

Commission's horizontal and vertical cable ownership limits. The deadline to file comments is extended from July 8, 2005, to August 8, 2005, and the deadline to file reply comments is extended from July 25, 2005, to September 9, 2005. The action is taken in response to a Motion for Extension of Time.

DATES: Comments are due on or before August 8, 2005; and reply comments are due on or before September 9, 2005.

ADDRESSES: You may submit comments, identified by MM Docket No. 92-264, by any of the following methods:

- Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Federal Communications Commission's Web site: <http://www.fcc.gov/cgb/ecfs/>. Follow the instructions for submitting comments.

- People with Disabilities: Contact the FCC to request reasonable accommodations (accessible format documents, sign language interpreters, CART, etc.) by e-mail: FCC504@fcc.gov or telephone: 202-418-0530 or TTY: 202-418-0432.

For detailed instructions for submitting comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Royce Sherlock, Industry Analysis Division, Media Bureau, (202) 418-2330 or Royce.Sherlock@fcc.gov; or Patrick Webre, Industry Analysis Division, Media Bureau, (202) 418-7953 or Patrick.Webre@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission's Order in MM Docket No. 92-264, released June 22, 2005. The full text of the Order is available for inspection and copying Monday through Thursday from 8 a.m. to 4:30 p.m. and Friday from 8 a.m. to 11:30 a.m. in the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, Room CY-A257, Portals II, 445 12th Street, SW., Washington, DC 20554. The complete text is also available on the Commission's Internet Site at <http://www.fcc.gov>. To request materials in accessible formats for people with disabilities (electronic files, large print, audio format and Braille), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (TTY). The complete text of the Order may also be purchased from the Commission's copy contractor, Best Copy and Printing, Inc., Portals II, 445 12th Street, SW., Room CY-B402, Washington, DC 20554, telephone (202)

488-5300 or (800) 378-3160, e-mail <http://www.BCPIWEB.com>.

Synopsis of the Order

1. On May 17, 2005, the Commission released its Second Further Notice of Proposed Rulemaking ("Second Further Notice") in the above-captioned proceeding.¹ The deadlines to file comments and reply comments were originally set as July 8, 2005, and July 25, 2005, respectively.

2. On June 10, 2005, the Media Access Project, filing on behalf of itself and other consumer groups, religious organizations and citizens groups ("MAP"), requested an extension of time until August 8, 2005, to file comments in response to the Second Further Notice, and until September 9, 2005, to file reply comments. MAP states that more time is needed because the Second Further Notice asks complex and detailed questions that would require extensive research and analysis to answer; public interest organizations have significant limits on their resources, preventing them from responding to such complex questions in a short period of time; and other conflicting commitments, including other proceedings, make the initial deadline impossible to meet for these groups.

3. It is the policy of the Commission that extensions of time are not routinely granted. However, there is good cause to extend the comment and reply comment deadlines. The Second Further Notice seeks comment on a broad range of proposals in the record, as well as recent developments in the industry, and the Commission has invited parties to undertake their own studies to further inform the record. In view of the complex and detailed questions and issues set forth in the Second Further Notice, and to assure the fullest possible public participation so that we can assemble a record that will help us to resolve the difficult issues in this proceeding, we find it appropriate to grant MAP's extension request and extend the deadlines for initial and reply comments to August 8, 2005, and September 9, 2005, respectively.

4. Accordingly, *it is ordered* that MAP's Request for Extension of Time to File Comments and Reply Comments in the above-captioned proceeding is granted.

5. *It is further ordered* that, pursuant to Sections 4(i), 4(j) and 5(c) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 154(j) and 155(c), and Sections 0.61, 0.283, and 1.46 of the Commission's rules, 47 CFR

0.61, 0.283, and 1.46, the date for filing initial comments in MM Docket No. 92-264 is extended until August 8, 2005, and the date for filing reply comments is extended to September 9, 2005.

List of Subjects in 47 CFR Part 76

Cable Television.

Federal Communications Commission.

Royce Sherlock,

Chief, Industry Analysis Division.

[FR Doc. 05-13148 Filed 7-5-05; 8:45 am]

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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; 90-Day Finding on a Petition To List the American Eel as Threatened or Endangered

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of petition finding and initiation of status review.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), announce a 90-day administrative finding on a petition to list the American eel (*Anguilla rostrata*) under the Endangered Species Act of 1973, as amended (Act). We find the petition presents substantial information indicating that listing the American eel may be warranted. We are initiating a status review to determine if listing the species is warranted. To ensure that the review is comprehensive, we are soliciting information and data regarding this species.

DATES: The administrative finding announced in this document was made on July 6, 2005. To be considered in the 12-month finding for this petition, data, information, and comments should be submitted to us by September 6, 2005.

ADDRESSES: Data, comments, information, or questions concerning this petition should be sent to Martin Miller, Chief, Division of Endangered Species, Region 5, U.S. Fish and Wildlife Service, 300 Westgate Center Drive, Hadley, MA 01035-9589; by facsimile to 413-253-8428; or by electronic mail to AmericanEel@fws.gov. The petition finding, supporting information, and comments are available for public inspection, by appointment, during normal business hours at the above address.

¹ 70 FR 33680 (rel. June 8, 2005).

FOR FURTHER INFORMATION CONTACT:

Heather Bell, at the above address (telephone 413-253-8645; facsimile 413-253-8428). Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800-877-8339, 24 hours a day, 7 days a week.

SUPPLEMENTARY INFORMATION:**Background**

Section 4(b)(3)(A) of the Act requires that we make a finding on whether a petition to list, delist, or reclassify a species presents substantial information to indicate that the petitioned action may be warranted. To the maximum extent practicable, this finding is to be made within 90 days of receipt of the petition, and the finding is to be published promptly in the **Federal Register**.

This finding summarizes information included in the petition and information available to us at the time of the petition review. Our review of a 90-day finding under section 4(b)(3)(A) of the Act and section 424.14(b) of our regulations is limited to a determination of whether the information in the petition meets the "substantial information" threshold. Our standard for substantial information with regard to a 90-day listing petition finding is "that amount of information that would lead a reasonable person to believe that the measure proposed in the petition may be warranted" (50 CFR 424.14(b)).

We have to satisfy the Act's requirement that we use the best available science to make our decisions. However, we do not conduct additional research at this point, nor do we subject the petition to rigorous critical review. Rather, at the 90-day finding stage, we accept the petitioner's sources and characterizations of the information, to the extent that they appear to be based on accepted scientific principles (such as citing published and peer reviewed articles, or studies done in accordance with valid methodologies), unless we have specific information to the contrary. Our finding considers whether the petition states a reasonable case for listing on its face. Thus, our 90-day finding expresses no view as to the ultimate issue of whether the species should be listed.

On November 18, 2004, the Service and the National Oceanic and Atmospheric Administration (NOAA Fisheries) received a petition, dated November 12, 2004, from Timothy A. Watts and Douglas H. Watts, requesting that the Service and NOAA Fisheries list the American eel as an endangered species under the Act. The petition contained detailed information on the

natural history of the American eel, its cultural use, population status, and existing threats to the species. Threats discussed in the petition included destruction and modification of habitat, overutilization, inadequacy of existing regulatory mechanisms, and other natural and manmade factors such as contaminants and hydroelectric turbines. The petition did not address potential threats caused by disease or predation. In response to the petitioners' request to list the American eel, the Service, as administrative lead for the species, sent a letter to the petitioners dated December 13, 2004, explaining that the Service, in coordination with NOAA Fisheries, would review the petition and determine whether or not the petition presents substantial information indicating that listing the American eel may be warranted. Jurisdiction for the American eel is jointly held by the Service and NOAA Fisheries, with the Service having administrative lead for processing this petition and working closely with NOAA Fisheries during the process.

Accompanying the petition, and incorporated by reference into the petition, is the Atlantic States Marine Fisheries Commission's (ASMFC) Interstate Fishery Management Plan for American Eel (2000). The ASMFC is an Interstate Compact of the 15 Atlantic Coast States (Maine to Florida) charged with managing interstate fisheries resources of the Atlantic Coast. The Compact was approved by the Congress of the United States in 1942 in Public Law 77-539, and authority was further amended by Public Law 81-721 and the Atlantic Coastal Fisheries Cooperative Management Act (Pub. L. 103-206). The Interstate Fishery Management Plan for the American eel (Management Plan) was developed by ASMFC in response to declining stocks of American eel and had input from the public and commercial fishing industry, as well as considerable technical scrutiny from the scientific community. The Service and NOAA Fisheries were involved in producing the Management Plan for the American eel, as representatives to the ASMFC Eel Technical Committee charged with developing the Management Plan. State agencies and an academic institution were also involved in developing this document, and it was approved by the ASMFC board that consists of representatives from the 15 Atlantic Coast States.

The Management Plan provides a detailed description of the life history, habitat requirements, the commercial fishery, population status, and threats to the American eel. The goals of the Management Plan are to protect and

enhance the abundance of American eels in both inland and territorial waters within ASMFC's jurisdiction, and to provide for sustainable commercial, subsistence, and recreational fisheries by preventing overharvest of any eel life stage.

For this finding, the Service utilized the petition and the Management Plan, which was incorporated into the petition by reference, and other petition appendices and references. Because of the rigor and integrity of the Management Plan, and the significance to the American eel of the geographic area covered by the Management Plan (the Gulf Stream transports the majority of larval American eel to the Atlantic Coast States), the Service relied on the petition and Management Plan in determining that the petitioned action may be warranted.

