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## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

#### 50 CFR Part 17

[Docket No. FWS-R6-ES-2009-0027; 92220-1113-0000; ABC Code: C3]

RIN 1018-AW27

#### Endangered and Threatened Wildlife and Plants; Threatened Status for Shovelnose Sturgeon Under the Similarity of Appearance Provisions of the Endangered Species Act

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Final rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service, determine it necessary to treat shovelnose sturgeon (*Scaphirhynchus platyrhynchus*) as threatened due to similarity of appearance to the endangered pallid sturgeon (*Scaphirhynchus albus*) under the similarity of appearance provisions of the Endangered Species Act of 1973, as amended. The shovelnose sturgeon and the endangered pallid sturgeon are difficult to differentiate in the wild and inhabit overlapping portions of the Missouri and Mississippi River basins. Commercial harvest of shovelnose sturgeon has resulted in the documented take of pallid sturgeon where the two species coexist and is a threat to the pallid sturgeon. This determination to treat shovelnose sturgeon due to similarity of appearance will substantially facilitate law enforcement actions to protect and conserve pallid sturgeon. This rule extends take prohibitions to shovelnose sturgeon, shovelnose-pallid sturgeon hybrids, and their roe when associated with a commercial fishing activity in areas where pallid sturgeon and shovelnose sturgeon commonly coexist. Accidental or incidental capture of pallid or shovelnose sturgeon, or shovelnose-pallid sturgeon hybrids, in commercial fishing gear will not be considered take provided the sturgeon

are immediately released to the wild at the point where taken with roe intact.

**DATES:** This rule becomes effective on October 1, 2010.

**FOR FURTHER INFORMATION CONTACT:** George Jordan, Pallid Sturgeon Recovery Coordinator, 2900 4th Avenue North, Room 301, Billings, Montana 59101 (telephone (406) 247-7365; facsimile (406) 247-7364). Public comments and literature referenced in association with this rule are available at <http://www.regulations.gov> at Docket No. FWS-R6-ES-2009-0027 and at the above office, by appointment, during normal business hours. 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

In 1990, the U.S. Fish and Wildlife Service (Service) listed the pallid sturgeon (*Scaphirhynchus albus*) as endangered under the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 *et seq.*) (55 FR 36641, September 6, 1990). The pallid sturgeon has a flattened, shovel-shaped snout, possesses a long and slender and completely armored caudal peduncle, and lacks a spiracle and belly scutes (Forbes and Richardson 1905, pp. 38-41). The pallid sturgeon is a bottom-oriented species found only in portions of the Missouri and Mississippi River basins (Kallemeyn 1983, p. 4). The species can be long-lived (40 plus years), with females reaching sexual maturity later than males (Keenlyne and Jenkins 1993, pp. 393, 395). Pallid sturgeon at the northern end of their range can attain sizes (both length and weight) much larger than pallid sturgeon at the southern end of their range (Service 1993, p. 3). Current known threats to the pallid sturgeon include habitat modification, small population size, limited natural reproduction, hybridization, pollution and contamination, entrainment, and commercial harvest (Service 2007, pp. 38-59).

The pallid sturgeon and the shovelnose sturgeon are both members of the genus *Scaphirhynchus*. These sturgeon can be difficult to differentiate in the wild and inhabit overlapping portions of the Missouri and Mississippi River basins. Within these areas of overlap, four States continue to allow commercial harvest of shovelnose sturgeon. Take of the endangered pallid sturgeon has been documented to occur where this commercial fishery is

allowed (Sheehan *et al.* 1997, p. 3; Service 2007, pp. 45-48; Bettoli *et al.* 2009, p. 3). Incidental and illegal harvest of pallid sturgeon is a significant impediment to the survival and recovery of this species in some parts of its range (Service 2007, p. 45). Our recent 5-year status review recommended that we identify and implement measures to eliminate or significantly reduce illegal and accidental harvest of pallid sturgeon (Service 2007, p. 59).

#### Previous Federal Actions

On September 6, 1990, the pallid sturgeon was listed as endangered under the Act (55 FR 36641). At the time of listing, the primary threats and vulnerabilities for pallid sturgeon were curtailment of range, habitat destruction and modification, low population size, lack of recruitment, commercial harvest, pollution and contaminants, and hybridization (55 FR 36641, September 6, 1990; Service 1993, pp. 10-15). Since listing, we worked cooperatively with State partners to address the threat posed by commercial harvest. A recent status review found that restrictions imposed through State fishing regulations had helped, but that incidental and illegal take during commercial harvest of shovelnose sturgeon was still having a substantial and detrimental effect on the pallid sturgeon (Service 2007, pp. 45-48). To address this issue, on September 22, 2009, we published in the **Federal Register** a proposed rule to treat the shovelnose sturgeon as a threatened species due to its similarity of appearance to the endangered pallid sturgeon (74 FR 48215).

#### Public Comments Solicited

As part of the September 22, 2009, proposed rule (74 FR 48215), we requested interested parties to provide comments and materials concerning the proposed rule during a 60-day public comment period. We contacted all appropriate State and Federal agencies, county governments, elected officials, scientific organizations, and other interested parties and invited them to comment. During the public comment period, we received several requests for a public hearing. On January 14, 2010, we published a **Federal Register** notice announcing a 21-day reopening of the comment period and an informational meeting and public hearing on January 28, 2010, in Cape Girardeau, Missouri (75 FR 2102).

#### Peer Review

In accordance with our policy for peer review (59 FR 34270, July 1, 1994), and

the Office of Management and Budget's (OMB) Final Information Quality Bulletin for Peer Review, dated December 16, 2004, we solicited review of the science in this rule from five independent specialists. That review process was conducted to ensure the use of the best scientific and commercial information available and to ensure and maximize the quality, objectivity, utility, and integrity of the information upon which this action is based. We received written responses from three of the peer reviewers. All three reviewers indicated: (1) The data presented were relevant and accurate; (2) the conclusions in the proposed rule were logically supported by the data presented; (3) necessary and pertinent information was included; and (4) the action will help conserve pallid sturgeon. Specific issues raised are discussed below.

### Summary of Public Comments

During the comment periods, we received approximately 40 comments (written and oral) representing 8 State agencies, 1 Federal agency, and 20 individuals representing themselves or their businesses and/or organizations, as well as responses from three peer reviewers. All comments are now available for inspection at <http://www.regulations.gov> in Docket No. FWS-R6-ES-2009-0027.

