SUPPLEMENTARY INFORMATION:

Electronic Access

Internet users may access all comments received by the U.S. DOT Dockets, Room PL–401, by using the universal resource locator (URL): *http://dms.dot.gov.* It is available 24 hours each day, 365 days each year. Please follow the instructions online for more information and help.

An electronic copy of this document may be downloaded by using a computer, modem and suitable communications software from the Government Printing Office's Electronic Bulletin Board Service at (202) 512–1661. Internet users may reach the Office of the Federal Register's web page at *http://www.access.gpo.gov/nara.* Internet users may also find this document at the FMCSA's Motor Carrier Regulatory Information Service (MCREGIS) web site for notices at *http://www.fmcsa.dot.gov/rulesregs/fmcsr/rulemakings.htm.*

Background

Structure of Washington Hearing

Speakers must limit their oral presentations to no more than 10 minutes duration. Presenters may submit additional written documentation to be placed in the public docket.

The public hearing will be subdivided and the FMCSA will seek comments on specific topics during the prescribed time period, as follows:

Day One

1. Opening remarks—8:30 a.m.
2. Supportive science—8:45 a.m. to 3 p.m., with general comments about any subject from 3:15 to 4:30 p.m.

Day Two

3. Daily cycle (18, 24, other) and weekly cycle (7-day, 168-hour, other)—8:30 a.m. to 10:30 a.m.
4. Minimum rest period to recover from cumulative multi-day fatigue—10:45 a.m. to noon.
5. Work-rest requirements for various types of operations—1 to 2 p.m.
6. Information collection methods and requirements, including electronic on-board recorders and Department of Labor time records—2 to 3 p.m.
7. General comments—3:15 to 4:30 p.m.

Washington Participants

All persons who would like to present comments must notify Mr. Stan Hamilton by telephone at (202) 366–0665 by 4 p.m. e.t., no later than May 26, 2000. All persons attending will be subject to Federal and DOT workplace security measures. All persons will need photo identification and must display the identification to DOT security officers. All persons will be required to sign in at the guard's desk, walk through metal detectors, and be subject to random search. All visitors will be required to wear a ''Visitor'' tag at all times while in the building. Persons failing to satisfy security requirements will be denied entry and forfeit their opportunity to participate in the hearing. Such persons may, however, submit their written comments by the close of business on July 31, 2000, to the Docket Clerk, U.S. DOT Dockets, Room PL–401, 400 Seventh Street, SW., Washington, DC 20950–0001.

Authority: 49 U.S.C. 322, 31502, and 31136; and 49 CFR 1.73.

Issued on: May 2, 2000.

Brian M. McLaughlin,

Director, Office of Policy Plans and Regulations.

[FR Doc. 00–11334 Filed 5–4–00; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 224

[Docket No 990910253–0118–02; ID No. 041300C]

RIN 0648–AM90

Endangered and Threatened Species; Proposed Endangered Status for White Abalone

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

ACTION: Proposed rule; request for comments.

SUMMARY: NMFS has completed a comprehensive status review of the white abalone (*Haliotis sorenseni*) under the Endangered Species Act (ESA). Based on the findings from the status review and a review of the factors affecting the species, NMFS has concluded that white abalone is in danger of extinction throughout a significant portion of its range. Accordingly, NMFS is now issuing a proposed rule to list white abalone as an endangered species. NMFS is not proposing to designate critical habitat for white abalone at this time, but is requesting public comments on the issues pertaining to this proposed rule.

DATES: Comments must be received no later than 5 p.m., Pacific daylight time, on July 5, 2000.

Requests for public hearings must be received by June 19, 2000. If NMFS receives a request for public hearings, it will announce the dates and locations of the public hearings in a later **Federal Register** notice.

ADDRESSES: Comments on this proposed rule and requests for public hearings or reference materials should be sent to the Assistant Regional Administrator, Protected Resources Division, NMFS, Southwest Region, 501 West Ocean Blvd., Suite 4200, Long Beach, CA 90802–4213. Comments may also be sent via facsimile (fax) to 562–980–4027, but they will not be accepted if submitted via e-mail or Internet.

FOR FURTHER INFORMATION CONTACT: Irma Lagomarsino, 562–980–4020; or Marta Nammack/Terri Jordan, 301–713–1401, or send a request via electronic mail to whiteab.info@noaa.gov.

SUPPLEMENTARY INFORMATION:

Background

Based on information indicating a major decline in abundance, NMFS designated the white abalone, a marine invertebrate, as a candidate species under the ESA of 1973, as amended (16 U.S.C. 1531 *et seq.*), on July 14, 1997 (62 FR 37560). In August 1998, NMFS contracted with Scripps Institution of Oceanography (SIO) to conduct a review of the biological status of white abalone, including the current and historical impacts to the species. NMFS received the draft status review on April 21, 1999, from SIO. In order to obtain an independent peer-review, NMFS requested that three non-federal scientists review and report on the scientific merits of the status review. By August 1999, NMFS received these anonymous reviews; NMFS scientists also reviewed the document. Subsequently, SIO incorporated all of these comments into the status review, and submitted the revised final status review document to NMFS on March 20, 2000.

NMFS received a petition on April 29, 1999, from the Center for Biological Diversity and the Southwest Center for Biological Diversity to list white abalone as an endangered species on an emergency basis and designate critical habitat under the ESA. On May 17, 1999, NMFS received a second petition to list white abalone as an endangered species throughout its range and designate critical habitat under the ESA from the following organizations: the Marine Conservation Biology Institute, Abalone and Marine Resources Council, Sonoma County Abalone Network, Asociacion Interamericana para la Defensa del Ambiente, Channel Islands

Marine Resource Institute, Proteus SeaFarms International, and the Environmental Defense Fund and Natural Resources Defense Council. NMFS considers this second request as supplemental information to the first petition.

On September 24, 1999, NMFS published its 90-day finding regarding the April 29, 1999, petition to list white abalone as an endangered species (64 FR 51725). It concluded that the April 29, 1999, petition presented substantial scientific and commercial information indicating that a listing may be warranted, based on criteria specified in 50 CFR 424.14(b)(2). However, NMFS did not find that the petition presented substantial evidence to warrant listing of white abalone on an emergency basis. To ensure that the ongoing white abalone status review was complete and based on the best available scientific and commercial data, NMFS's 90-day finding also solicited information and comments on (1) whether white abalone is endangered or threatened; (2) factors that have contributed to the decline of white abalone; and (3) any efforts being made to protect the species throughout its range. The comment period ended on November 23, 1999.