The ASMFC announced in March of 2004 that it is developing an amendment to the Management Plan to address continued stock declines. As part of the amendment process it committed to conduct a benchmark stock assessment in 2005, and requested that the Service and NOAA Fisheries conduct a status review of the American eel. Per this request, the Service agreed in September 2004, prior to receiving the petition, to conduct a rangewide status review of the American eel in coordination with NOAA Fisheries and the ASMFC.

Species Information

American eel are a migratory fish species with multiple life stages that migrate from freshwater to the ocean to spawn (a life history strategy known as "catadromy"). American eels require various habitats over their long-lifespan, including open oceans, large coastal tributaries, small freshwater streams, and lakes and ponds. They are opportunistic feeders at every level of the food chain. The North Atlantic is home to two recognized species of catadromous eel: the American eel and the European eel (*A. anguilla*). The range of the American eel includes western Atlantic drainages from Greenland to northern portions of South America, including most Caribbean Islands, the eastern Gulf of Mexico, and inland areas of the Mississippi River and the Great Lakes drainages. The majority of the American eel population is along the Atlantic seaboard of the United States. There is U.S. and international commercial harvest, limited subsistence use by Native Americans, and limited recreational interest in the American eel fishery.

Life History Characteristics

Reproduction and Growth

American eel eggs hatch in the Sargasso Sea, in the western Atlantic Ocean (for further description of the Sargasso Sea, see Habitat section below). The required environmental conditions for reproduction and the incubation period for the American eel are unknown (ASMFC 2000). The resulting larvae (leptocephali) drift in the upper 300 meters of the Gulf Stream for up to one year before reaching the North American continent (Kleckner and McCleave 1985, as in ASMFC 2000). At sea, perhaps at the edge of the continental shelf (Hardy 1978, as in ASMFC), the shape of the larvae dramatically changes as they metamorphose into miniature transparent glass eels (ASMFC 2000). American eel larvae may only be capable of undergoing metamorphosis during a specific window beginning after 6–8 months and remain capable for only 4–6 additional months (McCleave 1987, 1993, as in Castonguay *et al.* 1994b).

Glass eels actively migrate toward freshwater and ascend rivers during the winter and spring by drifting on flooding tides, holding position near the bottom on ebb tides, and actively swimming along the shore in estuaries above tidal influence (Facey and Van Den Avyle 1987; Barbin and Krueger 1994, as in ASMFC 2000). Migration to freshwater occurs earlier in the southern portion of the range and later in the northern portion (Helfman *et al.* 1984, McCleave and Kleckner 1982, as in ASMFC 2000), possibly due to the increased distance of northern areas from the Sargasso Sea.

Anadromous fish (*e.g.*, salmon and shad) spawn in freshwater but spend most of their lives at sea. As they mature, these fish usually return to their river of origin to repeat the cycle. Return rates and abundance are driven by prior spawning success, at sea survival, and environmental conditions. American eels are also highly migratory, but in the opposite direction. Adult eels migrate from freshwater to the ocean to spawn (catadromy). Since they are not returning to a home river, dispersion of juvenile “glass” eels back into freshwater is more likely dependant on environmental conditions, such as ocean and nearshore currents, river discharge rates, and temperature, as well as timing of larval metamorphosis (R. StPierre pers. comm. 2005).

Glass eels become elvers when they ascend into brackish or fresh water and become pigmented (McCleave and Kleckner 1982, as in ASMFC 2000).

Upstream migration may occur from May through October (Richkus and Whalen 1999, as in ASMFC 2000), peaking earlier in the southern and later in the northern portion of the range (Helfman *et al.* 1984, McCleave and Kleckner 1982, as in ASMFC 2000).

Elvers become yellow eels approximately 2 years after hatching and resemble the adult form. Yellow eels are usually yellow or green, and reach sizes up to about 11 in (28.0 cm) for males and 18 in (46 cm) for females (Hardy 1978, as in ASMFC 2000). The timing and duration of upstream migration is watershed specific, and upstream migration may occur in most months of the year (ASMFC 2000). The growth rates of yellow eels are variable, depending on latitudinal location (eels grow more slowly in the north than in the south) and habitat productivity (eels grow more slowly in freshwater than in estuarine areas because of the lack of productivity or nutrients in freshwater as compared to estuaries) (Richkus and Whalen 1999, as in ASMFC 2000).

The silver eel life stage, during which eels become sexually mature and begin their spawning migration, begins after 3, and up to 24 years as a yellow eel. Yellow eels, responding to some environmental or metabolic signal, begin to migrate downstream in the late summer or fall. As they proceed downstream, they transform into silver eels (Hardy 1978; Fahay 1978; Wenner 1973; Facey and Van Den Avyle 1987, as in ASMFC 2000). This transformation includes several physiological changes, including: (1) Silvering of the skin; (2) body fattening; (3) skin thickening; (4) eye enlargement and pigment change; (5) increased length of capillaries in the rete (a netlike structure) of the swim bladder; and (6) digestive tract degeneration (Facey and Van Den Avyle 1987).

Sex Ratio. There are several environmental variables that may influence age at sexual maturity, sexual determination, and the resulting ratios of females and males (juveniles are not sexually determined and at a certain stage may be hermaphroditic—being both sexes). In general, sexual differentiation does not occur until eels are about 8–10 in (20–25 cm) long (Dolan and Power 1977, as in Facey and Van Den Avyle 1987). Sexual maturity appears to occur at older ages and larger sizes in the northern portion of their range when compared with the southern portion, resulting in northern females being the most fecund and having a relatively long life span (Helfman *et al.* 1987, as in ASMFC 2000). Most sexually mature males are greater than 11 in (28 cm), and older than 3 years of age in the

northern populations. Information from the northern stocks indicates that most sexually mature females are greater than 18 in (46 cm), and older than 4 years of age (Hardy 1978, Fahay 1978, as in ASMFC 2000).

It has been hypothesized that sex determination, and the resulting differences in ratios and distribution, may be due to a variety of factors, including: (1) Latitudinal differences (females more abundant in northern areas: McCleave 1996, as in ASMFC 2000), (2) differences in salinity (females more abundant in freshwater: Facey and LaBar 1981, as in ASMFC 2000), (3) density dependency (more females in areas of low density: Fahay 1978, as in Facey and Van Den Avyle 1987), (4) timing (males returning to spawn earlier than females, and therefore finding it beneficial to stay in southern latitudes), or (5) energy use (slower growth, such as that which would occur in typically less productive areas of northern or inland areas, leads to larger size, and for females a higher fecundity: Helfman *et al.* 1987, as in ASMFC 2000).

Spawning. American eel fecundity can range between 0.5 to 21.9 million eggs per female and can be predicted based on female size (Facey and Van Den Avyle 1987, McCleave and Oliveira 1998, as in ASMFC 2000). High fecundity of the eel is consistent with an r-selected strategy that assumes high mortality of larval and subadult stages (Wenner and Musick 1974, Barbin and McCleave 1997, as in ASMFC 2000).

Adult American eels from throughout their range are believed to synchronize their arrival at the spawning grounds; however, little is known about the oceanic portion of the spawning migration, or mechanisms for locating the spawning grounds (Miles 1968, as in ASMFC 2000). The American eel may use the geoelectrical fields generated by ocean currents for orientation (Rommel and Stasko 1973, as in ASMFC 2000). The depth at which American eels migrate in the ocean has been hypothesized to vary with light intensity and turbidity (Edel 1976, as in ASMFC 2000). Migration has been suggested to occur within the upper few hundred meters of the water column (Kleckner *et al.* 1983, McCleave and Kleckner 1985, as in ASMFC 2000). However, Robins *et al.* (1979, as in ASMFC 2000) photographed two *Anguillid* eels, possibly pre-spawning American eels, at depths of about 6,500 ft (2,000 m) on the floor of the Atlantic Ocean in the Bahamas.

Some feature of the surface water mass of the Sargasso Sea, such as thermal fronts, may serve as a cue for

adult American eels to cease migration and begin spawning. Eels are thought to spawn in the winter and early spring in the upper few hundred meters of the water column of the Sargasso Sea (Kleckner *et al.* 1983, McCleave and Kleckner 1985, as in ASMFC 2000). After spawning, the spent eel is assumed to die (Facey and Van Den Avyle 1987).

The American eel and the European eel, considered separate species, both spawn in the Sargasso Sea, but a mechanism for separation, possibly location, depth, or timing of spawning, is unknown, and an area of overlap in spawning habitat is likely. Leptocephali of both species have been captured in the same trawl (McCleave *et al.* 1986b, as in Facey and Van Den Avyle 1987). Morphologically, the adult American and European eel differ in the number of vertebrae or myomeres. Larvae with the "American" and "European" myomere counts have partially separate but overlapping spatial and temporal distributions in the Sargasso Sea (Schmidt 1922, Schoth 1982, Schoth and Tesch 1982, Boëatius and Harding 1985a, b, McCleave *et al.* 1987, Kleckner and McCleave 1988, as in Avise 2003), indicating that spawning areas overlap to some degree. Both mitochondrial and nuclear gene evidence show that American and European eels belong to two largely separate gene pools (Avise 2003). Genetic data in conjunction with vertebral counts indicate that about 2 to 4 percent of the Icelandic eel are of American eel ancestry but do not appear to be strays, indicating a zone of hybridization between the two species (Avise 2003).