We reviewed and considered all comments in this final decision. Written comments and oral statements presented at the public hearing and received during the comment periods are addressed in the following summary or incorporated directly into this final rule. Comments of a similar nature are grouped together under subject headings in a series of "Issues" and "Responses."

**Issue 1:** Several commenters indicated that treating shovelnose sturgeon as threatened due to similarity of appearance to pallid sturgeon will close commercial sturgeon fishing resulting in a negative economic impact on those engaged in this activity.

**Response:** We recognize that treating shovelnose sturgeon as threatened due to similarity of appearance with pallid sturgeon will close commercial harvest of shovelnose sturgeon from waters commonly occupied by pallid sturgeon. Under section 4(e), the Act allows us to regulate commerce and take to the extent advisable when it is considered necessary to protect a listed species. In order to comply with the Act and reduce potential negative economic impacts, this rule covers the minimal geographic extent necessary to effectively conserve pallid sturgeon. This rule will not affect commercial

shovelnose sturgeon harvest, where permitted by the States or tribes, in waters where pallid sturgeon do not commonly occur (*i.e.*, those areas not identified under § 17.44, Special rules—fishes, in this rule).

**Issue 2:** A few commenters felt the methods used to estimate mortality of both pallid and shovelnose sturgeon in the proposed rule (74 FR 48215, September 22, 2009) were flawed because the methods of both Killgore *et al.* (2007) and Colombo *et al.* (2007) used a catch curve to estimate mortality. Specifically, the commenters asserted that the assumption that there is consistent reproduction and recruitment among years is not consistent with the life-history characteristics of shovelnose and pallid sturgeon.

**Response:** In both the Killgore *et al.* (2007) and Colombo *et al.* (2007) peer-reviewed publications, the authors describe their methods to account for inconsistent reproduction and recruitment. Killgore *et al.* (2007, p. 453) pooled their data among years and examined their data for variability among year-classes. Colombo *et al.* (2007, p. 445) also pooled their data by age class among years. Pooling annual data from successive sample years is an acceptable method to account for moderate and random fluctuations in recruitment when employing catch curves to estimate survival (Ricker 1975, p. 36). We believe these studies present the best available data and use accepted methodologies.

**Issue 3:** One commenter believed that existing harvest length regulations are protective of gravid female pallid sturgeon. These regulations set a maximum harvest limit for shovelnose sturgeon on the Mississippi River in Missouri and Illinois at 81.3 centimeters (cm) (32.0 inches (in.)) fork length. The commenter had never observed a gravid pallid sturgeon smaller than this limit and thought gravid female pallid sturgeon should be readily identifiable based on length.

**Response:** Since 1992, 11 wild-caught female pallid sturgeon were spawned in captivity at Missouri's Blind Pony State Fish Hatchery (Drecktrah 2009). Of these, five were less than 81.3 cm (32.0 in.) fork length, one measured 81.5 cm (32.1 in.) fork length, and five were longer than 98.8 cm (38.9 in.) (Drecktrah 2009). The two smallest gravid female pallid sturgeon spawned were 77.5 cm (30.5 in.) fork length. In 2009, at Neosho National Fish Hatchery, one gravid female pallid sturgeon was spawned that was 75.7 cm (29.8 in.) (Herzog 2010). These data illustrate the fact that that size alone cannot be used to identify species and current maximum

harvest size limits for shovelnose sturgeon on the Mississippi River (81.3 cm (32 in.)) and the Missouri River (76.2 cm (30 in.)) are inadequate to protect all gravid female pallid sturgeon.

**Issue 4:** Several commenters indicated that protection for shovelnose-pallid sturgeon hybrids was unwarranted and that allowing harvest of hybrid sturgeon would be a benefit to pallid sturgeon.

**Response:** The evolutionary relationship between pallid and shovelnose sturgeon is poorly understood and additional data and analyses are necessary to fully understand the relationship between putative hybrids and pallid and shovelnose sturgeon (Service 2007, pp. 25–26). In one study, morphometric-only indices assigned study specimens to the pallid sturgeon, shovelnose sturgeon, and putative hybrid groups (Murphy *et al.* 2007, p. 319). However, sheared principal component analysis of the same study specimens resulted in some putative hybrid specimens clustering with the pallid sturgeon group and other hybrid specimens clustering with the shovelnose sturgeon group (Murphy *et al.* 2007, p. 319). In another study, genetic identification revealed that pallid sturgeon identified using the character index (CI) and morphometric character index (mCI) were miscategorized (Schrey 2007, pp. 74–75, 120). Thus, some sturgeon that appear intermediate in character based on the CI or the mCI (presumed hybrids) may actually be pallid sturgeon. Given these uncertainties, law enforcement personnel would have substantial difficulty enforcing regulations allowing harvest of shovelnose-pallid sturgeon hybrids. Thus, extending protections to shovelnose sturgeon and to shovelnose-pallid sturgeon hybrids is the only way to ensure that pallid sturgeon are not inadvertently harvested from areas where these two species co-occur.

**Issue 5:** Several commenters indicated that treating shovelnose sturgeon as threatened due to similarity of appearance to pallid sturgeon is not warranted. These commenters referenced recent regulation changes implemented by the Illinois Department of Natural Resources and a study of the new regulation's effectiveness sanctioned by the Mississippi Interstate Cooperative Resources Association (Maher *et al.* 2009). These commenters state that in this study 946 sturgeon carcasses were collected from commercial fishermen, and none were determined by genetic analysis to be pallid sturgeon. Based on those data, commenters contend that differentiation between pallid and shovelnose sturgeon could occur with a 100 percent level of

accuracy with proper training and implementation.

*Response:* In 2007, the Illinois Department of Natural Resources instituted additional protective State regulations intended to eliminate pallid sturgeon harvest. These regulations prohibited take of or harm to pallid sturgeon and mandated their immediate release upon capture. These regulations also prohibited commercial harvest of shovelnose-pallid sturgeon hybrids downstream from Lock and Dam 26 on the Mississippi River. Specifically, these regulations prohibited take and mandated immediate release of any *Scaphirhynchus* that had any of the following: (1) Belly completely lacking in scales; (2) bases of outer barbels located slightly behind bases of inner barbels; or (3) length of inner barbels at least 6.3 times the length of head.

The new Illinois regulations as well as the existing Missouri and Kentucky regulations were evaluated to determine if they were effective in preventing bycatch of pallid sturgeon in the harvest of shovelnose sturgeon (Maher *et al.* 2009, p. 2). This study examined 946 carcasses from commercial fisherman including 513 collected in Illinois under their new regulations (Maher *et al.* 2009, pp. 3–4). Specimens were evaluated based on CI, mCI, barbel alignment, the presence or absence of belly scales, and the ratio of head length to barbel length (Maher *et al.* 2009, p. 3). Based on professional judgment, the authors did not believe any of the carcasses were pallid sturgeon (Maher *et al.* 2009, p. 4). However, the data were less clear.