On November 23, 1999, NMFS received a letter from the Center for Marine Conservation (CMC) strongly recommending that NMFS list white abalone as an endangered species on an emergency basis under section 4(b) of the ESA and immediately implement recovery measures. Based on conclusions reported in Davis *et al.* (1996 and 1998), CMC stated that white abalone has not been able to recover from overharvesting and faces inevitable extinction in the near future unless measures are taken to recover the species. CMC believes that an emergency listing will benefit white abalone because NMFS could then initiate the recovery planning process. Similar to the conclusion in the 90-day finding notice (64 FR 51725, September 24, 1999), NMFS believes that there is insufficient information to warrant listing white abalone on an emergency basis under the ESA at this time and that the normal rulemaking procedures are sufficient and appropriate for the protection of white abalone. Based on its review of the petition and on other available information, NMFS believes the decline of white abalone in California is primarily the result of overharvesting in the early 1970s. By March 1996, the State of California closed commercial and recreational fishing for white abalone. Also, the best available information indicates that white abalone habitat is not currently at risk from destruction or modification. Thus, NMFS concludes that no emergency exists to pose a significant risk to the well-being of the species and that an emergency listing is not warranted at this time.

Abalone Life History and Ecology

Abalone are marine gastropods belonging to the family Haliotidae and genus *Haliotis* and are characterized by a flattened spiral shell (Haaker, 1986; Hobday and Tegner, 2000a). Abalone have separate sexes and are broadcast spawners, releasing millions of eggs or sperm during a spawning event. Fertilized eggs hatch and develop into free-swimming larvae, spending from 5 to 14 days as non-feeding zooplankton before development (i.e., metamorphosis) into the adult form. After metamorphosis, they settle onto hard substrates in intertidal and subtidal areas. Abalone grow slowly and have relatively long lifespans of 30 years or more. Young abalone (referred to as ''cryptic abalone'') seek cover in rocky crevices, under rocks, and deep crevices, feeding on benthic diatoms, bacterial films, and single-celled algae found on coralline algal substrate (Cox, 1962). As abalone grow and become less vulnerable to predation at about 75–100 mm (2.9–3.9 inches) in length, they emerge from secluded habitat to more open, visible locations where their principal food source, attached or drifting algae, is more available (Cox 1962). In dive surveys, these animals are classified as ''emergent'' abalone. Abalone lead a relatively sedentary lifestyle. Although juveniles may move tens of meters per day, adult abalone have extremely limited movements as they increase in size (Cox, 1962; Tutschulte, 1976; Shephard, 1973).

Successful abalone recruitment has been related to the interaction between spawning density, spawning period and length, and fecundity (Hobday and Tegner, 2000a). At low adult densities, fertilization success is much reduced. When males and females are greatly separated, fertilization success may be negligible and recruitment failure will likely occur (Hobday and Tegner, 2000a).

White Abalone

Eight species of *Haliotis* occur along the west coast of North America. Historically, white abalone ranged from Point Conception, California, U.S.A., to Punta Abreojos, Baja California, Mexico. Although studies have recognized possible population structure in other *Haliotis* species, no studies have identified distinct populations of white abalone (Hobday and Tegner, 2000a). As its name suggests, the shell of *Haliotis sorenseni* is white—the adult body is characterized by a mottled orange tan epipodium. Tutschulte (1976) reported that white abalone are not as cryptic as other California abalone species.

White abalone is the deepest-living of the west coast *Haliotis* species (Hobday and Tegner, 2000), usually reported at subtidal depths of between 20–60 m (66–197 ft) and historically most ''abundant'' between 25–30 m (80–100 ft) (Cox, 1960; Tutschulte, 1976). At these depths, white abalone are found in open low relief rock or boulder habitat surrounded by sand (Tutschulte, 1976; Davis *et al.*, 1996).

White abalone may be limited to depths where algae grow, a function of light levels and substrate availability, because they are reported to feed less on drift algae and more on attached brown algae (Tutschulte, 1976; Hobday and Tegner, 2000a). The upper and lower limits of white abalone depth distribution could also be influenced by temperature effects on larvae and juvenile survival. Leighton (1972) found that white abalone larval survival is reduced at lower temperatures. Tutschulte (1976) speculated that white abalone may have been restricted to depths below 25 m (82 ft) by predation from sea otters when sea otter and white abalone latitudinal ranges overlapped or from competition with pink abalone and predation by octopuses.

Maximum shell length recorded for white abalone in California and Mexico is 20–25 cm (7.8–9.8 inches) and 17 cm (6.6 inches), respectively. However, ''average'' observed size is about 13–20 cm (5–8 inches), and animals that are less than 10 cm (4 inches) are rare (Cox, 1960). White abalone reach sexual maturity at a size of between 88 and 134 mm (3.4–5.2 inches) in approximately 4 to 6 years and spawn in the winter, between February and April (Tutschutle, 1976; Tutschutle and Connell, 1981). Compared to two other California species, white abalone have a high degree of spawning synchronicity wherein most males and females spawn in a relatively short time period. Based on a peak in 5-year old animals prior to the peak of the white abalone fishery, Tutschulte (1976) suggested that white abalone have irregular recruitment. Tutschulte (1976) estimated that maximum lifespan of white abalone is 35 to 40 years.

In the laboratory, settlement of white abalone larvae occurred after 9 to 10 days at 15 ^{o}C (59^{o}F) (Leighton, 1972). This larval period is longer than periods reported for other California abalone species (Hobday and Tegner, 2000a). Drift tube studies have found that larval

periods of most abalone species would not usually be long enough for regular dispersal of abalone between islands and mainland areas (Tegner and Butler, 1985b). Since they have a relatively long larval period, potential dispersal distances may be greater for white abalone than those other of abalone species (Hobday and Tegner, 2000a).

Status of White Abalone

Section 3 of the ESA defines the term ''endangered species'' as any species that is in danger of extinction throughout all or a significant portion of its range. The term ''threatened species'' is defined as ''any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.'' NMFS identified a number of factors that should be considered in evaluating the level of risk faced by a species, including (1) current abundance in relation to historical abundance; (2) trends in abundance; (3) spatial and temporal distribution and effective population size, and (4) natural and human influences. NMFS has evaluated these factors to aid in determining the status of white abalone.