Genetic studies indicate that American eels are a single panmictic breeding population (Williams and Koehn 1984, as in ASMFC 2000), meaning that it is a single breeding population exhibiting random mating, and that offspring from any parents are capable of inhabiting any suitable habitat in any portion of the range. Recent analyses, however, may indicate genetic variation with latitude, suggesting that mating within the species is not panmictic in the strict sense and that dispersal of larvae is not entirely random with respect to where their parents resided in continental waters (Avise 2003).

Feeding Habits

American eels are carnivorous, and at various life stages and locations they feed on multiple trophic levels, such as zooplankton and phytoplankton as leptocephali, aquatic invertebrates as juveniles, and fish and crustaceans as adults (McCord 1977, Ogden 1970,

Wenner and Musick 1975, as in ASMFC 2000).

Range, Distribution, and Habitat

The American eel occupies fresh, brackish, and coastal waters along the Atlantic Ocean from the southern tip of Greenland to northeastern South America, the inland waters near the Caribbean, the eastern Gulf of Mexico, and inland to the Mississippi River and Great Lakes drainages. Important aspects of American eel life history, including spawning, larval development, and migration, occur in the open ocean. Successful migration of leptocephali (and thus recruitment) depends on oceanic conditions being suitable to transport the larvae to continental areas during the window of metamorphosis from larvae into glass eel on the Continental Shelf (see the Reproduction and Growth section of this document). The mean circulation in the vicinity of the spawning area tends to transport larvae westward, and eventually into the Gulf Stream system, which carries them north and east along the coast of North America (*i.e.* Florida to Canada) (McCleave 1993, as in Castonguay *et al.* 1994). Other currents may transport larvae in smaller numbers to the more southerly areas of the range, but the conditions under which this happens are unclear.

Elver habitat likely includes soft, undisturbed bottom sediments (Facey and Van Den Avyle 1987) and river currents appropriate for upstream migration (Tesch 1977; Sorensen 1986; Sorensen and Bianchini 1986, as in ASMFC 2000). Feeding and growth of yellow eels occur in estuaries and fresh waters over a period of many years (including offshore, midwater, and bottom areas of lakes, estuaries, and large streams) (Adams and Hankinson 1928, Facey and LaBar 1981, GLFC 1996, Helfman *et al.* 1983, NYSDEC 1997a & b, as in ASMFC 2000; Facey and Van Den Avyle 1987).

When American eels metamorphose into silver eels and migrate seaward to their spawning ground, they travel downstream mostly at night (Bigelow and Schroeder 1953, as in ASMFC 2000) and may inhabit a broad range of depths throughout the water column.

As mentioned earlier, spawning occurs in the Sargasso Sea, an oval area in the middle of the Atlantic Ocean, between the West Indies and the Azores (between 20° to 35° North Latitude and 30° to 70° West Longitude), composed of a nearly 5.2 million km² area. Although the boundaries are not easily delineated, the Sea is identified as the "eye" of a large, slow, clockwise moving gyre of clear, deep blue colored, warm surface

waters, with elevated salinity and low plankton production. The Gulf Stream provides the western boundary, which along with other ocean gyres (large circular currents in all the ocean basins), such as the North Equatorial Current, encircles the Sargasso Sea.

Knowledge of the specific spawning area for the American eel within the Sargasso Sea is based on the distribution of the smallest leptocephali, as adults have never been observed in the area. Miller (1995, as in ASMFC 2000) reported two major distribution patterns for leptocephali with the highest abundance in areas located near fronts in the west of the Subtropical Convergence Zone (STCZ) in the southwestern Atlantic. The smallest leptocephali were reported to have been collected near the Bahama Banks (the Bahamas) in the Florida Current and at stations close to the southerly fronts in the western STCZ.

Population Status

Historically, American eels were abundant in East Coast streams and estuaries, and thought to comprise more than 25 percent of the total fish biomass (Smith and Saunders 1955, Ogden 1970, as in ASMFC 2000). Although this species declined from the historic levels, the population remained relatively stable, some thought, until the 1970s (ASMFC 2000). Others, including the Southeastern Fishes Council Technical Advisory Committee, concluded, based on a review of 51 major drainages of the southern United States, that the regional stock of the American eel was stable (Warren *et al.* 2000) through the 1990s, and NatureServe, which utilizes occurrence data, listed many eel stocks in Atlantic States as stable in 2001 (NatureServe 2004).

According to the ASMFC (2000), the eel has lost much of its habitat along the eastern United States. As stated in the petition, the ASMFC states: "By region, the potential habitat loss [for American eel] is greatest (91 percent) in North Atlantic region (Maine to Connecticut) where stream access is estimated to have been reduced from 111,482 kilometers to 10,349 kilometers of stream length. Stream habitat in the Mid Atlantic region (New York through Virginia) is estimated to have been reduced from 199,312 km to 24,534 km of unobstructed stream length (88 percent loss). The stream habitat in the South Atlantic region (North Carolina to Florida) is estimated to have decreased from 246,007 km to 55,872 km of unobstructed stream access, a 77 percent loss."

Decreases have been noted in the commercial and recreational fisheries. Since the fisheries' peak in the mid 1970s at 3.5 million pounds, commercial landings have declined significantly to a near record low of 868,215 pounds in 2001. Recreational data concerning eel harvest also appears to indicate a decline in abundance. According to the National Marine Fisheries Service (now NOAA Fisheries) Marine Recreational Fisheries Statistics Survey, recreational harvest in 2001 was 10,805 eels, a significant decrease from the peak of 106,968 eels in 1982 (ASMFC 2000). Harvest data are often all that is available; however, taken alone without a measure of fishing effort, this type of data are not good indicators of eel abundance because harvest is dependent on demand, which can fluctuate dramatically (the number of commercial harvest permits issued per state can provide a surrogate for fishing effort, and understanding and adjusting for market fluctuations can provide a clearer picture of trends). Additionally, changes in year-class strength are not readily recognizable because most samples of eels include individuals of similar sizes, but from unknown year classes, and harvest of young yellow-phase eels for use as crab bait and as live bait for recreational fisheries frequently go unreported (Haro *et al.* 2000).

Richkus and Whalen (1999, as in ASMFC 2000) concluded that there is broad-based evidence for a decline of American eels from 1984 to 1995 based on a Mann-Kendall trend analysis of eel abundance time series on eel migration data, including data from the Moses-Saunders eel ladder. Their results indicate significant negative trends for yellow and/or silver eel abundance in Ontario, Quebec, New York, and Virginia. The authors found no trends for glass eel or elvers, but those data sets were generally not complete and may not have covered the years where the largest declines were observed in other data sets.

In Canada, different areas report seemingly opposing harvest data. Commercial landings in the Nova Scotia region of the Gulf of St. Lawrence and from Newfoundland show variability in yellow and silver eel landings, but no clear trend. By contrast, an upward trend is apparent in catches south of the Gulf of St. Lawrence, in the Canadian Atlantic/Bay of Fundy regions (threefold increase since the mid or late 1980s) (ICES 2000). According to Ontario's Ministry of Natural Resources, Lake Ontario, which had as many as 10 million eels two decades ago, now holds only tens of thousands. Ontario's

commercial eel harvest peaked at more than 500,000 lbs (250 tn) in 1978. The 30,000 lbs (15 tn) harvest in 2003 was a fraction of the 1978 harvest (Dohne 2004, as in petition).

The St. Lawrence River in Canada, one of the largest rivers in North America, has seen little or no recruitment for the last 10 years, with an estimate of only 1 percent of the stocks remaining in this area. This observation is partially based on the age of eels (which appear to be getting older, indicating a failure in recruitment) and the monitoring of abundance at the eel ladder at the Moses-Saunders Dam. Annual numbers of juvenile eels climbing the Moses-Saunders Dam eel ladder decreased from a peak of 1,293,570 in 1983, to 935,170 in 1985, and went as low as 11,533 eels in 1992 (a 99 percent decline in recruitment to Lake Ontario). Electrofishing surveys and waterfall surveys of tributaries to the Gulf of St. Lawrence also point to an eel recruitment decline between 1981 and 1985 of approximately 80–90 percent (Castonguay *et al.* 1994a). Lake Ontario scientific trawl surveys from 1972–1999 (except 1989) indicated a downward trend with catches in the last five years an order of magnitude lower than in the first five years of the survey (ICES 2000). These observed declines may have significant impacts on the eel rangewide, as the stock in the St. Lawrence River is made up primarily of large spawning females. There is concern that if their numbers are down, it may affect recruitment to the entire Atlantic Coast. John Casselman, researcher for the Ontario Ministry of Natural Resources, Canada, and others, hypothesize that a substantial proportion of large female spawners for this panmictic species are from the St. Lawrence system (ASMFC 2004). As a consequence of the observed decline, the Ontario Ministry of Natural Resources issued a moratorium in 2004 on commercial eel harvest for Ontario waters, and a moratorium on recreational eel harvest is forthcoming (Casselman pers. comm. 2005).

Recent information indicates that a decline in U.S. harvest continues. Based on 2002 harvest reports collected by the ASMFC, the long-term average (52 year period) for landings is down 64 percent, the more recent average (past 20 years) for landings is down 44 percent, and the most recent average (past 5 years) for landings is down about 30 percent (Geer 2004).