The CI and mCI scores yielded different results when applied to the same carcasses. The CI scores indicated 4 of the carcasses were pallid sturgeon including 2 harvested by Illinois fishermen; 31 specimens were likely shovelnose-pallid sturgeon hybrids including 24 harvested by Illinois fishermen (Maher *et al.* 2009, pp. 4, 8–11). None of these 946 carcasses were deemed to be pallid sturgeon based on mCI scores, but 30 specimens were likely shovelnose-pallid sturgeon hybrids including 9 harvested by Illinois fishermen (Maher *et al.* 2009, pp. 4, 14–17). Genetic testing on 84 sturgeon (44 from Illinois, 20 from Kentucky, and 20 from Missouri) with the lowest CI values (most pallid sturgeon like) indicated that several of the carcasses were likely shovelnose-pallid sturgeon hybrids (Heist and Boley 2009, p. 3). Eighty-five of the specimens had barbel alignment consistent with pallid sturgeon including 78 in Illinois (Maher *et al.* 2009, pp. 4–5). None of the specimens had bellies that were absent scales consistent with pallid sturgeon,

but 37 carcasses had partial or small scales on their bellies indicative of shovelnose-pallid sturgeon hybrids (Maher *et al.* 2009, pp. 4–5). Finally, none of the specimens' ratio of head length to barbel length were indicative of pallid sturgeon (Maher *et al.* 2009, pp. 4–5).

As these data demonstrate, field-level identification based solely on character indices is subjective and not without some uncertainty. This subjectivity and uncertainty is reflected in the 2007 Illinois regulations. These regulations indicate that it is illegal to harvest any sturgeon that has "bases of outer barbels located slightly farther behind bases of inner barbels." The word "slightly" is subjective and difficult to apply consistently among observers (Maher *et al.* 2009, p. 4). For instance, 28 of the 78 sturgeon caught in Illinois had barbel alignment consistent with pallid sturgeon; however, because the outer barbels inserted only "slightly" behind the inner barbels, the data were analyzed with and without the 28 specimens (Maher *et al.* 2009, p. 4). In this case, the word "slightly" introduced ambiguity into identification efforts.

In total, more than 10 percent of the specimens harvested in Illinois were harvested in violation of Illinois regulations as they showed characteristics intermediate between pallid and shovelnose sturgeon (Maher *et al.* 2009, pp. 5–6). Because some sturgeon that appear intermediate (*i.e.*, presumed hybrids) may actually be pallid sturgeon (Wills *et al.* 2002, pp. 255–256; Schrey 2007, pp. 74, 120), we remain concerned that even in a highly regulated arena, harvest of shovelnose sturgeon and their roe results in the take of pallid sturgeon where the two species are sympatric.

One of the requirements of treating any species as endangered or threatened under Section 4(e) of the Act is related to law enforcement difficulties with differentiating between a listed and unlisted species. The available data demonstrate that both fishermen and enforcement personnel are having and will continue to have substantial difficulty in differentiating between these species where they coexist.

*Issue 6:* A few commenters highlighted an error in Table 1 of the proposed rule (74 FR 48215, September 22, 2009). Specifically, we reported 3,808 kilograms (8,395 pounds) of roe being harvested in Illinois' Mississippi River below Melvin Price Lock and Dam (Lock and Dam 26) in 2005, when the actual number was 166 kilograms (365 pounds).

*Response:* This error has been corrected in Table 1 of this rule.

Consideration of this error does not change our determination. The available data demonstrate a substantial level of commercial harvest of shovelnose, including both flesh and roe, is occurring in areas where both pallid and shovelnose sturgeon coexist. This harvest is resulting in incidental and illegal harvest of pallid sturgeon (Sheehan *et al.* 1997, p. 3; Bettoli *et al.* 2009, p. 3), which is a significant impediment to the survival and recovery of the pallid sturgeon.

*Issue 7:* One commenter was unable to find any evidence that we conducted an environmental impact study to determine the economic impact to fishermen and associated communities as a result of this decision.

*Response:* An Environmental Assessment or Environmental Impact Statement, as defined under the authority of the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4331 *et seq.*), need not be prepared in connection with listing regulations adopted pursuant to section 4 of the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). We determined that this rationale also applies to the associated section 4(d) rule.

*Issue 8:* Several States and one not-for-profit organization observed that closing commercial shovelnose sturgeon fishing in waters where they commonly coexist with pallid sturgeon could result in increased shovelnose sturgeon harvest pressures in waters that remain open. The concern raised is that this shift in pressure could result in overharvest of shovelnose sturgeon populations in areas outside the range of pallid sturgeon.

*Response:* Twenty-four States comprise the historical range of shovelnose sturgeon. Of these, eight allow for commercial harvest of shovelnose sturgeon; this action will halt commercial harvest of shovelnose sturgeon in four of these eight where shovelnose and pallid sturgeon coexist. Shovelnose sturgeon that occupy waters outside the areas regulated by this rule are subject to State commercial fishing regulations. Those States that acknowledged that a probable shift in harvest pressures is likely as a result of this rule indicated that their existing regulations are adequate to conserve shovelnose sturgeon. We believe that a combination of existing State regulations and the additional protections provided under this rule will facilitate conservation of both shovelnose and pallid sturgeon. However, we acknowledge this rule does not afford additional protections to

shovelnose sturgeon outside of its sympatric range of the pallid sturgeon. Thus, we will continue to work and cooperate with State resource agencies, the Mississippi Interstate Cooperative Resources Association and the Upper Mississippi River Conservation Committee, and other interested parties to help manage and monitor shovelnose sturgeon harvest where it occurs.

*Issue 9:* Several commenters highlighted other threats to pallid sturgeon, including non-native invasive species and habitat alteration. These comments imply we should focus on these other threat factors rather than the take issue being addressed by this rule.