1. Current Abundance in Relation to Historical Abundance

a. *Historical Abundance*. Estimates of pre-exploitation abundance of white abalone may be made from both fishery-independent and fishery-dependent data and by using an estimate of the total area of white abalone habitat within the species range. Based on a historical range between Point Conception and Punta Eugenia and on the assumption that 3 percent of the area within depth contours of 25 to 65 m (82–213 ft) is rocky reef habitat, Davis *et al.* (1998) estimate total area of white abalone habitat throughout the species' range to be 966 hectares (ha). Using Tutschulte's (1976) density estimate of 0.23 white abalone/m^2, Hobday and Tegner (2000a) estimated a pre-exploitation abundance of 2,221,800 animals. Alternatively, Hobday and Tegner (2000a) calculated another pre-exploitation population abundance estimate for white abalone using data from Mexico. Using fishery-independent data from abalone surveys conducted by Guzman and Proo *et al.* (1976) between 1968 and 1970 along the west coast of Baja California, Mexico, within the depth contours between 0 to 27 m (0–89 ft), Hobday and Tegner (2000a) estimated that the pre-exploitation population size in Mexico was 2.12 million individuals. Hobday and Tegner (2000a) then doubled this estimate to account for white abalone in California and calculated a pre-exploitation estimate of white abalone abundance of 4.24 million animals throughout the range of the species. This estimate incorrectly assumes that white abalone were found throughout the area surveyed (i.e., in southern Baja, California) and, thus, this calculation may overestimate white abalone abundance.

Hobday and Tegner (2000a) also calculated a pre-exploitation abundance of white abalone using fishery-dependent data. Between the peak years of white abalone exploitation in California, approximately 605,807 lb (274,792 kg) of white abalone were landed. (Assuming 1.67 lbs (.76 kg)/animal, 362,759 animals were harvested). Since it would have taken 10 years for white abalone to reach California's legal size limit, and the fishery collapsed after only 10 years of exploitation, Hobday and Tegner (2000a) assume that all legal-sized adults were harvested every year. If total catch in the 10-year period represents the total accumulated virgin stock and there was no recruitment, Hobday and Tegner (2000a) estimate the former California population size equals the total catch between 1969 and 1978, namely 362,759 animals. If this figure is doubled to include Mexico, the historical abundance estimate is 725,518 white abalone throughout its historical range. However, the actual pre-exploitation abundance must have been greater because some white abalone were harvested in subsequent years, some animals were lost to natural mortality, and white abalone from the recreational catch were not included in the estimate. Not all of the pre-exploitation estimates account for cryptic white abalone.

b. *Current Abundance*. Using a research submersible vessel, the first deep-reef surveys for white abalone were conducted near Santa Barbara, Anacapa, and Santa Cruz Islands, and on Osborn Bank in 1996 and 1997 (Davis *et al.*, 1998). After searching 77,070 m^2 (829,601 ft^2) of rocky reef between 27 and 67 m (89 and 220 ft) depth, only nine live white abalone were found. Assuming that population densities of white abalone estimated from these surveys (i.e., 0.000167 white abalone/m^2, plus or minus 0.0001) were representative of white abalone densities throughout their entire range and that the total available habitat within the species range is 966 ha (2,386 acres), Hobday and Tegner (2000a) estimate that the 1996/1997 population size throughout the entire range of the species was 1,613 white abalone. They conclude from these results that white abalone are absent or at extremely low densities at all depths and areas surveyed. Using these same data, Davis *et al.* (1998) estimated that fewer than 1,000 white abalone existed in 1996/1997 throughout the species range and concluded that these submersible surveys both confirmed the ''critically low'' population density and demonstrated the lack of a *de facto* refugia beyond normal scuba depths.

In October 1999, scientists conducted another deep-reef survey for white abalone near Santa Cruz, Anacapa, Santa Barbara, San Clemente and Santa Catalina Islands and on Osborn, Farnsworth, Tanner and Cortez Banks using a submersible vessel (Haaker *et al.*, 2000; Hobday and Tegner, 2000b). In contrast to the 1996/1997 submersible surveys, the areas selected for the October 1999 study were the areas where the greatest amount of white abalone had been removed by the commercial and recreational fisheries in the 1970s (Hobday and Tegner, 2000a). This survey covered approximately 57.5 ha (142 acres) (Haaker *et al.*, 2000) of suitable white abalone habitat, at a depth between 19 and 65 m (62 and 213 ft), and found 157 live white abalone (average density = 0.00027 white abalone/m^2 or 2.7 white abalone per ha).

The 1996/1997 and 1999 submarine surveys for white abalone in California covered approximately 6 percent of the estimated 966 ha (2,386 acres) of suitable habitat throughout the species' range (Hobday and Tegner, 2000b). Hobday and Tegner (2000b) combined data from these surveys and calculated another estimate of current population abundance. This estimate should be more representative of the population because they used spatially-distinct white abalone densities from the different areas surveyed. Based on the estimated potential habitat (966 ha or 2,386 acres) and the area-specific white abalone densities, Hobday and Tegner (2000b) calculated a revised current population abundance of 2,540 individuals throughout the range of the species.

All of these historical and current white abalone abundance estimates are likely to be biased for several reasons. First, the total amount of white abalone habitat may be more or less than the 3–percent assumed area within the depth contours between 25 and 65 m (82–213 ft), and the amount may vary among areas (Hobday and Tegner, 2000b). Second, since the exact width of the submarine transect widths are not known, the area actually surveyed may be larger or smaller. In addition, since white abalone prefer low relief rocks covered with folise algae near sand at depths between 40–60 m, observers

collecting data during surveys may preferentially search these areas. Finally, in 1996 alone, 12,307 kg (27,132 lb) of white abalone were reported in Mexican commercial abalone landings. Because the average weight of white abalone is 1.67 lb (0.75 kg), represents approximately

32,000 white abalone (Hobday and Tegner, 2000a). If the Mexican landings data are correct, the current white abalone density estimates based on fishery-independent data may be too low.

