptions to the ESA's section 9 take prohibitions. Section 10(a)(1)(A) scientific research and enhancement permits may be issued to entities (Federal and non-federal) for scientific purposes or to enhance the propagation or survival of a listed species. Activities potentially requiring a section 10(a)(1)(A) research/enhancement permit include scientific research that targets black abalone. Under section 10(a)(1)(B), the Secretary may permit takings otherwise prohibited by section 9(a)(1)(B) if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity, provided that the requirements of section 10(a)(2) are met.

Section 7(a)(2) of the ESA requires Federal agencies to consult with NMFS to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species or to destroy or adversely modify critical habitat. Under section 7(a)(4), Federal agencies must confer with us on any of these activities to ensure that any such activity is not likely to jeopardize the continued existence of a species proposed for listing or destroy or adversely modify proposed critical habitat. Examples of Federal actions that may affect black abalone include permits and authorizations relating to coastal development and habitat alteration, oil and gas development, military operations, coastal power plant operations, toxic waste and other pollutant discharges, and aquaculture operations.

### Identification of Activities That Would Constitute a Violation of Section 9 of the ESA

On July 1, 1994, NMFS and USFWS published a policy to identify, to the maximum extent possible, those activities that would or would not constitute a violation of section 9 of the ESA once a species is listed (59 FR 34272). The intent of this policy is to increase public awareness of the effect

of listings on proposed and ongoing activities within the species' range. We identify, to the extent known, specific activities that will be considered likely to result in violation of section 9, as well as activities that will not be considered likely to result in violation. Activities that we believe could result in violation of section 9 prohibitions against "take" of black abalone include: (1) unauthorized take; (2) activities that directly result in elevation of sea surface temperatures (e.g. thermal effluent from power plants); (3) substrate destruction in intertidal habitats that adversely affects black abalone (e.g., coastal development, recreational access, oil spills, sea level rise); (4) unauthorized transfer of abalone species among aquaculture facilities or from aquaculture facilities to the wild; (5) discharging or dumping toxic chemicals or other pollutants into areas used by black abalone; and (6) unpermitted scientific research activities. We believe, based on the best available information, the following actions will not result in a violation of section 9: (1) possession of black abalone which are acquired lawfully by permit issued by NMFS pursuant to section 10 of the ESA, or by the terms of an incidental take statement pursuant to section 7 of the ESA; (2) federally funded or approved projects for which ESA section 7 consultation has been completed, and when activities are conducted in accordance with any terms and conditions provided by NMFS in an incidental take statement accompanying a biological opinion. These lists are not exhaustive. They are intended to provide some examples of the types of activities that might or might not be considered by NMFS as constituting a take of black abalone under the ESA and its regulations.

#### Critical Habitat

Critical habitat is defined in section 3 of the ESA as: (i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the ESA, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed upon a determination that such areas are essential for the conservation of the species (16 U.S.C. 1532(5)(A)). "Conservation" means the use of all methods and procedures needed to bring the species to the point at which listing under the ESA is no longer necessary (16 U.S.C. 1532(3)). Section 4(a)(3)(A) of the ESA requires

that, to the maximum extent prudent and determinable, critical habitat be designated concurrently with the listing of a species (16 U.S.C. 1533(a)(3)(A)(i)). If critical habitat is not determinable at the time of listing, an extension of one year may be given, during which critical habitat must be designated (16 U.S.C. 1533(b)(6)(C)(ii)). Designations of critical habitat must be based on the best scientific data available and must take into consideration the economic, national security, and other relevant impacts of specifying any particular area as critical habitat. Once critical habitat is designated, section 7 of the ESA requires Federal agencies to ensure that they do not fund, authorize or carry out any actions that are likely to destroy or adversely modify that habitat. This requirement is in addition to the section 7 requirement that Federal agencies ensure that their actions do not jeopardize the continued existence of listed species. We are currently considering critical habitat for black abalone, but a proposed designation is not yet determinable because: (1) we lack information sufficient to perform required analyses of the impacts of the designation; and (2) the habitat requirements of the species are not sufficiently well known to permit identification of an area as critical habitat. Thus, we seek public input to assist in gathering and analyzing the best available scientific data and information to support a critical habitat designation, which will be proposed in a subsequent **Federal Register** notice. Specifically, we seek information regarding: (1) current or planned activities within the range of black abalone, their possible impact on black abalone, and how those activities could be affected by a critical habitat designation; (2) quantitative evaluations describing the quality and extent of marine intertidal or subtidal habitats occupied in the past or presently by black abalone; and (3) the economic costs and benefits likely to result from the designation of critical habitat. We will continue to meet with co-managers and other stakeholders throughout the designation process.

Joint NMFS/USFWS regulations for listing endangered and threatened species and designating critical habitat at section 50 CFR 424.12(b) state that the agency "shall consider those physical and biological features that are essential to the conservation of a given species and that may require special management considerations or protection" (hereafter also referred to as "essential features"). Pursuant to the regulations, such requirements include,

but are not limited to the following: (1) space for individual and population growth, and for normal behavior; (2) food, water, air, light, minerals, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal; and generally; (5) habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species. These regulations go on to emphasize that the agency shall focus on essential features within the specific areas considered for designation. These features "may include, but are not limited to, the following: spawning sites, feeding sites, seasonal wetland or dryland, water quality or quantity, geological formation, vegetation type, tide, and specific soil types."