The information provided by the petitioners indicates that American eel populations have generally declined and the species has lost much of its habitat. Declines in eel populations

appear to be most dramatic in the Saint Lawrence, Lake Ontario, and northeastern states. In other areas, such as the southeast, declines may not be as severe and populations may be stable. Additionally, the American eel appears to have lost the majority of its stream habitat, ranging from 91 to 77 percent habitat loss in states bordering the Atlantic Ocean. Although much of the population trend information is based on harvest data without any measure of effort, we believe that the petitioner has provided substantial information indicating that the eel's population has declined on a regional basis, in addition to experiencing severe habitat loss.

Factors that may contribute to a possible population decline are habitat loss and degradation, overharvest, disease, structures impeding upstream and downstream passage, contaminants, and variable oceanic conditions (further discussed in Discussion of Listing Factors). Similar declines in the population of European and Japanese eels have been observed (Moriarty and Dekker 1997, Tatsukawa and Matsumiya 1999, as in Haro *et al.* 2000).

Discussion

In the following discussion, we respond to each of the major assertions made in the petition, organized by the Act's listing factors. Section 4 of the Act and its implementing regulations (50 CFR 424) set forth the procedures for adding species to the Federal list of endangered and threatened species. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1) of the Act. The five listing factors are: (1) The present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; and (5) other natural or manmade factors affecting its continued existence.

The petition provided specific information on the life history of the American eel, use of American eels by humans, population status, obstacles to river passage, mortality by hydroelectric turbines, and the impacts of contaminants, habitat loss, and harvest, as well as a discussion of inadequacy of existing regulatory mechanisms. Incorporated into the petition by reference was the ASMFC Interstate Fishery Management Plan for American Eel (Management Plan) (ASMFC 2000), which summarizes peer reviewed papers on the status of the species and recent and historical trends and

provides extensive information on the life history and the threats and impacts affecting various life stages of the species, in the eastern United States. Participating in the development of the Management Plan were the Service; Maine Department of Marine Resources; New Jersey Division of Fish; Game and Wildlife; Delaware Division of Fish and Wildlife; South Carolina Department of Natural Resources; Maryland Department of Natural Resources; and East Carolina University. This document was also approved by the ASMFC board, which consists of representatives from 15 Atlantic Coast States.

This 90-day finding is not a status assessment and does not constitute a status review under the Act.

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

The petition, its appendices, and referenced documents discuss the following threats which we have grouped under Factor A: (1) Seaweed harvest; (2) benthic habitat degradation; (3) alterations in stream flow; (4) loss of wetland habitat; and (5) loss of upper tributary habitat.

Seaweed Harvest

Information provided in the petition. The petitioner did not provide specific information on the effects of seaweed harvest on American eels. However, the Management Plan incorporated by reference discussed seaweed harvest as a possible emerging threat to the ocean spawning habitat.

Reproduction of all American eels occurs in the Sargasso Sea. One species of *Sargassum*, a brown algae that is commonly found floating in the Sargasso Sea and drifting along the Atlantic Coast from Florida to Cape Cod, was harvested in U.S. waters primarily by one company. The harvesting of *Sargassum* began in 1976, but has only occurred in the Sargasso Sea since 1987 (ASMFC 2000).

Analysis of the information provided in the petition and information in our files. The Management Plan proposes that the harvest of *Sargassum* may affect American eels (ASMFC 2000). From 1976 through 1998, approximately 44,800 lbs (dry) of *Sargassum* have been harvested, 33,500 lbs of which were from the Sargasso Sea (ASMFC 1998). The ASMFC stated that the harvesting of *Sargassum* was to be eliminated in the South Atlantic Exclusive Economic Zone (EEZ) by January 2001; however, a Management Unit for *Sargassum* was established in 2002 throughout the South Atlantic EEZ and State Waters that did not eliminate harvest, but

instituted timing restrictions and established specific areas where harvest is closed (ASMFC 2002). The remainder of the Sargasso Sea is outside of the EEZ and currently not subject to restriction.

It is conceivable that harvesting *Sargassum* would affect eggs and leptocephali, if harvest occurs where eggs and leptocephali are present. There is also the potential that migrating or spawning adults may be affected either directly or indirectly by the harvest of *Sargassum*. We agree that seaweed harvest may impact American eels. However, we are not aware of any analysis on the extent and impact of this activity on the American eel; therefore, we are unable to speak to whether seaweed harvest has caused or contributed to a decline in American eel.

Benthic Habitat Degradation

Information provided in the petition. The petitioner did not provide specific information on the effects of benthic habitat destruction on American eels. However, the Management Plan incorporated by reference discussed benthic habitat destruction as a possible threat within the Continental shelf habitat.

The Management Plan also explained that larval migration, feeding, and growth, and juvenile metamorphosis, migration, feeding, and growth all occur on the Continental Shelf. Glass eel growth, distribution, and abundance, according to the ASMFC, is probably impacted by a variety direct effects (e.g., channel dredging and overboard spoil disposal) and indirect effects (e.g., changes in salinity due to dredging) (ASMFC 2000).

Analysis of the information provided in the petition and information in our files. Glass eels and elvers burrow or rest in deep water during the day (Deelder 1958, as in ASMFC), and therefore may be susceptible to activities, such as dredging, that disturb those habitats. Channel dredging and overboard spoil disposal are common throughout the Atlantic coast. Changes in salinity as a result of dredging projects could alter the distribution of American eels. Additionally, dredging associated with whelk and other fisheries may damage benthic habitat for this species (ASMFC 2000). However, we are not aware of any analysis on the extent and impact of these activities on the American eel, and therefore, we are unable to speak to whether benthic habitat degradation has caused or contributed to a decline in the American eel.

Alterations of Stream Flow

Information provided by the petitioner. The petitioner did not provide specific information on the effects that alterations of stream flow have on American eels. However, the Management Plan incorporated by reference discussed alterations of stream flow as being a possible threat to their access to tributaries, which would limit upstream recruitment.

Elvers are small (4 in/10 cm or less in length) and are poor swimmers, initially utilizing tides when initiating upstream migration. Elvers orient to river currents for their upstream migration (Tesch 1977, as in ASMFC 2000). Their upstream migration is a slow process (Haro and Krueger 1988, as in Richkus and Whalen 1999, as in ASMFC, estimated upstream migration rates of 6 m/day), and if the current becomes too weak or too strong (changes in stream velocity), the eels may move into backwater areas, severely delaying upstream progress (Tesch 1977, as in ASMFC 2000). The onset of this active upstream migration appears to be influenced by several environmental variables (changes in water chemistry caused by intrusion of estuarine water, or changes in pH or salinity), or other environmental variables such as river current velocities, the odor of decomposing leaf detritus, or a temperature threshold (Facey and Van Den Avyle 1987, Sorensen and Bianchini 1986, as in ASMFC 2000).

Analysis of the information provided in the petition and information in our files. Altering stream flows, such as rapid changes in stream flow associated with hydroelectric project peaking operations and water storage facilities, may limit upstream recruitment according to ASMFC by affecting upstream migration (2000). However, we are not aware of any analysis on the extent and impact of alterations of stream flow on American eels, and therefore, we are unable to speak to whether alterations of stream flow have caused or contributed to a decline in the American eel.

Loss of Wetland Habitat

Information provided by the petitioner. The petitioner did not provide specific information on the effects of wetland habitat loss on American eels. However, the Management Plan incorporated by reference discussed loss of wetland habitat under decreased availability of important habitats.

Lost wetlands or access to wetlands have significantly decreased the availability of important habitats for

feeding and growth of American eel juveniles and subadults (ASMFC 2000). Ackerknecht *et al.* (1984, as in ASMFC 2000) reported in 1984 that over half (54 percent) of the coastal wetlands in the lower 48 states have been destroyed.

Analysis of the information provided in the petition and information in our files. Wetlands loss can be caused by filling and dredging, and coastal subsidence. Degradation of wetland habitat has occurred due to contaminants and the invasion of nonnative species. Although prior losses have been significant, regulations implemented in the 1970s have curbed declines by 42 percent. For example, all coastal States in the lower 48, except Texas, have enacted special laws to protect estuarine wetlands (Ackerknecht *et al.* 1984; Tiner 1991). The ASMFC (2000) reported that the historic loss of wetland habitat, along with loss of upper tributary habitat (discussed below), significantly decreased the availability of important habitats for the feeding and growth of American eels. However, the most significant loss of estuarine wetlands occurred before the decline in the American eel was reported. We agree that the loss of wetland habitat has likely impacted and may continue to impact American eels. However, because of the temporal discrepancy between the greatest wetland loss and the onset of a decline, we believe that the loss of wetland habitat is unlikely the single cause of the decline, but may have contributed to the decline in combination with other factors.

Loss of Upper Tributary Habitat

Information provided by the petitioner. The petitioners presented information on the decline of freshwater habitat available to American eels, stating that it has declined, having been destroyed, modified, or curtailed by at least 84 percent in the United States. This significant loss of habitat is due to blockage or restriction caused by dams.