2. Trends in Abundance

a. *Commercial Fishery Data - California.* In 1967, at a time when the total abalone landings in California began to decline, commercial white abalone harvest began (Hobday and Tegner, 2000a). Within a 9-year period between 1969 and 1977, over 95 percent of the commercial white abalone landings took place. White abalone landings peaked at 144,000 lb (86,000 individuals) in 1972, only 3 years after intense harvest began. The decline in white abalone landings was so dramatic by 1978 (less than 5,000 lb (2270 kg) landed), that the CDFG no longer required white abalone to be reported separately on commercial landings receipts. Between 1987 and 1992, only 11 white abalone were voluntarily reported in commercial landings, and, since 1992, none have been reported.

b. *Recreational Fishery Data—California.* Data on the recreational catch of abalone in California comes from commercial passenger dive boats (Hobday and Tegner, 2000a). Between 1971 and 1993, white abalone comprised 1.29 percent of the total, and 2.89 percent of the ''identified,'' recreational abalone catch in California. Most of the catch was harvested from Santa Catalina and San Clemente Islands. Recreational harvest of white abalone peaked at about 35,000 animals in 1975, then declined sharply. By 1986, white abalone were rarely reported as landed by divers using commercial dive boats. Abalone catch from recreational divers not using commercial dive boats has not been quantified.

c. Commercial Fishery Data - Mexico. Data on abalone landings in Mexico are limited because species-specific catch data are sparse. Before 1984, Mexico did not require commercial abalone fishermen to land abalone in the shell, the only identifying characteristic. Prior to about 1990, Hobday and Tegner (2000a) found no data on the number or weight of white abalone landed in Mexico. Often, available data were temporally and spatially inconsistent and contradictory.

Although white abalone are deep-living and most likely hard to find, they were harvested in Mexico prior to 1931 because the tender meat attracted a high price (Croker, 1931, p. 69). Historically, white abalone comprised only a few percent of the total Baja, California, abalone catch. However, in certain cooperatives, white abalone was sometimes a significant portion of the abalone catch—in some months representing over 50 percent of the total abalone catch (Hobday and Tegner, 2000a). For instance, between 1992 and 1994, white abalone represented about 65 percent of the catch of one Mexican fishing cooperative. Since the total abalone catch for that cooperative was 57,983 lb (26,301 kg) of meat, that represents a large amount of white abalone meat (i.e., 37,689 lb or 17,096 kg). Hobday and Tegner (2000a) suggest that this harvest may represent overharvesting of newly located reefs, because that harvest rate was not sustained in subsequent years.

Data from Zone 1 (the northernmost portion of species range in Mexico) from 1990 to 1997 indicate that white abalone represented only 0.73 percent of the total abalone catch (Hobday and Tegner, 2000a). In this same zone, no catch trends are evident for any abalone species. White abalone were not harvested south of Zone I in Baja, California, from 1993 to 1998. Although the data are limited, it appears that in those areas, catch-per-unit-effort of abalone declined from 205 to 18 kg/boat/day (452 to 40 lb) between 1958 and 1984, respectively (Guzman del Proo, 1992, as cited in Hobday and Tegner, 2000a). Since 1981, total abalone catch has remained near 800–1000 tons, with most abalone harvested from Cedros Island. From 1993 to 1998, the price of abalone in Mexico has remained constant and is an important source of income for the region (Ponce-Diaz *et al.*, 1998, cited in Hobday and Tegner, 2000a). Based on trends in landings, Mexico's white abalone populations may be depleted (Guzman del Proo, 1992), though perhaps not as severely as in the United States (Hobday and Tegner, 2000a).

d. Recreational Fishery-Dependent Data—Mexico. Although there is no recreational abalone fishery in Mexico, the gathering of intertidal abalone occurs at some level (Hobday and Tegner, 2000a).

e. Summary of Trends. Survey assessments for white abalone have been limited in number and spatially separate (Hobday and Tegner, 2000a). Because of this and because relatively few white abalone were observed, estimates of white abalone density, using fishery-independent data collected during the surveys in the 1980's and 1990's are imprecise. The current white abalone abundance calculations based on these survey data may also be biased due to assumptions about the total amount of white abalone habitat currently available (e.g., 3 percent) and the amount of area actually surveyed. Nevertheless, data collected from the white abalone surveys represent the best available scientific information on the species.

Review of the results from the series of fishery-independent abalone surveys in the early 1980s and 1990s indicates that white abalone density may have declined by several orders of magnitude in California since 1970 (Hobday and Tegner, 2000a). Over the last 30 years, white abalone abundance has declined from approximately 2.22 to 4.24 million animals (pre-exploitation) to approximately 1,613 to 2,540 animals throughout the species range. This decline represents a decrease in white abalone abundance of over 99 percent since exploitation began in the late 1960s. Review of the commercial landings data also indicates a significant decline in white abalone abundance, from a peak of 144,000 lbs (65,318 kg) in 1972 to less than 1,000 lbs (454 kg) in 1979, after only a decade of commercial exploitation.

3. Spatial and Temporal Distribution and Effective Population size

In addition to the absolute number of individuals in a population or species, their spatial and temporal distribution is critical for successful fertilization, recruitment, and survival of local populations. Reproductive failure will occur below a threshold population density because surviving individuals are so few and so scattered that they cannot find mates. This is commonly referred to as the ''Allee Effect'' (Primack, 1993). Individuals that are close enough to find mates may still not produce offspring due to other factors such as age, poor health, sterility, malnutrition, and small body size (Primack, 1993). As a result of these factors, the ''effective population size'' of breeding individuals will be substantially smaller than the actual population size.

Even with high adult densities, abalone recruitment is highly variable and unpredictable (Davis *et al.*, 1996). Based on results from modeling and experiments with sea urchins, Pennington (1985) demonstrated that successful fertilization for broadcast spawners requires that males and females be close enough for free-swimming sperm to contact eggs in sufficient densities. Juvenile abalone

recruitment severely declines, or ceases in abalone populations that are depleted below approximately 50 percent of virgin stock levels (Shepherd and Brown, 1993; Richards and Davis, 1993). Price *et al.* (1988) found that, for the Australian abalone species, *Haliotis rubra*, abundance of breeding animals determined recruitment. Thus, despite the broadcasting of millions of sperm and eggs and a planktonic larval phase, locally reduced adult abalone densities can result in lower local recruitment. More recently, Babcock and Keesing (1999) found that, for the Australian abalone species, *Haliotis laevigata*, recruitment failure occurred when the mean nearest neighbor distances were over 1–2 m (3.3–6.6 ft) or when densities fell below 0.3 animals/m^2. They also speculate that reductions in abalone densities may further reduce reproductive success by limiting the ability to synchronize reproductive behavior.

Because abalone are slow-moving bottom dwellers, their ability to aggregate during spawning to overcome even relatively small separations is extremely limited. If the current estimate of mean white abalone density (e.g., 0.00027 white abalone/m^2) is representative throughout most of the range of the species, it is far below that necessary to produce gamete concentrations high enough for effective fertilization. Based on the current estimated average distance of approximately 50 m (164 ft) between white abalone adults, the chance of successful fertilization and regular production of viable cohorts of juvenile white abalone is extremely low (Davis, 1998).