#### Information Solicited

To ensure that a designation of critical habitat will be as accurate and effective as possible, we solicit information from the public, other governmental agencies, the scientific community, industry, and any other interested parties. Specifically, we are interested in any information that will inform the designation including: (1) quantitative evaluations describing the quality and extent of marine intertidal or subtidal habitats (occupied currently or occupied in the past, but no longer occupied) for black abalone as well as information on areas that may qualify as critical habitat for black abalone in the future; (2) biological or other relevant data concerning threats to black abalone including, but not limited to: toxicological studies on the adverse effects of chemicals on black abalone and epidemiological data relating to withering syndrome; (3) current or planned activities within the range of black abalone and their possible impact on black abalone; (4) efforts being made to protect black abalone; (5) activities that could be affected by a critical habitat designation; and (6) the economic costs and benefits of additional requirements of management measures likely to result from the designation of critical habitat (see **DATES** and **ADDRESSES**).

#### References

A complete list of all references cited herein is available upon request (see **ADDRESSES** section).

**Classification**

*National Environmental Policy Act*

The 1982 amendments to the ESA, in section 4(b)(1)(A), restrict the information that may be considered when assessing species for listing. Based on this limitation of criteria for a listing decision and the opinion in *Pacific Legal Foundation v. Andrus*, 675 F. 2d 825 (6th Cir. 1981), NMFS has concluded that ESA listing actions are not subject to the environmental assessment requirements of the National Environmental Policy Act (NEPA; See NOAA Administrative Order 216 6.)

*Executive Order 12866, Regulatory Flexibility Act and Paperwork Reduction Act*

As noted in the Conference Report on the 1982 amendments to the ESA, economic impacts cannot be considered when assessing the status of a species. Therefore, the economic analysis requirements of the Regulatory Flexibility Act are not applicable to the listing process. In addition, this rule is exempt from review under Executive Order 12866. This proposed rule does not contain a collection-of-information

requirement for the purposes of the Paperwork Reduction Act.

*Federalism*

NMFS has conferred with the State of California in the course of assessing the status of black abalone through quarterly coordination meetings between the CDFG and NMFS and CDFG technical peer review of the black abalone draft status review report. The coordination meetings contributed to our consideration of Federal, state and local conservation measures. The CDFG technical peer review comments were considered and comments and information were incorporated into the final version of the status review report. As subsequent issues with ESA compliance and rulemaking arise (e.g., issuance of permits, critical habitat designation, recovery planning), we will continue to communicate with the States, and other affected local or regional entities, giving careful consideration to all concerns and comments received.

**List of Subjects in 50 CFR Part 224**

Endangered and threatened species, Exports, Imports, Transportation.

Dated: January 9, 2009.

**James W. Balsiger,**

*Acting Assistant Administrator for Fisheries, National Marine Fisheries Service.*

■ For the reasons set out in the preamble, 50 CFR part 224 is amended as follows:

**PART 224—ENDANGERED MARINE AND ANADROMOUS SPECIES**

■ 1. The authority citation of part 224 continues to read as follows:

**Authority:** 16 U.S.C. 1531 1543 and 16 U.S.C. 1361 *et seq.*

■ 2. In § 224.101, paragraph (d) is revised to read as follows:

**§ 224.101 Enumeration of endangered marine and anadromous species.**

\* \* \* \* \*

(d) *Marine invertebrates.* The following table lists the common and scientific names of endangered species, the locations where they are listed, and the citations for the listings and critical habitat designations.

Species		Where Listed	Citation (s) for Listing Determinations	Citations (s) for Critical Habitat Designations
Common name	Scientific name			
Black abalone	<i>Haliotis cracherodii</i>	USA, CA. From Crescent City, California, USA to Cape San Lucas, Baja California, Mexico, including all offshore islands.	[insert Federal Register volume and page number where document begins; January 14, 2009]	N/A
White abalone	<i>Haliotis sorenseni</i>	USA, CA. From Point Conception, California to Punta Abreojos, Baja California, Mexico including all offshore islands and banks.	NOAA 2001; 66 FR 29054, May, 29, 2001.	Deemed not prudent NOAA 2001; 66 FR 29054, May, 29, 2001.

[FR Doc. E9-635 Filed 1-13-09; 8:45 am]

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**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

**50 CFR Part 679**

[Docket No. 071106673-8011-02]

RIN 0648-XM68

**Fisheries of the Exclusive Economic Zone Off Alaska; Atka Mackerel Lottery in Areas 542 and 543**

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

**ACTION:** Notification of fishery assignments.

**SUMMARY:** NMFS is notifying the owners and operators of registered vessels of their assignments for the 2009 A season Atka mackerel fishery in harvest limit area (HLA) 542 and/or 543 of the Aleutian Islands subarea of the Bering Sea and Aleutian Islands management area (BSAI). This action is necessary to allow the harvest of the 2009 A season HLA limits established for area 542 and area 543 pursuant to the 2008 and 2009 harvest specifications for groundfish in the BSAI.

**DATES:** Effective 1200 hrs, Alaska local time (A.l.t.), January 9, 2009, until 1200 hrs, A.l.t., April 15, 2009.

**FOR FURTHER INFORMATION CONTACT:** Josh Keaton, 907-586-7228.

**SUPPLEMENTARY INFORMATION:** NMFS manages the groundfish fishery in the BSAI exclusive economic zone according to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations governing fishing by U.S. vessels in accordance with the FMP appear at subpart H of 50 CFR part 600 and 50 CFR part 679.

In accordance with § 679.20(a)(8)(iii)(A), owners and operators of vessels using trawl gear for directed fishing for Atka mackerel in the HLA are required to register with NMFS. Fourteen vessels have registered with NMFS to fish in the A season HLA fisheries in areas 542 and/or 543. In