In a Busch *et al.* (1998, as in ASMFC 2000) assessment, they determined that Atlantic coastal streams from Maine to Florida have 15,115 dams that can hinder or prevent upstream and downstream movement of eels, resulting in a restriction or loss of access to 84 percent of the stream habitat within the Atlantic Coastal historic range. This is a potential reduction from 345,359 miles (556,801 kilometers) to 56,393 miles (90,755 kilometers) of stream habitat available for species such as American eel. The greatest losses reported in Busch *et al.*'s study were in the North Atlantic region from Maine to Connecticut where potential habitat loss

is estimated at 91 percent. The South Atlantic region of North Carolina to Florida is estimated to have experienced a 77 percent loss of habitat (Busch *et al.* 1998, as in ASMFC 2000). Although elvers will attempt to scale wetted substrates, such as small dam faces, for many of the migrants, dams probably limit their ability to pass these structures (Tesch 1977, as in ASMFC 2000).

In Canada, the construction of the Moses-Saunders Dam in 1954–58 impeded upstream (and downstream) migration on the St. Lawrence River, restricting access by migratory fish from the Atlantic Ocean to Lake Ontario and the Finger Lakes system in New York for 20 years. An eel ladder, constructed at the dam in 1974, improved upstream passage (ASMFC 2000).

Analysis of the information provided in the petition and information in our files. Castonguay *et al.* (1994a) reviewed major habitat modifications as a potential cause for the drastic decline of American eels in the Lake Ontario and Gulf of St. Lawrence ecosystems. Anthropogenic (human-caused) habitat modifications in the Lake Ontario/St. Lawrence River ecosystem (such as the Moses-Saunders Dam) occurred mostly before the 1960s, whereas the eel recruitment decline started only in the early to mid 1980s. The lack of temporal correspondence between permanent habitat modifications argues, according to Castonguay *et al.* (1994a), against their role in the decline. However, they provide caution to accepting this explanation, because of the American eel's strikingly different life histories (panmictic, longer lived, and ocean spawning as compared to anadromous fishes); catadromous fishes (such as eel) are likely to respond more slowly to these anthropogenic impacts compared with anadromous fish populations.

Although along the U.S. Atlantic Coast there remains some available upstream habitat, unlike anadromous species such as herring or shad, American eels have no particular homing instinct. The implication here is that although rivers remain that allow for upstream migration, even if an adult female successfully migrates down her resident stream and spawns, the resulting young eels will not necessarily return to that stream and could, due to currents, be delivered to an area with upstream blockage. Returning to a stream with blockage does not necessarily eliminate survival (as the young can remain in the lower reaches and likely become male), but it may present increased risks of predation (predation may be significant at the

blockage where predatory fish may congregate).

Based on the information provided by the petitioner and an analysis of the information in our files, we agree with the petitioners' assertion that the decline in American eel may be in some part attributable to the loss of upper tributary habitat for female eel, and if not responsible for the decline initially, may well be a limiting factor as population numbers decrease.

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

Information provided by the petitioner. According to the petitioners, it is undisputed that overutilization through harvest of the American eel is occurring across the species' range in the United States and that along with habitat loss, harvest pressure is a primary cause of any possible historic and recent decline in abundance of the American eel (Castonguay *et al.* 1994a and 1994b, as in ASMFC 2000).

The U.S. commercial fishery has traditionally supplied American eels for the U.S. and European food markets, domestic trotline bait, bait for domestic sport fisheries, and (at times) the Asian food market. American eel fisheries exist in the United States, Canada, and to a lesser extent the Caribbean and Central America. American eel fisheries have fluctuated widely. For example, throughout the first half of the 20th century, the eel fishery was small; however, as European and Asian eel fisheries declined by the late 1960s, a strong market developed in the early 1970's for live American glass eel and elvers which range from 2–4 inches (Crawford 1996, as in ASMFC 2000). Eastern Asia has an intensive aquaculture industry (165,347 tn/150,000 t metric production) which is dependent upon and supported by wild-caught glass eel and elvers because artificial propagation of the species from fertilized egg to commercial size has not been successful (Moriarty and Dekker 1997, as in ASMFC 2000). Both glass and elver commercial eel fisheries are scattered throughout the American eel's range, with the present fishery concentrated in Maine (16,599 lbs landed in 1995; ASMFC 2000).

Yellow eel spend from 2 to 30 years in fresh and estuarine habitats before reaching sexual maturity and are harvested throughout that period. According to ASMFC (2000) they are thus susceptible to overharvest. Silver eels are sexually mature individuals and are harvested in freshwater and marine environments throughout their range.

During strong market periods, for instance in the 1970s and 1990's, legal shipment increases of over 153 and 230 percent, respectively, were recorded (ASMFC 2000). Annual harvest reported in the mid 1970's was in excess of 1,700 tons, and in the 1990's just under 14 tons. These harvests are likely less than the actual amount exported as underreporting has been an issue (underreporting has ranged from 3.6 to 261 percent) (ASMFC 2000). More recent information provided by the petitioner indicates that U.S. landings on the Atlantic Coast are down about 64 percent of the long-term average, possibly (Geer 2004).

Analysis of information provided in the petition and information in our files. Information in our files provides additional detail on the extent of the commercial and recreational American eel fishery. Few recreational anglers directly target eel, but eel are often purchased by recreational fishermen for use as bait for larger gamefish such as striped bass. From the Atlantic coast area surveyed, the estimated total annual catch of eel ranged from 212,690 eel in 1982 to 36,741 eel in 1997 (ASMFC 2000). Some recreational fishermen may catch eels for bait purposes directly, but not report such landings (ASMFC 2004).

Commercial exports of glass eels to Europe and Asia have led to enforcement problems due to high prices, low cost of entry to the fishery, and large numbers of participants. State agencies have focused enforcement efforts on take while federal efforts have been focused on foreign trade aspects of the fishery. A U.S. Fish and Wildlife Service, Division of Law Enforcement (USFWS-DLE) review of foreign trade of American eels from 1992 to 1996 revealed problems with reporting of catches and exports, with records for 1993 showing more than twice as many live American eels being exported as were reported caught in the U.S. Commercial eel harvest is reportedly one of the largest commercial fishing activities on the east coast due to the high economic incentives associated with glass eels. The commercial "on-the-street" price for glass eels from the Atlantic seaboard ranges from approximately \$600 per pound in the early fishery to \$100 per pound in the late fishery (USFWS-DLE pers. comm.).

Illegal take of glass eels and possibly other life stages were not recognized as a major problem until summer 1997. Numerous prosecutions for illegal fishing activity involving glass eels have taken place in state and federal courts since 1997. During the period March 1996 through March 1998, the Office of

Law Enforcement expended a great deal of man hours and effort focused on the protection of American eels. This period saw a marked increase in illegal activity involving American eels that was directly attributable to the black market value of elvers. Service investigations revealed that during this period poachers could easily expect to command in the neighborhood of \$350 per pound for eels, harvested at only about 2 to 4 inches long, that were then exported live to Asia and Europe (USFWS-DLE pers. comm.).

In 1999 the Office of Law Enforcement observed a nearly complete cessation of illegal activity involving American eels. This appears to be the result of a bottoming out of the black market value for elvers and not a reaction to previous enforcement activity. In 1999 commercial fisherman, who could legally harvest elvers in Maine, reported they were lucky to get \$20-\$22 a pound as compared to the \$350 per pound seen the year before. This drop in value apparently was the result of the preference of Asian consumers for the taste of juvenile Asian eels over American eels and the availability of farmed raised Asian eels. During this three year period, the Office of Law Enforcement conducted three separate but related investigations intended to detect and prosecute subjects involved in illegal commercialization of elvers. Current regulatory requirements make it difficult to document the number of glass eels in the commercial trade. The Atlantic States Marine Fisheries Commission has recommended that the Fish and Wildlife Service proceed with listing the American eel in Appendix III of CITES to allow for better monitoring of glass eel harvest and commercialization. Recently the price for elvers has risen to \$200 per pound (USFWS-DLE pers. comm.).

Shifts in population makeup are evident in the upper Chesapeake Bay in Maryland where harvest pressure is on larger eels. Weeder and Uphoff (2003) noted a shift in population makeup between the 1980s and 1990s toward younger, smaller eels being harvested. This is consistent with responses to increased size selective fishing pressure (i.e. large eels being exploited). Many exploited fish stocks decrease in size at maturity as a compensatory response (Trippel 1995, as cited in Weeder and Uphoff 2003). Harvest of large individuals unequally affects females. Eels below 40 cm in length are either male or female, but almost all eels greater than 40 cm are female. Additionally, suggests Weeder and Uphoff, smaller eels may be less

reproductively successful. If there were sufficient reduction in the reproductive contribution from particular areas, overall egg production would likely be impacted. Because larval dispersal is random, a decline in larval production would impact the entire species range, including those areas from which the reproductive contribution of spawners was high. Weeder's more recent work in association with Hammond (in review), stated that strong fishing pressure, which removes thousands of pound of eels per day from the small tidal estuaries they studied, is likely to cause reduced densities consistent with the demographics they observed. Median catch-per-unit effort (CPUE) of eels sampled in a fishery-independent survey of Chesapeake Bay's Sassafras River, a heavily fished system, dropped from 9 to 0 eels per eel pot (between 1981 and 1998) and median total weight dropped from 2.5k kg/pot to 0 kg/pot. Conversely, an increase in eel size was observed after fishing ceased in the Wye River. They concluded that the lower fecundity and number of spawning adults may reduce the amount of spawner biomass to unsafe levels.