The density of white abalone observed during the 1999 submersible survey varied from 0 to 9.76 abalone per ha (Hobday and Tegner, 2000b). The highest densities were found at Tanner Bank, an offshore area where distance, average sea conditions, and navigational challenges may have reduced white abalone fishing effort. Of the 157 white abalone found in the October 1999 submersible survey, nearly 80 percent were individuals (i.e., the nearest neighbor was more than 2 m (6.6 ft) away (Hobday and Tegner, 2000b). Twenty percent of the white abalone observed were found in ''groups'' of two, and one group of four was found. Although these groups have the potential to produce offspring if at least one male and one female occurs in each group, it is still likely that the effective population size of the species is currently very small (Hobday and Tegner, 2000b).

The size and frequency of empty abalone shells observed during surveys can also indicate local population structure and whether habitat is suitable for survival. For example, about 20 percent of the empty shells near stable red abalone populations, with regular juvenile recruitment are juvenile-sized shells (Hines and Pearse, 1982, reported in Davis *et al.*, 1996). In contrast, the percentage of juvenile-sized empty shells found near a red abalone population on the verge of collapse at Santa Rosa Island dropped from 22 percent to 6 percent as recruitment and adult densities declined (Tegner *et al.*, 1989; Davis *et al.*, 1992, reported in Davis *et al.*, 1996).

Davis *et al.* (1996) found that during the 1992–1993 scuba surveys for white abalone, most of the empty shells and live individuals were probably more than 25 years old (>140 mm or 5.5 inches). All of these shells, except one, were adult size (>50 mm or 2 inches) and most were between 131 and 180 mm (5 and 7 inches). During the 1996–1997 submersible white abalone surveys, over 300 empty shells were observed. All of these shells appeared to be over 25 years old (Davis, G., pers. comm., February 2000). These results indicate that the survey sites were previously inhabited by white abalone. Davis *et* al. (1998) concludes that these older abalone represent the last major cohort recruited to the population. This cohort would have been spawned in the late 1960s or early 1970s and survived because they would have been too small to be legally harvested during the peak of the fishery in the 1970s.

Although the influence of age on white abalone fertility is unknown, if individual age is a factor for reproductive success, the effective population size of white abalone may be significantly lower than the current estimate of white abalone abundance throughout its range. Analysis of the 1999 survey video footage and photographs to determine size frequencies of the white abalone observed (live individuals and empty shells) has not yet been conducted (Hobday and Tegner, 2000b).

4. Other Natural and Human Influences. See (A), (C), and (E) in Summary of Factors Affecting White Abalone.

Summary of Factors Affecting White Abalone

Section 4(a)(1) of the ESA and the listing regulations (50 CFR part 424) set forth procedures for listing species. NMFS must determine, through the regulatory process, if a species is endangered or threatened based upon any one or a combination of the following 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; or (E) other natural or human-made factors affecting its continued existence. NMFS' contract with SIO included a review of current and historical factors affecting white abalone. This review identifies overutilization for commercial purposes as the primary reason for the decline of white abalone (Hobday and Tegner, 2000a). The following is a discussion of the factors used to determine whether white abalone should be listed as a threatened or endangered species under the ESA.

A. Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

Loss or modification of habitat is not likely to have been a factor in the decline of white abalone. Hobday and Tegner (2000a) conclude that natural or anthropogenic white abalone habitat losses are unknown. Due to the isolation of the offshore islands off southern California and northern Baja, California, Mexico, and the depth range of the species, anthropogenic impacts to white abalone habitat should be limited near the islands. The California Department of Fish and Game (CDFG) believe, that direct threats to white abalone are limited, especially on the islands offshore of southern California, but mainland habitat may have been affected to an ''unknown extent'' for a variety of unspecified land-based human activities. On the other hand, pollution affected shallow water abalone habitat (i.e., *Macrocystis* kelp forests) along the Palos Verdes Peninsula in the 1950s, resulting in a decline in certain shallow water abalone populations (Tegner, 1989; 1993). However, the source of the pollution has been controlled and is no longer affecting habitat in that area.

Long-term or short-term changes in ocean conditions could affect both larval and adult abalone (Hobday and Tegner, 2000a). For example, periodic El Nino conditions increase surface water temperatures above optimum larval survival levels. In addition, due to the periodicity of these events, Hobday and Tegner (2000a) suggest the warming events would lead to recruitment failure. The influence of some diseases may increase during periods of warm water conditions. Warm water has also been associated with depleted nutrients in the ocean, declines in *Macrocystis*,

and the availability of drifting algae material. The direct or indirect impacts of increasing water temperatures within the depth range on white abalone are unknown. Harvesting of *Macrocystis pyrifera* has been shown to have little effect on shallow-living abalone species (Tegner, 1989) and could even benefit abalone by providing greater amounts of drift algae (Hobday and Tegner, 2000a). For these reasons, habitat loss or modification are not likely to have been factors of decline of white abalone.

B. Overutilization for Commercial, Recreational, Scientific or Educational Purposes

White abalone throughout its range have experienced declines in abundance as a result of overutilization for commercial and recreational purposes. Hobday and Tegner (2000a) suggest that white abalone in California were subject to ''serial depletion'' by the commercial fishery during the early 1970s. Due to their life history characteristics as slow-moving bottom dwellers with external fertilization, abalone are particularly susceptible to local and subsequent serial depletion. If female abalone are not within a few meters of males when they both spawn, the sperm will be too diluted by diffusion to fertilize the eggs (Davis *et al.*, 1996). As local abalone density declines, the probability of successful fertilization and subsequent recruitment, correspondingly decreases. Serial depletion occurs as fishermen shift from exploited to unexploited fishing areas due to local depletion. Total landings may remain constant in the short term. Eventually, however, if all areas are harvested at unsustainable levels, recruitment failure occurs on a regionwide basis. The CDFG believe that the most significant threat to white abalone is related to the effects of low population abundance on continued white abalone reproduction, survival and recovery.

Because white abalone catch data from California were recorded by blocks that can be aggregated into regions, data indicate that over 80 percent of the white abalone landings were taken from San Clemente Island. The offshore Tanner Bank and Cortez Bank-Bishop Rock region provided 13 percent of the total catch. Notably, between 1965 and 1975, over 25 percent (average 43 percent) of the white abalone catch at each location came from a single year (Hobday and Tegner, 2000a). If harvest was sustainable, the portion of catch harvested each year at each location should have been more equitable over many years. In contrast, at each location (e.g., island), large harvest was sustained for only a few years after previously unexploited white abalone stocks were depleted (see Table 8 in Hobday and Tegner, 2000a). After only 3 years of commercial exploitation, regionwide landings of white abalone peaked at 144,000 lb (65,318 kg) in 1972, declining to less than 10,000 lb (4,535 kg) in 1977. White abalone landings were so negligible by 1978 (<1,000 lb or 454 kg), that CDFG no longer collected landings data for the species.