*Response:* This rule is being undertaken to address documented take of an endangered species, the pallid sturgeon, due to similarity of appearance to shovelnose sturgeon. The take is occurring through commercial harvest of shovelnose sturgeon where allowed. Through the provisions of section 4(e) of the Act, we are employing a mechanism to help address this take, which is an identified threat to the pallid sturgeon (55 FR 36641; Service 2007, pp. 45–48, 57). We are not assessing the pallid sturgeon in this rule in accordance with section 4(a) of the Act. However, we concur with the commenter that habitat destruction or alteration is a threat to this species as we described in our 2007 5-year review (Service 2007, pp. 38–45, 56). We are actively working with State and Federal partners to implement restoration activities to address habitat issues throughout the range of the pallid sturgeon. Examples include the efforts of the Upper and Lower Mississippi River Conservation Committees and U.S. Army Corps of Engineers Missouri River Recovery Program. These partnerships and programs have restored side channel connectivity and modified existing in-channel structures (*i.e.*, dike notching) to increase habitat complexity. We are currently reviewing available data to better evaluate effects from invasive species. While these are important efforts, we also determined that the mortality of reproductive-condition female pallid sturgeon associated with commercial fishing must be addressed in order to conserve the species and achieve recovery.

*Issue 10:* The State of Wyoming identified potential confusion associated with the word “entire” found under the column heading “Vertebrate population where endangered or threatened” in § 17.11 Endangered and Threatened Wildlife. The confusion is associated with the rule treating shovelnose sturgeon as threatened due to similarity of appearance to pallid

sturgeon in waters where both species commonly coexist. There are several States identified in this table that are not within the documented historical range of pallid sturgeon.

*Response:* The table in Part 17 delineates the historic range of the shovelnose sturgeon and identifies the population where treated as endangered or threatened is over the entire range of the species. However, section 4(e) allows for regulation of commerce and take as deemed advisable. The special rule described under § 17.44(aa) articulates the portions of the range in which take will be regulated under this rule. In this case, the shovelnose sturgeon’s historic range occurs in 24 States; however, shovelnose and shovelnose–pallid sturgeon hybrid populations covered by this special rule occur in portions of 13 States. Therefore, Wyoming and several other States that historically or currently support shovelnose sturgeon populations but not pallid sturgeon are not identified in this rule and will not be regulated and subject to shovelnose sturgeon take prohibitions as a result of this rule.

*Issue 11:* One commenter encouraged us to conduct a review of shovelnose sturgeon to determine if threatened status is warranted for this species range-wide. This commenter provided references to several publications that suggest shovelnose sturgeon are being over-harvested in the middle and upper Mississippi Rivers (Colombo *et al.* 2007; Koch *et al.* 2007; Tripp *et al.* 2009). The commenter also recommended that if additional protections were not warranted, we should work with State agencies to implement strict size limits on commercial harvest to better protect shovelnose sturgeon where they are commercially harvested.

*Response:* This action was initiated to address documented take occurring of an existing listed species and provide for the conservation of that listed species—the endangered pallid sturgeon. We are not assessing the status of the shovelnose sturgeon in this rule. We have a separate petition process and our own internal candidate assessment process to elevate species for listing consideration. In the context of this regulation, we have considered this comment and believe that the combination of existing State regulations and the protections provided in this rule address many of the concerns highlighted in the cited literature (Colombo *et al.* 2007; Koch *et al.* 2007; Tripp *et al.* 2009). We also intend to continue working with the States and various committees to ensure adequate regulations exist where

commercial shovelnose sturgeon harvest is permitted. Should future data indicate the shovelnose sturgeon meets the Act’s definition of threatened or endangered, we would initiate a status review and propose listing the species if warranted.

#### Similarity of Appearance Determination

Section 4(e) of the Act and implementing regulations (50 CFR 17.50–17.52) authorize the Secretary of the Interior to treat a species as an endangered or threatened species even though it is not itself listed if: (a) The species so closely resembles in appearance a listed endangered or threatened species that law enforcement personnel would have substantial difficulty in attempting to differentiate between the listed and unlisted species; (b) the effect of this substantial difficulty is an additional threat to an endangered or threatened species; and (c) such treatment of an unlisted species will substantially facilitate the enforcement and further the purposes of the Act. With regard to shovelnose sturgeon, we believe all of these factors apply.

The shovelnose sturgeon (*Scaphirhynchus platyrhynchus*) is similar in appearance to the pallid sturgeon and inhabits overlapping portions of the Missouri and Mississippi River basins (Bailey and Cross 1954, pp. 175–190). Morphological characteristics (*i.e.*, body measurements) and meristic counts (*i.e.*, number of fin rays) have been used to distinguish between the two *Scaphirhynchus* species. However, those characters were based on a limited number of pallid sturgeon (15) and of shovelnose sturgeon (16) specimens (Bailey and Cross 1954, pp. 177–179).

Two indices, CI and mCI, were developed to help differentiate between the species and account for putative hybrid individuals (Wills *et al.* 2002, pp. 249–258). The CI uses both morphometric ratios and meristic counts (number of fin rays in both the dorsal and anal fins); mCI is based only on the five morphometric ratios and was developed because the meristic counts can be difficult to accurately obtain from live specimens (Wills *et al.* 2002, p. 250). Both indices utilized five ratios of morphometric measurements based on careful length measurements of both the inner and outer barbels, the head length, the interrostrum length, and the mouth-to-inner-barbel distance. While both indices did a good job of properly classifying pallid sturgeon (Wills *et al.* 2002, p. 253), errors occurred when putative hybrids overlapped the parental forms (Wills *et al.* 2002, pp.

253–254). Both indices had an error rate of approximately 10 percent (Wills *et al.*, pp. 255–256). Thus, Wills *et al.* (2002, p. 257) recommended incorporating molecular genetic techniques to verify species delineations.

Genetic analysis of *Scaphirhynchus* specimens to test the performance of several character indices, including CI and mCI suggest that at least 1.9 percent of sampled individuals were misidentified (Schrey 2007, p. 75). Specifically, CI appeared to perform better than the other indices by not classifying genetic pallid sturgeon as shovelnose or shovelnose-pallid sturgeon hybrids, but did classify genetic shovelnose sturgeon as pallid sturgeon (Schrey 2007, pp. 75–76). Similarly, mCI did not classify genetic pallid sturgeon as shovelnose sturgeon, but did classify genetic shovelnose as pallid sturgeon (Schrey 2007, p. 75). However, mCI misclassified genetic pallid sturgeon as shovelnose-pallid sturgeon hybrids (Schrey 2007, p. 75). The CI performs better than the other indices because it relies on dorsal and anal fin ray counts. However, dorsal and anal fin ray counts can be difficult to obtain from live specimens (Wills *et al.* 2002, p. 250; Schrey 2007, p. 76); mCI was developed in recognition of this difficulty. In order to provide the greatest confidence in species identification, both genetic and morphological analyses are required (Schrey 2007, p. 80).