Along with the commercial fishery in the U.S., an active commercial fishery exists in Canada. Yellow and silver eel catches are reported from the Lake Ontario/St. Lawrence River ecosystem as well as from the Gulf of St. Lawrence and from Atlantic Nova Scotia and the Bay of Fundy (ICES 2000). The mean annual catches of St. Lawrence River were 788 tn (715 t) in 1984 and 592 tn (537 t) in 1991. The periodic reporting of "river eel" catches in the Caribbean and Central American countries are believed to be glass eels/elvers caught for export. Information has only been collected since 1975 and may very well be underreported. The catches have ranged from 1.1 tn (1 t) (1975 in Mexico, 1988 and 1989 in Dominican Republic, and 1989 in Cuba) to 54 tn (49 t) (Dominican Republic in 1994) (ICES 2000).

In analyzing the effect of harvest on American eel abundance, there are various reasons the magnitude of the threat is difficult to determine. Most of the data on eel numbers come from commercial harvest data (or landings) where fishing effort is not always available and may consist of different year-classes which are not differentiable simply based on eel size (ASMFC 2000). Harvest is market driven and therefore high harvest years may reflect high market demand rather than increased abundance (likewise, low harvest numbers may indicate a low market demand rather than a decrease in abundance). Harvest of highly valued

glass eels or elvers to meet foreign aquaculture demands are likely underreported, and there is evidence of substantial illegal harvest and sale of glass eels and elvers having occurred through the 1990s on the Atlantic Coast (R. St. Pierre, pers. comm. 2005).

The absence of fishing effort information was identified by Castonguay *et al.* (1994a) as a major weakness in their assessment of commercial fishing and declines in the American eel. They analyzed trends in commercial eel landings in Canada and the United States and compared them to the timing of the decline. They concluded that there was little evidence that commercial fishing caused the decline.

Ongoing research by Chesapeake Bay area scientists, however, suggests that eels appear to be overfished. Fishing mortality has been estimated at two to four times natural mortality (Weeder, J. and J. Uphoff. In review). Although this does not point to the reason for the decline, it may indicate, at least in the Chesapeake Bay, an important area for American eels, current fishing pressure may be affecting future abundance.

There are several factors occurring on, and affecting the abundance of, multiple life stages (glass, elver, yellow, and silver) of American eel. These factors increase the risk that significant harvest pressure poses for the American eel population due to their life history. According to the ASMFC (2000), the following factors should be considered in any analysis of harvest effects: (1) American eels mature slowly, requiring 7 to 30+ years to attain sexual maturity (K. Oliveira, Univ. of Maine pers. comm., as in ASMFC 2000); (2) glass eels aggregate seasonally to migrate, making them more vulnerable to capture in large numbers (Haro and Krueger 1988, as in ASMFC 2000); (3) one year class of yellow eels are harvested over many years, resulting in high cumulative fishing mortality (Richkus and Whalen 1999, as in ASMFC 2000); (4) all harvest is pre-spawning (McCleave 1996, as in ASMFC 2000); and (5) changes in year class abundance are not readily recognizable, because harvest abundance data include eels of similar sizes but from a number of year classes (Ritter *et al.* 1997, as in ASMFC 2000), potentially masking declines.

In responding to the petitioners' assertion that commercial harvest is a threat to the American eel we were presented with differing analyses on whether and to what degree legal and illegal harvest is implicated in the decline, and complicating factors in determining harvest impacts. As part of our 12-month status review of the

American eel, we will determine the implications of these factors on the role of harvest on the eel's decline.

Information from the Chesapeake studies suggests that not only numbers, but eel size may well be important in determining the impacts of harvest, as have already been noted in the Chesapeake Bay. Because the petitioner and the ASMFC indicated that commercial harvest is a possible reason for the decline of the American eel and that at the 90-day finding stage we accept the petitioner's sources and characterizations of the information, to the extent that they appear to be based on accepted scientific principles, we conclude that commercial harvest likely effects American eel abundance, although it may not be solely responsible for its decline, and we conclude that commercial harvest is likely to impact the American eel in the future.

C. Disease or Predation

Information provided in the petition: The petition did not specifically provide information on disease and predation; however, the Management Plan incorporated by reference provided the information below.

Disease

American eels are afflicted by disease like any other species; however, one disease was specifically discussed by ASMFC as a potential threat to the overall health of the American eel. The non-indigenous eel swimbladder nematode (*Anguillicola crassus*) is a parasite native to marine and freshwater areas of eastern Asia, from Japan and China to Vietnam. Its native host is the Japanese eel (*Anguilla japonica*). The nematode has been documented to have significant negative impacts on European eels, and on American eels in Texas and South Carolina.

Analysis of information provided in the petition and information in our files. The swimbladder nematode was found in American eels (Barse and Secor 1999, as in ICES 2000) in 1997, but may have been present earlier. The nematode has been implicated with acute mortality in eels, as well as internal injury and growth impairment. Part of its life cycle occurs in the eel's swim bladder, and its departure through the swim bladder wall can cause injury and scarring. These effects on the swim bladder could impact a silver eel's ability to travel to the Sargasso Sea spawning grounds and thus its reproductive success (ICES 2000).

Although there is evidence that the parasite *Anguillicola crassus* causes negative impacts to *Anguilla* spp,

according to the International Council for the Exploration of the Sea (ICES) (2000), it is unlikely that there are substantial effects from the parasite on American eel abundance (because of the lack of temporal correspondence between the appearance of the parasite and American eel declines).

Predation

American eel juveniles and adults are a seasonal food item of various finfish, and data are available that indicate eels are preyed on by fish-eating birds and mammals such as mink (Sinha and Jones 1967, Seymour 1974, as in ASMFC 2000). Younger life stages may also provide a food source.

Analysis of information provided in the petition and information in our files. Under conditions of abundance, impacts from predation would not be of concern; however, when populations are declining, or particular life stages are experiencing heavy predation, the impact of what were typical stresses may be magnified. The information provided and available in our files is, however, insufficient to determine the role of predation in the decline of the American eel.

D. The Inadequacy of Existing Regulatory Mechanisms

The petition stated that State and Federal agencies have not adequately regulated (1) fish passage, or (2) harvest and trade, leading to a decline in population numbers and range of the American eel.

Fish Passage

Information provided by the petitioner. The petitioners stated that under the authority of the Federal Power Act, the Federal Energy Regulatory Commission (FERC) can immediately stop the killing of adult female American eels in hydroelectric turbines in the United States, but have failed to do so. They also state that the Service and NOAA Fisheries, pursuant to Section 18 of the Federal Power Act, have the legal authority to require the licensees of private hydroelectric dams to provide safe and efficient upstream and downstream passage for American eels. The petitioners allege that, to date, neither agency has exercised this legal authority. Additionally, the petitioners state that pursuant to the Federal Clean Water Act, the Environmental Protection Agency (EPA) has the legal authority to require the licensees of private hydroelectric dams to provide safe and efficient upstream and downstream passage for American eels. Allegedly, to date, the EPA has declined to exercise this legal authority. Finally,

the petitioners were not aware of any instance in Maine or Massachusetts where these States have required by law the safe and efficient passage of American eels at non-hydroelectric dams, despite fish passage statutes which allow the States to make such requirements. Also, the petitioners questioned whether other States had statutes requiring safe and efficient passage of juvenile American eels at non-hydroelectric dams and whether such statutes were being enforced.

Analysis of information provided in the petition and information in our files. Safe upstream and downstream passage, which the petitioner alleges lacks adequate regulatory mechanisms, is standard when special licenses are required. For example, dams for hydropower production and navigation provide opportunities for fish passage when required by the resource management agencies, such as the Service. The Service takes every opportunity available to insure that safe upstream and downstream passage is prescribed for American eels under the Federal Power Act during relicensing of hydroelectric power facilities that are under the purview of FERC. NOAA Fisheries has exercised its legal authority under the Federal Power Act to prescribe fishways for eels at select projects. However, not all hydroelectric power facilities are currently equipped with structures that ensure safe upstream and downstream passage. Of the 15,570 dams on the Atlantic Coast only 1,100 dams were identified for hydropower production and 50 for navigation. Therefore, over 90 percent of the dams in the range of the American eel, including those for water-level control, water supply, and recreation, do not necessarily have Federal licensing requirements (ASMFC 2000), but not all these structures would be considered barriers.

To the extent that we find safe upstream passage (Factor A. Access to upper tributary habitat) and downstream passage (Factor E. Hydropower turbines) may be responsible in part for the decline of the American eel, we concur with the petitioners that the existing regulations for facilities preventing safe up and downstream passage may be inadequate or not exist because the vast majority of these dams do not have Federal licensing requirement, and therefore, may be partly responsible for the decline of the American eel.

Harvest and Trade

Information provided by the petitioner. The petitioners stated that under the authority of the Magnuson-

Stevens Fisheries Conservation and Management Act, the ASMFC can immediately prohibit the harvest of American eels in the waters of the United States from Maine to Florida, and asserted that they have not exercised this authority.