Hobday and Tegner (2000a) suggest that the increasing value of abalone may have contributed to increased fishing pressure. For example, the price of white abalone increased from about $2.50 per pound in 1981 to about $7 per pound in 1993. As the catch of all abalone declined, the total and per-unit value of the harvest continued to increase. White abalone was usually the most valuable species and by 1988, white abalone was worth twice the value of other abalone species (Davis *et al.*, 1996).

C. Disease or Predation

First detected in 1985, withering syndrome disease has significantly affected west coast abalone species, especially the black abalone. Withering syndrome also occurs in pink, red, and green abalone (Alstatt *et al.*, 1996, cited in Hobday and Tegner, 2000a). Withering syndrome has recently been identified as a ricksettia bacterium that affects the digestive glands of abalone. Surveys of black abalone suffering from withering syndrome found large numbers of empty black abalone shells. Hobday and Tegner (2000a) suggest, that if white abalone were significantly affected by withering syndrome, large numbers of empty white abalone shells should have been detected during the abalone surveys of the 1980s.

In 1990, 20 freshly dead white abalone, which could have been killed by withering syndrome, with undamaged shells were collected from Santa Catalina (Tegner *et al.*, 1996). In 1993, two live white abalone were collected from Santa Catalina Island and diagnosed with withering syndrome. A white abalone in captivity recently died and showed symptoms of withering syndrome. Although white abalone appear to be susceptible to withering syndrome, it is not likely to have been a major factor in the decline of white abalone.

Several abalone predators have been documented, including sea stars, fish, crabs, octopuses, and sea otters (Hobday and Tegner, 2000a). Although increases in abundance of these predators could be related to declines in white abalone abundance, no information is available on the density of the invertebrate predators in white abalone habitat. Due to the depth range and latitudinal distribution of white abalone, predation by sea otters is not likely to have been a factor in the decline of white abalone abundance. The CDFG believes that factors such as disease or predation may have contributed to the decline of white abalone but are not currently a major factor affecting the species' continued existence.

D. The Inadequacy of Existing Regulatory Mechanisms

Because white abalone throughout their range have experienced declines in abundance as a result of overutilization for commercial purposes, fishing regulations for white abalone during the major period of its decline in the 1970s were inadequate to regulate harvest of white abalone at sustainable levels.

The establishment of minimum size limits has been a strategy used worldwide to manage the harvest of abalone on a sustainable basis (Hobday and Tegner, 2000a). Managers expected this restriction would allow individual abalone a chance to reproduce and contribute to the population before possible removal from the population by harvest. In California, minimum size limits for abalone were greater than the size of sexual maturity and could have allowed for several years of reproduction before the animals reached legal harvest size. However, successful reproduction does not necessarily occur each year. If reproductive failure occurs for several years, abalone could reach legal size and be removed by the fishery before they have successfully reproduced and contributed offspring to the population. California also prohibited abalone fishing during the spawning season. Other regulations, such as bag limits for recreational fishermen, and limited entry, were also instituted by California as abalone management measures.

In 1970, California established a permit fee of $100 for both divers and crew members (Burge *et al.*, 1975; cited in Hobday and Tegner, 2000a). The diver fee increased to $200 in 1975 and finally reached $330 in 1991. Relative to permit fees charged by other countries to harvest abalone which approach $1 million per permit (e.g., Tasmania, South Australia), these relatively low fees did not promote sustainable abalone fishing in California.

California's abalone management did not prevent serial depletion of white abalone or promote sustainable harvest practices in the 1970s. In 1996, the California Fish and Game Commission closed the California white abalone fishery to protect the surviving adults (Davis *et al.*, 1998). At this time, NMFS does not have documentation that

Mexico has closed its commercial white abalone fishery or limited white abalone fishing.

Intentional capture of sub-legal abalone before they contributed substantially to the population could have reduced the reproductive potential of white abalone (Hobday and Tegner, 2000a). However, since the State of California has required all commercially caught abalone to be landed in the shell, poaching is not likely to have been a major factor for the decline of white abalone. In Mexico, during a survey in 1973, a substantial portion of the commercial white abalone catch was found to be undersized. The impact of illegal white abalone harvesting as a factor of the species' decline is difficult to evaluate in Mexico, but was probably not a major factor in California. Because abalone has no blood clotting ability, cut animals bleed to death (Cox, 1962, cited in Hobday and Tegner, 2000a). Burge *et al.* (1975) found that accidental cutting of sub-legal sized abalone is a significant cause of mortality and could have further reduced white abalone abundance (Hobday and Tegner, 2000a). For example, mortality due to cutting during collection of sub-legal red abalone was estimated at 60 percent from small cuts in the lab, and almost 100 percent in the field. Even undersized abalone that are handled and replaced without being cut suffer a 2 to 10–percent mortality in the field. Under-sized abalone may also be subject to predation before they have a chance to reattach to the substrate.

E. Other Natural or Manmade Factors Affecting Their Continued Existence

Competition from sea urchins and other abalone species for food and space could have been a factor in the decline of white abalone. For instance, increasing trends in abundance of sea urchins (*Strongylocentrotus purpuratus* and *S. franciscanus*) could have limited the amount of algae available for juvenile or adult white abalone consumption (Hobday and Tegner, 2000a). Although these potential ecological interactions have not been studied in the field, the densities of these potential competitors are also currently low and are no longer likely to limit white abalone abundance (Hobday and Tegner, 2000a).

Hybridization of white abalone with other more abundant California abalone species could potentially lower white abalone population size (Hobday and Tegner, 2000a). Natural hybridization between other California abalone species and white abalone has been observed. Owen *et al.* (1971) found that disturbance, high sea urchin frequency, and low abundance of one parent species increased the frequency of abalone hybrids. However, because large numbers of white abalone hybrids have not been found in the field, Hobday and Tegner (2000a) conclude that hybridization of white abalone with other abalone species is unlikely to have led to a decline of the species.