Other recent analyses confirm limited success applying character indices universally across the geographic range of the species (Kuhajda *et al.* 2007, pp. 344–346; Murphy *et al.* 2007, p. 322). Furthermore, available data indicate character indices do not work well on smaller sized specimens (Kuhajda *et al.* 2007, pp. 324, 344).

Currently, biologists use an approach requiring up to 13 morphometric body measurements, multivariate analysis, meristic counts (*i.e.*, the number of dorsal and anal fin rays), and genetic data to reliably differentiate between the 2 species. Many of these methods require data collection and analysis that are not easily implemented in field-level applications and are not immediately available to commercial fishermen at the time of harvest or to law enforcement personnel at the time of determining whether a violation has occurred.

Finally, while genetic tests can differentiate *Scaphirhynchus* eggs from those of other genera, at this time, processed roe cannot be differentiated as having been derived from shovelnose sturgeon, harvest of which may be legal, or pallid sturgeon, harvest of which is

illegal (Curtis 2008). This similarity poses a problem for Federal and State law enforcement agents trying to address illegal trade in pallid sturgeon roe.

While harvest of pallid sturgeon is prohibited by section 9 of the Act and by State regulations throughout its range, commercial harvest of shovelnose sturgeon has resulted in the documented take of pallid sturgeon (Sheehan *et al.* 1997, p. 3; Bettoli *et al.* 2009, p. 3; Service 2007, pp. 45–48). Four States allow commercial harvest of shovelnose sturgeon from waters commonly occupied by pallid sturgeon (Service 1993, pp. 3–5). These are Tennessee (Tennessee 2008, pp. 4–5), Missouri (except on the Missouri River upstream of the Kansas River to the Iowa border) (Missouri 2008, pp. 10–11), Kentucky (Kentucky 2008, pp. 1–2), and Illinois (below Mel Price Locks and Dam) (Illinois 2007, pp. 3–5; Illinois 2008, p. 2). To protect pallid sturgeon, fishing seasons with maximum harvestable size limits for shovelnose sturgeon have been established (Bettoli *et al.* 2009, pp. 1–2). However, harvestable size limits for shovelnose sturgeon cannot protect pallid sturgeon that fall within the harvestable size limits if pallid sturgeon cannot be reliably differentiated from shovelnose sturgeon.

Along the Tennessee portion of the Mississippi River, commercial fishers misidentified 29 percent of the encountered pallid sturgeon (Bettoli *et al.* 2009, p. 3) and a minimum of 1.8 percent of total sturgeon harvest was endangered pallid sturgeon (Bettoli *et al.* 2009, p. 3). Applying this minimum harvest estimate to the 2005–2007 commercial shovelnose fishing seasons within Tennessee results in a minimum harvest estimate of 169 adult pallid sturgeon (Bettoli *et al.* 2009, p. 1). Extrapolating this minimum estimate of pallid sturgeon take across the four States that allow for commercial harvest of shovelnose sturgeon where the two species commonly coexist implies annual incidental take is a substantial source of pallid sturgeon mortality and a threat to the species' survival and recovery.

Furthermore, total annual pallid sturgeon mortality rates are higher where commercial harvest of shovelnose sturgeon occurs compared to areas without commercial harvest (30 percent versus 7–11 percent) (Killgore *et al.* 2007, pp. 454–455). Maximum identified ages of pallid sturgeon are substantially lower in commercially fished reaches of the Mississippi River (14 years) than in noncommercially fished reaches of the Mississippi River

(21 years) (Killgore *et al.* 2007, p. 454). Harvested and protected populations should have considerably different mortality rates (and, therefore, corresponding different maximum ages); however, the endangered pallid sturgeon have similar mortality rates as the harvested shovelnose sturgeon in the middle Mississippi River (Colombo *et al.* 2007, p. 449). This information provides further evidence that illegal harvest of pallid sturgeon is occurring. Because female sturgeon do not begin egg development until ages 9–12 years, may not spawn until ages 15–20 years, and may not spawn every year (Keenlyne and Jenkins 1993, p. 395), mortality associated with commercial fishing activity is likely substantially lowering recruitment, negatively impacting population growth, and ultimately affecting recovery.

Much of the domestic sturgeon fishing pressure has been driven by international sturgeon supply and increasing price trends. International sturgeon catch declined from the record peak of 32,078 metric tons (70,719,884 pounds) in 1978 to 2,658 metric tons (5,859,886 pounds) in 2000 (FAO Fisheries Circular 2004, executive summary). This reduction in supply resulted in exponential increase in caviar prices subsequent to the 1978 peak (Bardi and Yaxley 2005, p. 2). Since 1998, international trade in all species of sturgeon has been regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) owing to concerns over the impact of international trade on sturgeon populations in the wild. Recent CITES sturgeon quotas have further limited supply and exacerbated price pressures (CITES 2005, pp. 1–5, 8–9; CITES 2006, pp. 1, 5–6, 10–11; CITES 2007, pp. 1, 3–5, 8–9; CITES 2008, pp. 3, 7, 8, 11, 14). We expect commercial pressures on domestic sturgeon to remain constant or possibly increase due, in part, to current restrictions on importation of beluga sturgeon (*Huso huso*) caviar into the United States (70 FR 57316, September 30, 2005; 70 FR 62135, October 28, 2005) due to its status as a threatened species and the general trend toward reduced caviar exports from the Caspian Sea and Black Sea sturgeon stocks.

State commercial fishing data (Table 1) demonstrate a substantial level of commercial harvest of shovelnose sturgeon, including both flesh and roe, from areas where both shovelnose and pallid sturgeon coexist (Williamson 2003, pp. 118–120; Maher 2008; Scholten 2008a; Scholten 2008b; Travnichek 2008; Illinois DNR 2009).