Analysis of information provided in the petition and information in our files. The Magnuson Stevens Fisheries Conservation and Management Act does not apply as indicated by the petitioner. The Atlantic Coastal Fisheries Cooperative Management Act does allow for emergency actions to be taken by the ASMFC and obligates States to implement the emergency actions (e.g., harvest restrictions). To address concerns regarding coastwide declines in American eel abundance, the ASMFC's American Eel Management Board authorized development in March 2004, of an Amendment to the Interstate Fishery Management Plan for American eel, which may include changes in harvest restrictions for recreational and commercial fisheries. However, these are not currently in place, and a large number of eel use areas/habitats are outside the jurisdictional boundaries of the State agencies within the purview of the ASMFC. These include watersheds in the Canadian Atlantic Provinces of Quebec and Ontario, upstream freshwater reaches managed by inland fish and wildlife agencies, regional institutions such as the Gulf States Marine Fisheries Commission and Great Lakes Fishery Commission, and those waters within Native American Reservations where Tribal Governments have jurisdiction. To date, of these other jurisdictions, only the Province of Ontario, Canada, has placed a moratorium on the harvest of American eels.

Currently, Atlantic Coast states differ in their eel harvest regulations, such as variations in the minimum size of harvestable eel, dates of harvest, and fishing gear. Few states have defined fishing seasons and limited management over the eel fishery (ASMFC 2000).

The ASMFC also recommended in the Management Plan that the Secretary of Commerce address and initiate controls over harvest and use of American eels in Federal waters (3–200 nautical miles offshore) that are not landed in States' waters. Specifically, the ASMFC recommended that the Secretary of Commerce ban harvests of American eels at any life stage in the EEZ, but permit the possession of up to 50 eel per person as bait. NOAA Fisheries does not now have a fishery management plan for eels and does not manage the fishery in the EEZ.

In summary, although individual jurisdictions have taken some action in response to the decline of the American eel (Canada's moratorium on commercial harvest in Ontario) or are considering changes (ASMFC Amendment 1), there are both gaps in the ability of current regulations to address threats (varied state regulations), and as the petitioners pointed out, limited implementation of existing regulatory mechanisms (limited and varying state restrictions on eel harvest, harvest within the EEZ). To the extent we find that commercial harvest (Factor B. Overutilization for commercial, recreational, scientific, or educational purposes) may be responsible in part for the decline of the American eel, the existing regulations may be inadequate or nonexistent and therefore partly responsible for the decline of the American eel.

E. Other Natural or Manmade Factors Affecting Continued Existence

The petition, its appendices, and referenced documents discuss the following threats which we have grouped under Factor E: (1) Hydropower turbines; (2) displacement by or competition with nonnative species; (3) contaminants; and (4) changes in oceanographic conditions.

Hydropower Turbines

Information provided by the petitioners. According to the petitioners, radio tagging studies of migrating female American eels conducted by the Maine Department of Marine Resources (MDMR) at two hydroelectric dams in Maine indicate nearly 100 percent of adult female eels entering project turbines are killed or severely injured, and therefore unable to complete their spawning migration (MDMR 2002, as in petition). Additionally, the Petitioner's state, "Radio-tracking of adult American eels by Maine Department of Marine Resources just above the Lockwood hydro-electric project on the Kennebec River during fall 2002 indicates that 40 percent or more of the adult American eel attempting to migrate past the Lockwood Project each fall are entrained and killed in the Lockwood Dam turbines, despite the availability of the project spillway for passage (MDMR 2003). According to the petitioner, the entrainment and death of eels in the turbine is not a recent issue. The petitioners' state that records of severe kills of female American eels by the turbines of hydro-mechanical and hydroelectric dams exist since as early as the 1880s.

Downstream passage of silver eels is stated by ASMFC (2000) as a problem in

streams with hydropower turbines. According to Ritter *et al.* (1997, as in ASMFC), the 1,100 hydropower dams on the eastern seaboard of the United States may represent a major source of mortality to pre-spawning adults and represent approximately 7 percent of the dams on the eastern seaboard. According to the petitioners, virtually none of these hydropower facilities provide safe passage for migrating female American eels. As a result, downstream passage by female American eels at these facilities is via the project turbines, which results in the death of female eels attempting to migrate. According to Hadderingh (1990, as in ASMFC) and McCleave (pers. comm., as in ASMFC), if eels have to pass through turbines in their downstream migration, mortality rates range from 5 to 60 percent depending on the flow through the turbines and the length of the individual.

Analysis of information provided in the petition and information in our files. We agree with the petitioners' assertions that rivers with hydropower turbines are a documented threat to female American eels as they leave the rivers to spawn and may be a threat to the species as a whole. Although hydropower turbines are on less than 7 percent of the rivers, this mortality may be playing a larger role as the population declines (because as the population declines, gravid females become a vital resource and a high percentage of these individuals are lost to hydropower turbines). Additionally, not all hydroelectric power facilities are currently equipped with structures that ensure safe upstream and downstream passage. There is particular concern that the St. Lawrence River/Lake Ontario stock, a significant (possibly 19 percent of total female spawners) source of old, large, fecund female spawners (Castonguay *et al.* 1994a), is impacted by turbines at the Moses-Saunders and Beauharnois-Les Cédres hydroelectric complex on the St. Lawrence River.

Displacement by or Competition With Nonnative Species

Information provided by the petitioners. The petitioner did not provide information on the impact of displacement by or competition with nonnative species. Rather, what is presented below is recent information from a petition reference on a potentially emerging threat.

Two nonnative species may be impacting American eels, the flathead catfish (*Pylodictis olivaris*) and the blue catfish (*Ictalurus furcatus*), both native to the Mississippi River watershed. These two species, according to the

minutes from the 2004 ASMFC meeting, have exploded in certain areas, having been introduced as recently as the early 1980s in some systems. They have displaced some of the indigenous catfish species. There has been speculation from some research done at Virginia Commonwealth University that they have a large impact on the shad population and potentially on the American eel population as well (ASMFC 2004). Because no additional information was presented or available in our files at this time, we are unable to analyze further the impact of displacement by or competition with nonnative species on American eels.

Contaminants

Information provided by the petitioners. As the petitioners state, American eels are benthic, long-lived, and lipid (fat) rich (bioaccumulation of many toxins occurs in the fat of the fish). Therefore, American eels can accumulate high concentrations of contaminants, potentially causing an increased incidence of disease and reproductive impairment than is found in other fish species (Couillard *et al.* 1997, as in ASMFC). Studies have shown bioaccumulation of mercury and other heavy metals, dioxin and chlordane, polychlorinated biphenyls (PCBs) and dichlorodiphenyltrichloroethane (DDT) in American eels.

An analysis of the contaminants in migrating silver eels in the St. Lawrence River showed that the highest concentrations of chemicals were in the gonads. Concentrations of PCB and DDT were found to be 17 percent and 28 percent higher in the gonads than in the carcasses. The chemical levels in the eggs could exceed the thresholds of toxicity for larvae. Also, since the migrating females are not feeding, the chemical levels in the eggs could be even higher at hatching, increasing the likelihood of toxicity to the larvae (Hodson *et al.* 1994, as in ASMFC 2000). According to ASMFC (2000), in the St. Lawrence River migrating silver eels, vertebral malformations and basophilic foci (lesions) in the liver were found to be most common in contaminated eels (Couillard *et al.* 1997, as in ASMFC 2000).

Aside from bioaccumulation, ASMFC expressed concern over accidental spills and mosquito abatement practices and their effect on eels. Accidental release of toxins into the Rhine River in 1986 killed hundreds of thousands of European eels (Facey and Van Den Avyle 1987, as in ASMFC 2000). Toxicity studies of aquaculture chemical effects on various life stages of

the American eel suggest increased tolerance with size and age (Hinton and Eversole 1978, 1979, 1980, as in ASMFC 2000). A relatively new, specific area of concern deals with coastal wetlands and the potential impact caused by spraying insecticides for mosquito control at the time glass eels enter these areas (ASMFC 2000).

Analysis of information provided in the petition and information in our files. Contaminants clearly accumulate in American eels at high levels. Some evidence indicates that contaminant levels may be high enough to be toxic to larvae and possibly affect the health of adult migrating eels. However, we were not presented with information, nor did we have information in our files, on the level of risk to the species from different contaminants. Declines in recruitment in the St. Lawrence River (and in Europe), according to Castonguay *et al.*, do not coincide with periods of maximum contamination by organochlorine compounds (Castonguay *et al.* 1994a; Knights 1996, as in ICES 2000), and ICES stated that spawners would still be available from uncontaminated areas (ICES 2000). Therefore, in responding to the petitioners' assertion that contaminants are a threat to the American eel, we can agree that individual American eel and their young are likely at risk from certain contaminants: however, the petitioners did not provide substantial information nor do we have any in our files supporting this assertion. Therefore we are unable to support, at this time, the assertion that contaminants are a threat to the species at a population level.

Changes in Oceanographic Conditions

Information provided by the petitioner. The petition did not specifically provide information on the effects that changes in oceanographic conditions are having on American eel abundance and distribution, but the Management Plan incorporated by reference provided the information below.

The ASMFC lists changes in oceanographic conditions as a concern to the ocean habitat of the American eel. The spatial and temporal distribution of leptocephali is a result of oceanic circulation patterns and the drifting behavior of the larvae, and therefore potential changes in oceanographic conditions that influence the transport of leptocephali may have an impact on juvenile recruitment to coastal tributaries, potentially impacting an overall year class (McCleave 1998; Castonguay *et al.* 1994b, as in ASMFC 2000). Castonguay *et al.* (1994a, as in

ASMFC 2000) suggests that a weak, slow Gulf Stream would cause larvae to miss the optimum period for metamorphosis and be lost to the population. Castonguay *et al.* (1994a, as in ASMFC 2000) also suggests that recent cooling events and oceanographic changes in the northwest Atlantic may have altered the currents or other processes that carry glass eel to the continent.