Efforts Being Made to Protect White Abalone

Section 4(b)(1)(A) of the ESA requires the Secretary of Commerce to make listing determinations solely on the basis of the best scientific and commercial data available and after taking into account efforts being made by any state or foreign nation to protect a species, by predator control, protection of habitat and food supply, or by other conservation practices. In making this listing determination, therefore, NMFS must consider white abalone status and the factors that have lead to its decline, as well as state or foreign conservation efforts that may ameliorate the risks faced by the white abalone.

In judging the efficacy of state or foreign conservation efforts, NMFS considers the following: (1) The substantive, protective, and conservation elements of such efforts; (2) the degree of certainty that such efforts will be reliably implemented; and (3) the presence of monitoring provisions that determine effectiveness and that permit adaptive management (NMFS, 1996b). In some cases, conservation efforts may be relatively new and may not have had time to demonstrate their biological benefit. In such cases, provisions for adequate monitoring and funding of conservation efforts are essential to ensure intended conservation benefits are realized.

State of California Conservation Measures for White Abalone

The CDFG has collected fishery-independent data on white abalone for many years and has conducted and participated in the scuba and submersible surveys conducted in 1980/1981, 1992/1993, 1996/1997, and 1999. The data and information gathered during these studies have contributed to a better understanding of the decline of white abalone. Because the State required that abalone fishermen submit landings data, the precipitous decline of white abalone in the 1970s has been documented. As mentioned previously, the State closed white abalone fishing in 1996, thereby removing a significant factor for decline. The closure of all abalone fisheries in southern California in 1997 has also reduced the likelihood of accidental harvest or poaching of white abalone in California. Despite these State conservation measures, however, the species may not survive without human intervention because most of the remaining individuals are too far apart to successfully reproduce. To date, the State of California has not listed white abalone under the State's Endangered Species Act.

Mexican Conservation Measures for White Abalone

At this time, NMFS does not know whether Mexico has closed its white abalone fishery or instituted other conservation measures to protect the species. NMFS contracted out the status review to SIO to gather data on white abalone landings and status of white abalone in Mexico, but conservation measures were not part of this contract. The U.S. Government has not contacted Mexico yet with regard to conservation measures. Under 50 CFR 424.16, insofar as practical and in cooperation with the Secretary of State, NMFS must give notice of any proposed regulation to list a species to each foreign nation in which the species is believed to occur and invite the comment of such nation. After NMFS solicits and receives comments from Mexico, it should have a better understanding of the conservation measures Mexico has implemented to protect white abalone.

Private-Public Partnerships

Due to concern over the depleted status of white abalone, a consortium of scientists, fishermen, conservation organizations, universities, Federal and state agencies, and mariculturists in private enterprise have joined together to develop and execute a plan to restore white abalone populations (Davis *et al.*, 1998). The White Abalone Restoration Consortium (Consortium) has developed the following four-step restoration plan: (1) Locate surviving white abalone by surveying historical habitat; (2) collect brood stock; (3) breed and rear a new generation of brood stock; and (4) re-establish refugia of self-sustaining brood stocks in the wild. The Consortium has also initiated an outreach program to raise public awareness of the status of white abalone and restoration efforts. Particularly challenging is the ability to increase public awareness of a relatively small and unknown marine invertebrate. Because nearly 25 years of artificially producing and outplanting juvenile and younger red abalone in California have failed to demonstrate effective population restoration, the Consortium is advocating that captive-born white abalone be reared until 4 years of age (>100 mm or 4 inches). Federal, state, and private grants and

funds have recently supported white abalone submersible surveys and the establishment of an aquaculture facility specifically designed to breed white abalone in captivity and rear offspring to adulthood for outplanting to the wild.

While NMFS recognizes that many of the existing conservation measures are likely to protect the remaining white abalone survivors, in the aggregate, they do not yet provide for white abalone conservation at a scale that is adequate to protect and recover the species. Due to the extremely low population abundance of white abalone throughout its range, NMFS believes that the existing protective measures alone will not be sufficient to reduce the risk of white abalone extinction in the near future.

Proposed 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 (16 U.S.C. 1532(6) and (20)). 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.

Review of white abalone landings data and analysis of fishery-independent data indicate that over the last 30 years, white abalone abundance has declined by over 99 percent and several orders of magnitude. Most of the remaining survivors are old and so scattered that they will not be able to find mates to spawn successfully and regularly produce viable cohorts of juveniles. While NMFS recognizes that many of the existing conservation measures are likely to protect the remaining white abalone, in the aggregate, they do not yet provide for white abalone conservation at a scale that is adequate to protect and recover the species.

Based on results from the white abalone status review, information received in the petition to list white abalone as an endangered species, and other published and unpublished information, NMFS has determined that white abalone are in danger of extinction throughout all or a significant portion of their range. Therefore, NMFS proposes to list white abalone as an endangered species.

During the period between publication of this proposed rule and publication of a final rule, NMFS will continue to solicit information regarding existing protective efforts including those by Mexico (see Public Comments Solicited). NMFS will also work with Federal and state fisheries managers to evaluate and enhance the efficacy of the various white abalone conservation efforts.

Conservation Measures

Conservation measures that may apply to listed species include conservation measures implemented by tribes, states, foreign nations, local governments, and private organizations. Also, Federal, tribal, state, and foreign nations' recovery actions, Federal consultation requirements, and prohibitions on taking constitute conservation measures. In addition, recognition through Federal government or state listing promotes public awareness and conservation actions by Federal, state, tribal governments, foreign nations, private organizations, and individuals.

Based on information presented in the proposed rule, general protective and conservation measures that could be implemented to help conserve white abalone are listed as follows. This list does not constitute NMFS' interpretation of a recovery plan under section 4(f) of the ESA:

1. Continue the State prohibition on commercial and recreational white abalone fishing in California.
2. Locate white abalone in California and Mexico by surveying historic habitat.
3. Collect white abalone brood stock, spawn the brood stock, rear the offspring to early adulthood, and outplant the next generation in the wild.
4. Collect and aggregate adult white abalone in the wild to facilitate successful reproduction in the field.
5. Establish protected zones to serve as refugia for captive-bred offspring and aggregated adult white abalone.
6. Promote protection and conservation of white abalone in Mexico.

Prohibitions and Protective Measures

Section 9 of the ESA prohibits certain activities that directly or indirectly affect endangered species. These prohibitions apply to all individuals, organizations and agencies subject to U.S. jurisdiction. Section 9 prohibitions apply automatically to endangered species.

Sections 7(a)(2) and (4) of the ESA require Federal agencies to consult with NMFS to ensure that activities they authorize, fund, or conduct are not likely to jeopardize the continued existence of a listed species or a species proposed for listing, or to adversely modify critical habitat or proposed critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with NMFS.