TABLE 1—REPORTED COMMERCIAL HARVEST OF SHOVELNOSE STURGEON FLESH AND ROE IN POUNDS FROM 1995–2007 FROM THE PORTIONS OF ILLINOIS, KENTUCKY, MISSOURI, AND TENNESSEE WHERE BOTH SHOVELNOSE STURGEON AND PALLID STURGEON COEXIST

[Illinois DNR 2009; Scholten 2008a, 2008b; Travnichek 2008; Williamson 2003]

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>Flesh</b>													
Illinois .....	405	3,475	6,115	2,855	3,798	1,576	3,074	1,541	600	2,931	2,599	*	*
Kentucky .....	*	*	*	*	25	9,938	13,059	8,324	1,413	5,167	16,324	14,130	10,043
Missouri .....	6,201	10,142	8,231	9,089	19,655	23,394	77,498	43,211	23,956	28,818	10,002	6,526	5,220
Tennessee .....	*	*	*	*	*	4,178	2,178	3,519	5,759	4,005	17,297	12,926	7,812
Total .....	6,606	13,617	14,346	11,944	23,478	39,086	95,809	56,595	31,728	40,921	46,222	33,582	23,075
<b>Roe</b>													
Illinois .....	0	28	65	87	0	16	208	402	136	585	365	554	*
Kentucky .....	*	*	*	*	*	527	1,021	731	258	554	1,844	1,648	1,738
Missouri .....	*	*	*	*	*	*	*	*	4,490	3,504	2,356	1,907	1,420
Tennessee .....	*	*	*	*	*	*	*	660	1,001	665	2,290	2,027	1,366
Total .....	0	28	65	87	0	543	1,229	1,793	5,883	5,308	6,855	6,136	4,524

Illinois shovelnose harvest includes Mississippi River catch downstream of Mel Price Locks and Dam; Missouri shovelnose harvest includes both Mississippi River (downstream of Mel Price Locks and Dam) and Missouri River (except on the Missouri River upstream of the Kansas River to the Iowa border) catches; and Tennessee and Kentucky shovelnose harvest includes Mississippi River catch. Tennessee's flesh data were extrapolated using length-weight relationships from total fish harvested.

An asterisk (\*) indicates no data reported or data otherwise unavailable.

Incidental, illegal harvest of pallid sturgeon is a significant impediment to the survival and recovery of this species in some portions of its range (Service 2007, p. 45). We recommended in our 2007 5-year status review that we should identify and implement measures to eliminate or significantly reduce illegal and accidental harvest of pallid sturgeon (Service 2007, p. 59).

Treating the shovelnose sturgeon as a threatened species, under section 4(e) of the Act, will result in termination of commercial harvest of shovelnose sturgeon and shovelnose-pallid sturgeon hybrids where they commonly coexist with pallid sturgeon. This action will facilitate the enforcement of take protections for pallid sturgeon and substantially reduce or eliminate take of pallid sturgeon associated with commercial harvest of shovelnose sturgeon and their roe. Reduction of take of pallid sturgeon will facilitate the species' survival, reproduction, and, ultimately, its recovery. For these reasons, we will treat the shovelnose sturgeon as threatened due to similarity of appearance to the pallid sturgeon in those areas where the two species commonly coexist, in accordance with section 4(e) of the Act.

**Section 4(d) "Special Rule" Regulating Take**

When a species is considered threatened under the Act, the Secretary may specify regulations that he deems necessary to provide for the conservation of that species under a rule

authorized by section 4(d) of the Act. These rules, commonly referred to as "special rules," are found in part 17 of title 50 of the Code of Federal Regulations (CFR) in sections 17.40–17.48. This special rule for § 17.44, which deals with fishes, prohibits take of any shovelnose sturgeon, shovelnose-pallid sturgeon hybrids, or their roe when associated with or related to a commercial fishing activity in those portions of its range that commonly overlap with the range of the endangered pallid sturgeon. In this context, commercial fishing purposes is considered as any activity where shovelnose sturgeon and shovelnose-pallid sturgeon hybrid roe or flesh is attempted to be, or is intended to be, traded, sold, or exchanged for financial compensation, goods, or services. Capture of shovelnose sturgeon or shovelnose-pallid sturgeon hybrids in commercial fishing gear is not prohibited if it is accidental or incidental to otherwise legal commercial fishing activities, such as commercial fishing targeting nonsturgeon species, provided the animal is released immediately upon discovery, with all roe intact, at the point of capture. All otherwise legal activities involving shovelnose sturgeon and shovelnose-pallid sturgeon hybrids that are conducted in accordance with applicable State, Federal, tribal, and local laws and regulations are not considered to be take under this regulation.

**Effects of These Rules**

Treating the shovelnose sturgeon as threatened under the "similarity of appearance" provisions of the Act extends take prohibitions to shovelnose sturgeon, shovelnose-pallid sturgeon hybrids, and their roe when associated with a commercial fishing activity. Capture of shovelnose sturgeon or shovelnose-pallid sturgeon hybrids in commercial fishing gear is not prohibited if it is accidental or incidental to otherwise legal commercial fishing activities, such as commercial fishing targeting nonsturgeon species, provided the animal is released immediately upon discovery, with all roe intact, at the point of capture. All otherwise legal activities within the areas identified that may involve shovelnose sturgeon and shovelnose-pallid sturgeon hybrids and which are conducted in accordance with applicable State, Federal, tribal, and local laws and regulations will not be considered take under this regulation.

Under this special 4(d) rule, take is prohibited where shovelnose and pallid sturgeons' range commonly overlap (Service 1993, pp. 3–5, 16–17). Specifically, this includes: (1) The portion of the Missouri River in Iowa, Kansas, Missouri, Montana, North Dakota, Nebraska, and South Dakota; (2) the portion of the Mississippi River downstream from the Melvin Price Locks and Dam (Lock and Dam 26) in Arkansas, Illinois, Kentucky, Louisiana,

Missouri, Mississippi, and Tennessee; (3) the Platte River downstream of the Elkhorn River confluence in Nebraska; (4) the portion of the Kansas River downstream from the Bowersock Dam in Kansas; (5) the Yellowstone River downstream of the Bighorn River confluence in North Dakota and Montana; and (6) the Atchafalaya River in Louisiana. See the map in the rule portion of this document.

This designation of similarity of appearance under section 4(e) of the Act would not extend any other protections of the Act, such as the requirements to designate critical habitat, the recovery planning provisions under section 4(f), or consultation requirements for Federal agencies under section 7, to shovelnose sturgeon. Therefore, Federal agencies are not required to consult with us on activities they authorize, fund, or carry out that may affect shovelnose sturgeon.

**Paperwork Reduction Act**

The OMB regulations at 5 CFR part 1320 implement provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). The OMB regulations at 5 CFR 1320.3(c) define a “collection of information” as the obtaining of information by or for an agency by means of identical questions posed to, or identical reporting, recordkeeping, or disclosure requirements imposed on, 10

or more persons. Furthermore, 5 CFR 1320.3(c)(4) specifies that “10 or more persons” refers to the persons to whom a collection of information is addressed by the agency within any 12-month period. For purposes of this definition, employees of the Federal Government are not included. A Federal agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. This rule does not contain collections of information other than those permit application forms already approved under the Paperwork Reduction Act and assigned OMB control number 1018–0094.