Analysis of information provided in the petition and information in our files. Eels are expected to be even more affected by North Atlantic climatic changes than most marine species as the relative strength and position of the Gulf Stream is vital for their dispersal and successful migration, and the species consists of a single spawning population which may depend on the strength or location of thermal ocean fronts to trigger spawning. Evidence of historic population contractions is presented for both the American eel and the European eel. Most of these events probably occurred during the Wisconsinan glaciation 20,000 years ago, which changed ocean circulation, thereby reducing the speed of the Gulf Stream (Duplessy 1999, Lynch-Stieglitz *et al.* 1999, as in Wirth and Bernatchez 2003), and moved the gyre boundary and associated currents further to the south (Keffer *et al.* 1988, as in Wirth and Bernatchez 2003).

However, the degree to which recent (within the last 30–40 years) oceanic changes have contributed to the American eel population decline is still being debated. Castonguay *et al.* (1994a) evaluated the role of oceanic variations in the decline of both the American and European eel, and although they could not test the hypothesis of reduced recruitment directly, they found the most important result of their analysis to be the similarity between North America and Europe in both the rate of decline of these two eel species and the year in which the decline began. That such declines could be due to simultaneous and equivalent habitat, pollution, or fishing pressures, they say, is unlikely. Rather they conclude that the most probable cause is an oceanic factor acting simultaneously on both species.

We would concur with the ASMFC that changes in oceanographic conditions (*i.e.* changes in the strength and direction of ocean currents “in particular the Gulf Stream) may have an impact on juvenile recruitment to coastal tributaries, particularly those on the Atlantic seaboard. Also, because of the lack of information in our files to the contrary, we concur that changes in oceanic conditions may be a reason for

a decline in the American eel abundance and their distribution, whether taken singly or in combination with other factors discussed above.

Summary

It is reasonable to infer, as the petitioners proposed and scientifically supported, that the American eel is experiencing a decline. The petitioner also provided information on possible reasons for this decline which are generally not refuted, but more often are validated by the information in our files, which suggests that the listing action may be warranted. Our review of the ASMFC 2000 Management Plan (which the petitioner incorporated by reference and which the Service and NOAA Fisheries, State representatives, and academics were involved with writing), with regards to the life history of the species, potential threats to the various life stages of this species, and the habitats it utilizes, provided us with a range of potential causes for the decline and the likely effects to the species. These potential threats and effects provided by the petitioner were supported by scientific research with gaps in information acknowledged.

The complex life history and the incompleteness of historical data (abundance, stock composition, life stage mortality rates, and exploitation rates) make it challenging at this time to understand the potential influence of the numerous individual threats, and threats acting in a cumulative fashion or synergistically. Individual and cumulative effects of these threats upon the American eel may be magnified as the species' abundance declines, and as proposed by Wirth and Bernatchez (2003), there may be a synergistic effect of the short- and long-term threats faced by the species because of its peculiar life history.

Further analysis of oceanic variations is necessary particularly in light of the scant direct evidence and the potential for oceanic variations to be compounding or confounding the impact of other threats. Commercial harvest, habitat loss and degradation (primarily the loss of wetlands and upper tributary habitat), hydropower turbine mortality, and inadequacy of existing regulatory mechanisms, may also have caused or contributed to the decline of the American eel. Other potential threats, such as seaweed harvest, benthic habitat destruction, alterations of stream flow, disease, predation, and contaminants, could not be fully addressed or supported.

Finding

On the basis of our review, we find that the petition presents substantial scientific and commercial information indicating that listing the American eel may be warranted. The main threats to the species presented by the petitioner and supported by the information they provided appear to be commercial harvest, habitat loss and degradation due to loss of wetlands and upper tributary habitat, hydropower turbine mortality, changes in oceanic conditions, and inadequacy of existing regulatory mechanisms.

Public Information Solicited

When we make a finding that substantial information is presented to indicate that listing a species may be warranted, we are required to promptly commence a review of the status of the species. To ensure that the status review is complete and based on the best available scientific and commercial data, we are soliciting information on the American eel. We request any additional data, comments, and suggestions from the public, other concerned governmental agencies, Native American Tribes, the scientific community, industry, or any other interested parties concerning the status of the American eel. We are seeking information regarding the species' historical and current status and distribution, its biology and ecology, ongoing conservation measures for the species and its habitat, and threats to the species and its habitat.

Finally, if we determine that listing the American eel is warranted, it is our intent to propose critical habitat to the maximum extent prudent and determinable at the time we would propose to list the species. Therefore, we request data and information on what may constitute physical or biological features essential to the conservation of the species, where these features are currently found and whether any of these areas are in need of special management, and whether there are areas not containing these features which might of themselves be essential to the conservation of the species. Please provide specific comments as to what, if any, critical habitat should be proposed for designation, if the species is proposed for listing and why that proposed habitat meets the requirements of the Act.

If you wish to comment or provide information, you may submit your comments and materials concerning this finding to the Division of Endangered Species (*see* ADDRESSES section).

Our practice is to make comments and materials provided, including names and home addresses of respondents, available for public review during regular business hours. Respondents may request that we withhold a respondent's identity, to the extent allowable by law. If you wish us to withhold your name or address, you must state this request prominently at the beginning of your submission. However, we will not consider anonymous comments. To the extent consistent with applicable law, we will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the address listed above under **ADDRESSES**.

Literature Cited

A complete list of all references cited herein is available, upon request, from the Hadley, Massachusetts, Regional Office (see **ADDRESSES** section above).

Author

The primary author of this notice is Heather Bell, Hadley, Massachusetts, Regional Office (see **ADDRESSES** section above).

Authority: The authority for this action is the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Dated: June 21, 2005.

Matt Hogan,

Acting Director, Fish and Wildlife Service.
[FR Doc. 05-12971 Filed 7-5-05; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 223

[Docket No. 050323081-5081-01; I.D. 031505C]

RIN 0648-AT02

Endangered and Threatened Species: Extension of Public Comment Period on Proposed Listing Determination for the Southern Distinct Population Segment of North American Green Sturgeon

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

ACTION: Proposed rule; extension of public comment period.

SUMMARY: In April 2005, NMFS proposed to list the Southern Distinct Population Segment (DPS) of the North American green sturgeon (*Acipenser medirostris*; hereafter "green sturgeon") as threatened under the Endangered Species Act. NMFS is extending the public comment period on the proposed listing determination until July 27, 2005.

DATES: The due date for written comments is extended to July 27, 2005.

ADDRESSES: You may submit comments on the proposed rule by any of the following methods:

- E-mail:

GreenSturgeon.Comments@noaa.gov.

- Federal e-Rulemaking Portal: *http://www.regulations.gov.* Follow the instructions for submitting comments.

- Mail: Submit written comments to Chief, Protected Resources Division, Southwest Region, National Marine Fisheries Service, 501 West Ocean Blvd., Suite 4200, Long Beach, CA, 90802-4213.

- Fax: 562-980-4027.

The updated green sturgeon status review and other reference materials related to the proposed rule can be obtained via the Internet at: *http://www.swr.noaa.gov.* The updated status review and list of references are also available by submitting a request to the Assistant Regional Administrator, Protected Resources Division, Southwest Region, NMFS, 501 West Ocean Blvd., Suite 4200, Long Beach, CA 90802-4213, or the Assistant

Regional Administrator, Protected Resources Division, Northwest Region, NMFS, 1201 NE Lloyd Avenue, Suite 1100, Portland, OR 97232.

FOR FURTHER INFORMATION CONTACT:

Melissa Neuman, NMFS, Southwest Region (562) 980-4115; Scott Rumsey, NMFS, Northwest Region (503) 872-2791; or Lisa Manning, NMFS, Office of Protected Resources (301) 713-1401.

SUPPLEMENTARY INFORMATION:

Background

On April 6, 2005, NMFS published a proposed ESA listing determination for the Southern DPS of green sturgeon (70 FR 17386). The proposed rule was based on: information showing that spawning adults are concentrated into one spawning river (i.e., Sacramento River), thus, increasing the risk of extirpation due to catastrophic events; threats that remain severe and have not been adequately addressed by conservation measures currently in place; fishery-independent data exhibiting a negative trend in juvenile green sturgeon abundance; and information showing evidence of lost spawning habitat in the upper Sacramento and Feather Rivers. With the publication of the proposed listing determination, NMFS announced a 90-day public comment period ending on July 5, 2005. On June 20, NMFS announced that it would hold a public hearing (70 FR 35391) on July 6 in Sacramento, CA, and extended the public comment period to July 6 to coincide with the public hearing.

Extension of Public Comment Period

NMFS has received a request from a U.S. Department of the Interior to extend the public comment period by 2 weeks. In this notice NMFS is extending the public comment period by three weeks, and now comments will be accepted until July 27, 2005.

References

Copies of the **Federal Register** notices and related materials cited in this document are available on the Internet at *http://swr.noaa.gov*, or upon request (see **ADDRESSES**).

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

Dated: June 30, 2005.

Wanda L. Cain,

Acting Director, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 05-13264 Filed 7-5-05; 8:45 am]

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