Examples of Federal actions that may affect white abalone include coastal development, oil and gas development, outfall construction and operation, and power plant permitting.

Sections 10(a)(1)(A) and (B) of the ESA provide NMFS with authority 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. The type of activities potentially requiring a section 10(a)(1)(A) research/enhancement permit include scientific research that targets white abalone; collection of adult white abalone for artificial propagation purposes and aggregation or relocation of white abalone to enhance the potential of natural propagation in the wild.

Section 10(a)(1)(B) incidental take permits may be issued to non-Federal entities performing activities that may incidentally take listed species, as long as the taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. The types of activities potentially requiring a section 10(a)(1)(B) incidental take permit include scientific research, not targeting white abalone, that incidentally takes white abalone, and the operation of power plants in a manner that incidentally takes white abalone.

NMFS Policies on Endangered and Threatened Wildlife

On July 1, 1994, NMFS, jointly with the U.S. Fish and Wildlife Service (FWS), published a series of policies regarding listings under the ESA, including a policy for peer review of scientific data (59 FR 34270) and 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.

Role of Peer Review

Before adopting the status review prepared under contract by SIO, NMFS submitted the review for peer review. NMFS shares a joint policy with FWS regarding the role of peer review of proposed listing determinations. The intent of the peer review policy is to

ensure that listings are based on the best scientific and commercial data available. Prior to a final listing, NMFS will solicit the expert opinions of at least three qualified specialists, concurrent with the public comment period. Independent peer reviewers will be selected from the academic and scientific community, Federal and state agencies, and the private sector.

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

NMFS and the FWS published in the **Federal Register** on July 1, 1994, (59 FR 34272), a policy that NMFS shall identify, to the maximum extent practicable at the time a species is listed, those activities that would or would not constitute a violation of section 9 of the ESA. The intent of this policy is to increase public awareness of the effect of this listing on proposed and ongoing activities within the species' range. If this rule is finalized, at that time NMFS will identify to the extent known, specific activities that will not be considered likely to result in violations of section 9, and activities that will be considered likely to result in violations. NMFS believes, based on the best available information, the following actions will not result in a violation of section 9:

1. Possession of white 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 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.

Activities that NMFS believes could potentially harm white abalone, and result in a violation of section 9 take prohibition include, but are not limited to:

1. Coastal development that adversely affects white abalone (e.g., dredging, oil and gas development).

2. Destruction/alteration of white abalone habitat, such as the harvesting of algae.

3. Discharges or dumping of toxic chemicals or other pollutants (e.g., sewage, oil, gasoline) into areas supporting white abalone.

4. Interstate and foreign commerce of white abalone and import/export of white abalone without a permit.

5. Collecting or handling of white abalone in the United States. Permits to conduct these activities are available for purposes of scientific research or to enhance the propagation or survival of the species.

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 white abalone under the ESA and its regulations. Questions regarding whether specific activities will constitute a violation of the ESA section 9 take prohibitions and general inquiries regarding prohibitions and permits should be directed to NMFS (see **ADDRESSES**).

Critical Habitat

Section 4(a)(3)(A) of the ESA requires that, to the maximum extent prudent and determinable, NMFS designate critical habitat concurrently with a determination that a species is endangered or threatened. While NMFS has completed its initial analysis of the biological status of white abalone, it has not performed the full analysis necessary for proposing a designation of critical habitat at this time. NMFS intends to develop a critical habitat proposal for white abalone within the next year, as soon as the analysis can be completed.

Public Comments Solicited

NMFS exercised its best professional judgement in developing this proposal to list white abalone. To ensure that the final action resulting from this proposal will be as accurate and effective as possible, NMFS is soliciting comments and suggestions from the public, other governmental agencies, the Government of Mexico, the scientific community, industry, and any other interested parties. NMFS is interested in any additional information concerning (1) biological or other relevant data concerning any threats to white abalone; (2) the range, distribution, and abundance of white abalone; (3) current or planned activities within the range of white abalone and their possible impact on white abalone; and (4) efforts being made to protect white abalone.

NMFS will review all public comments and any additional information regarding the status of white abalone and will complete a final determination within one year of publication of this proposed rule, as required under the ESA. The availability of new information may cause NMFS to reassess the status of white abalone.

Joint Commerce-Interior ESA implementing regulations state that the Secretary ''shall promptly hold at least one public hearing if any person so requests within 45 days of publication of a proposed regulation to list ...or to designate or revise critical habitat.'' (see 50 CFR 424.16(c)(3)). If a public hearing is requested, it would provide an opportunity for the public to give comments and to permit an exchange of information and opinion among interested parties. NMFS encourages the public's involvement in such ESA matters. Written comments on the proposed rule should be submitted to NMFS (see **ADDRESSES**).

References

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

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. 2d825 (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 (RFA) are not applicable to the listing process. In addition, this rule is exempt from review under Executive Order 12866. This rule does not contain a collection-of-information requirement for the purposes of the Paperwork Reduction Act.

Executive Order 13132—Federalism

In keeping with the intent of the Administration and Congress to provide continuing and meaningful dialogue on issues of mutual State and Federal interest, NMFS has conferred with the State of California in the course of assessing the status of white abalone, and considered, among other things, state and local conservation measures. California has expressed support for the conservation of white abalone. The content of this dialogue with the State of California as well as the basis for this proposed action, is described in the **SUPPLEMENTARY INFORMATION** section of this document. As the process continues, NMFS intends to continue

engaging in informal and formal contacts with California, and other affected local or regional entities, giving careful consideration to all written and oral comments received. NMFS also intends to consult with appropriate elected officials in the establishment of a final rule.

Critical Habitat

At this time, NMFS is not proposing to designate critical habitat for white abalone pursuant to ESA section 4(b)(2). Prior to proposing to designate critical habitat for white abalone, NMFS will comply with all relevant RFA requirements.

List of Subjects in 50 CFR Part 224

Endangered and threatened wildlife, Exports, Imports, Marine Mammals, Transportation.

Dated: May 1, 2000.

Andrew A. Rosenberg,

Deputy Assistant Administrator for Fisheries, National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 224 is proposed to be 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 added to read as follows:

§ 224.101 Enumeration of endangered marine and anadromous species.

* * * * *

(d) *Marine invertebrates*. White abalone (*Haliotis sorenseni*).

[FR Doc. 00–11285 Filed 5–4–00; 8:45 am]

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