**National Environmental Policy Act**

We have determined that an Environmental Assessment or Environmental Impact Statement, as defined under the authority of the NEPA, need not be prepared in connection with listing regulations adopted pursuant to section 4, including section 4(a), of the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

**References Cited**

A complete list of references cited in this rule is available upon request from

the Pallid Sturgeon Recovery Coordinator (see **FOR FURTHER INFORMATION CONTACT** section above).

**List of Subjects in 50 CFR Part 17**

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

**Regulation Promulgation**

■ Accordingly, we hereby amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as follows:

**PART 17—[AMENDED]**

■ 1. The authority citation for part 17 continues to read as follows:

**Authority:** 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Public Law 99–625, 100 Stat. 3500; unless otherwise noted.

■ 2. Amend § 17.11(h) by adding an entry for “Sturgeon, shovelnose”, in alphabetical order under “FISHES,” to the List of Endangered and Threatened Wildlife to read as follows:

**§ 17.11 Endangered and threatened wildlife.**

\* \* \* \* \*  
(h) \* \* \*

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
* FISHES	*	*	*	*	*	*	*
* Sturgeon, shovelnose.	* <i>Scaphirhynchus platyrhynchus.</i>	* U.S.A. (AL, AR, IA, IL, IN, KS, KY, LA, MN, MO, MS, MT, ND, NE, NM, OH, OK, PA, SD, TN, TX, WI, WV, WY).	* Entire .....	* T (S/A)	* 778	N/A	* 17.44(aa)
*	*	*	*	*	*	*	*

■ 3. Amend § 17.44 by adding a new paragraph (aa) to read as follows:

**§ 17.44 Special rules—fishes.**

\* \* \* \* \*

(aa) Shovelnose sturgeon (*Scaphirhynchus platyrhynchus*).

(1) Within the geographic areas set forth in paragraph (aa)(2) of this section, except as expressly noted in this paragraph, take of any shovelnose sturgeon, shovelnose-pallid sturgeon hybrids, or their roe associated with or related to a commercial fishing activity

is prohibited. Capture of shovelnose sturgeon or shovelnose-pallid sturgeon hybrids in commercial fishing gear is not prohibited if it is accidental or incidental to otherwise legal commercial fishing activities, such as commercial fishing targeting nonsturgeon species, provided the animal is released immediately upon discovery, with all roe intact, at the point of capture.

(2) The shovelnose and shovelnose-pallid sturgeon hybrid populations covered by this special rule occur in

portions of Arkansas, Iowa, Illinois, Kansas, Kentucky, Louisiana, Missouri, Mississippi, Montana, North Dakota, Nebraska, South Dakota, and Tennessee. The specific areas are:

(i) The portion of the Missouri River in Iowa, Kansas, Missouri, Montana, North Dakota, Nebraska, and South Dakota;

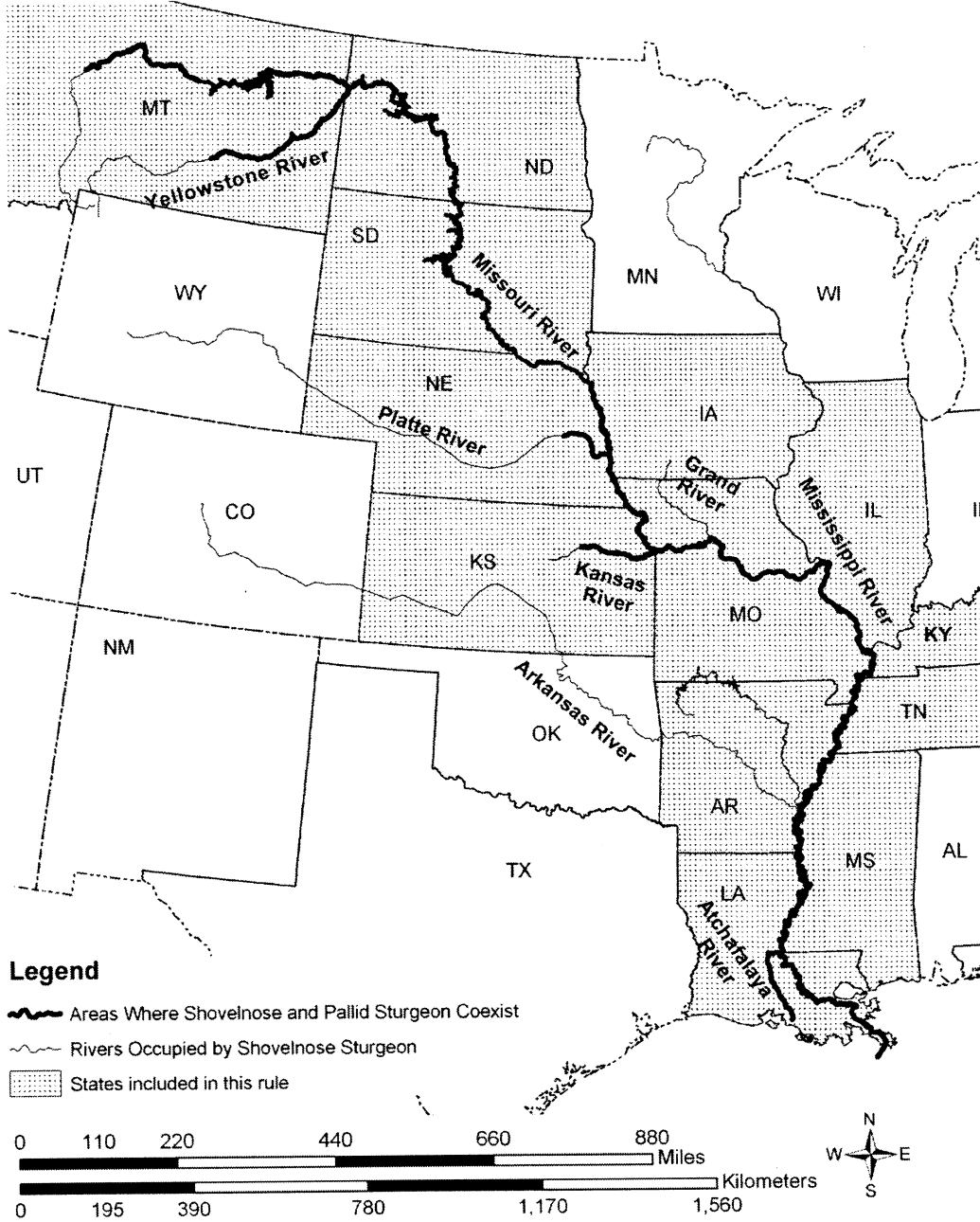
(ii) The portion of the Mississippi River downstream from the Melvin Price Locks and Dam (Lock and Dam 26) in Arkansas, Illinois, Kentucky,

Louisiana, Missouri, Mississippi, and Tennessee;  
 (iii) The Platte River downstream of the Elkhorn River confluence in Nebraska;

(iv) The portion of the Kansas River downstream from the Bowersock Dam in Kansas;  
 (v) The Yellowstone River downstream of the Bighorn River confluence in North Dakota and Montana; and

(vi) The Atchafalaya River in Louisiana.  
 (3) A map showing the area covered by this special rule (the area of shared habitat between shovelnose and pallid sturgeon) follows:  
 BILLING CODE 4310-55-C

Figure 1: Areas Where Pallid and Shovelnose Sturgeon Commonly Coexist in the Missouri and Mississippi River Basins





Dated: August 25, 2010.

**Will Shafroth,**

*Acting Assistant Secretary for Fish and Wildlife and Parks.*

[FR Doc. 2010-21861 Filed 8-31-10; 8:45 am]

**BILLING CODE 4310-55-P**

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

#### 50 CFR Part 665

[Docket No. 100630283-0388-02]

RIN 0648-XX15

#### Fisheries in the Western Pacific; Bottomfish and Seamount Groundfish Fisheries; 2010-11 Main Hawaiian Islands Bottomfish Total Allowable Catch

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

**ACTION:** Final specification.

**SUMMARY:** In this rule, NMFS specifies a total allowable catch (TAC) of 254,050 lb (115,235 kg) of Deep 7 bottomfish in the main Hawaiian Islands (MHI) for the 2010-11 fishing year. The expected impact of the TAC is long-term sustainability of Hawaii bottomfish.

**DATES:** This final specification is effective October 1, 2010.

**ADDRESSES:** Copies of the Fishery Ecosystem Plan for the Hawaiian Archipelago and associated Environmental Impact Statement are available from the Western Pacific Fishery Management Council (Council), 1164 Bishop St., Suite 1400, Honolulu, HI 96813, tel 808-522-8220, fax 808-522-8226, or [www.wpcouncil.org](http://www.wpcouncil.org).

A supplemental environmental assessment (EA), was prepared that describes the impact of this final specification on the human environment. Based on the environmental impact analysis presented in the EA, NMFS prepared a finding of no significant impact (FONSI). Copies of the EA and FONSI are available from [www.regulations.gov](http://www.regulations.gov), or Michael D. Tosatto, Acting Regional Administrator, NMFS Pacific Islands Region (PIR), 1601 Kapiolani Blvd. 1110, Honolulu, HI 96814.

**FOR FURTHER INFORMATION CONTACT:** Jarad Makaiau, Sustainable Fisheries Division, NMFS PIR, 808-944-2108.

**SUPPLEMENTARY INFORMATION:** NMFS hereby specifies a TAC of Deep 7 bottomfish in the MHI for the 2010-11

fishing year of 254,050 lb (115,235 kg), as recommended by the Council, based on the best available scientific, commercial, and other information, taking into account the associated risk of overfishing. The MHI Management Subarea is the portion of U.S. Exclusive Economic Zone around the Hawaiian Archipelago lying to the east of 161° 20' W. longitude. The Deep 7 bottomfish are onaga (*Etelis coruscans*), ehu (*E. carbunculus*), gindai (*Pristipomoides zonatus*), kalekale (*P. sieboldii*), opakapaka (*P. filamentosus*), lehi (*Aphareus rutilans*), and hapuupuu (*Epinephelus quernus*).

When the TAC is projected to be reached, NMFS will close the non-commercial and commercial Deep 7 bottomfish fisheries until the end of the fishing year (August 31, 2010). During a fishery closure for Deep 7 bottomfish, no person may fish for, possess, or sell any of these fish in the MHI, except as otherwise authorized by law. Specifically, fishing for, and the resultant possession or sale of, Deep 7 bottomfish by vessels legally registered to Pacific Remote Island Areas bottomfish fishing permits, and conducted in compliance with all laws and regulations, are not affected by the closure. There is no prohibition on fishing for or selling other non-Deep 7 bottomfish species throughout the year.

All other management measures continue to apply in the MHI bottomfish fishery. The MHI bottomfish fishery reopens on September 1, 2010, and will continue until August 31, 2010, unless the fishery is closed prior to August 31 as a result of the TAC being reached.

Additional background information on this final specification may be found in the preamble to the proposed specification published on August 2, 2010 (75 FR 45085), and is not repeated here.

#### Comments and Responses

On August 2, 2010, NMFS published a proposed specification and request for public comments on the MHI Deep 7 bottomfish TAC (75 FR 45085). The comment period ended on August 17, 2010. NMFS did not receive any public comments.

#### Changes from the Proposed Specification

There are no changes in the final specification.

#### Classification

The Regional Administrator, NMFS PIR, determined that this final specification is necessary for the conservation and management of MHI bottomfish, and that it is consistent with

the Magnuson-Stevens Fishery Conservation and Management Act and other applicable laws.

The Chief Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration during the proposed rule stage that this action would not have a significant economic impact on a substantial number of small entities. The factual basis for the certification was published in the proposed rule and is not repeated here. No comments were received regarding this certification. As a result, a regulatory flexibility analysis was not required, and none was prepared.

This action is exempt from review under Executive Order 12866.

**Authority:** 16 U.S.C. 1801 *et seq.*

Dated: August 27, 2010.

**Samuel D. Rauch III,**

*Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.*

[FR Doc. 2010-21829 Filed 8-31-10; 8:45 am]

**BILLING CODE 3510-22-S**

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

#### 50 CFR Part 679

[Docket No. 0910131363-0087-02]

RIN 0648-XY62

#### Fisheries of the Exclusive Economic Zone Off Alaska; Atka Mackerel in the Bering Sea and Aleutian Islands Management Area

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

**ACTION:** Temporary rule; closures and openings.

**SUMMARY:** NMFS is prohibiting directed fishing for Atka mackerel in the Eastern Aleutian District and the Bering Sea subarea of the Bering Sea and Aleutian Islands management area (BSAI) by vessels participating in the BSAI trawl limited access fishery. This action is necessary to prevent exceeding the 2010 total allowable catch (TAC) of Atka mackerel in these areas by vessels participating in the BSAI trawl limited access fishery. NMFS is also announcing the opening and closing dates of the first and second directed fisheries within the harvest limit area (HLA) in areas 542 and 543. These actions are necessary to conduct