

December 16, 2005

Via Facsimile and Electronic Mail

The Honorable Craig Manson
Assistant Secretary for Fish,
Wildlife and Parks
U.S. Department of Interior
1849 C Street, N.W.
Room 3156
Washington, DC 20240

Re: Injurious Wildlife Species; Black Carp (*Mylopharyngodon piceus*); Extension of Comment Period (70 Fed. Reg. 61,933).

Dear Assistant Secretary Manson:

The Office of Advocacy of the U.S. Small Business Administration (Advocacy)¹ submits these comments on the U.S. Fish and Wildlife Service's (FWS) release, *Injurious Wildlife Species; Black Carp (*Mylopharyngodon piceus*); Extension of Comment Period*.² Advocacy believes that the economic analysis prepared by FWS and the public comments received to date do not support FWS' decision to certify this rule under the Regulatory Flexibility Act (RFA) as not having a significant economic impact on a substantial number of small entities. Should FWS adopt the regulatory alternative advanced in this rulemaking to date, Advocacy believes FWS should first complete an initial and final regulatory flexibility analysis under the RFA before finalizing the rule. Further, FWS should reconsider its rejection of other regulatory alternatives, including one regulatory alternative submitted by numerous small business commenters. This rule currently appears to adopt a regulatory alternative which is not supported by the agency's economic analysis and is likely to result in serious harm to an already struggling domestic industry, catfish farmers.

¹ Congress established Advocacy in 1976 under Pub. L. No. 94-305 to represent the views and interests of small business within the Federal government. Pub. L. No. 94-305, 90 Stat. 663, §§ 201 et seq. (codified at 15 U.S.C. §§ 634a-g). Advocacy is an independent office within the Small Business Administration (SBA), so the views expressed by Advocacy do not necessarily reflect the views of the SBA or the Administration. Advocacy has a statutory duty to monitor and report to Congress on agencies' compliance with the Regulatory Flexibility Act (RFA). Regulatory Flexibility Act of 1980, Pub. L. No. 96-354, 94 Stat. 1164, §3(a) (1980) (codified as amended at 5 U.S.C. § 612).

² *Injurious Wildlife Species; Black Carp (*Mylopharyngodon piceus*); Extension of Comment Period*, 70 Fed. Reg. 61933 (Oct. 27, 2005).

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On August 14, 2002, President George W. Bush signed Executive Order 13272, requiring Federal agencies to implement policies protecting small businesses when writing new rules and regulations.⁵ This Executive Order authorizes Advocacy to provide comment on draft rules to the agency that has proposed or intends to propose the rules and to the Office of Information and Regulatory Affairs of the Office of Management and Budget.⁶ It also requires agencies to give every appropriate consideration to any comments provided by Advocacy regarding a draft rule.

I. Background.

On July 30, 2002, FWS published a proposed rule that would list the black carp as “injurious” under the Lacey Act.⁷ Species listed as injurious under the Lacey Act are prohibited from interstate commerce, including transport and sales.⁸ The proposed rule was certified under the RFA, with the agency concluding that the rule would not impose a significant economic impact on a substantial number of small entities.⁹ On August 30, 2005, FWS published a notice of availability of a draft economic analysis of the rule's potential impacts and requested comment from the public.¹⁰

Black carp are an Asian fish species imported to the United States for their use in aquaculture. Black carp can be found in aquaculture as triploids (sterilized fish) or as diploids (fertile fish).¹¹ The species is widely used in fish farming to control the spread of parasitic worms (or “trematodes”) which infect catfish and other fish. These parasitic worms, yellow grubs and *Bolbophorus confusus*, burrow under the skin of infected fish and greatly reduce their economic value by causing loss of appetite in the fish or, in some

³ Pub. L. No. 94-305, 90 Stat. 663, §§ 201 et seq. (codified at 15 U.S.C. §§ 634a-g).

⁴ 5 U.S.C. § 612.

⁵ Exec. Order. No. 13272, at § 1, 67 Fed. Reg. 53,461 (2002).

⁶ *Id.* at § 2(c).

⁷ FWS, *Proposed rule, Injurious Species; Black Carp (Mylopharyngodon piceus)*, 67 Fed. Reg. 49280 (July 30, 2002) (“Black Carp NPRM”).

⁸ *Lacey Act*, ch. 645, 62 Stat. 687 (1948)(codified as amended at 18 U.S.C. § 42(a)(1)).

⁹ Black Carp NPRM, 67 Fed. Reg. at 49283.

¹⁰ FWS, *Proposed rule; reopening of comment period and availability of supplemental information, Injurious Wildlife Species; Black Carp (Mylopharyngodon piceus); Availability of Draft Environmental Assessment and Draft Economic Analysis*, 70 Fed. Reg. 51326 (Aug. 30, 2005). The comment period for this notice was extended to December 16, 2005. FWS, *Proposed rule; extension of comment period, Injurious Species; Black Carp (Mylopharyngodon piceus); Extension of Comment Period*, 70 Fed. Reg. 61933.

¹¹ FWS, *Draft Environmental Assessment for Listing Black Carp (Mylopharyngodon piceus) as Injurious under the Lacey Act*, at 4 (Aug. 2005) (available online at <http://www.fws.gov/contaminants/Issues/InvasiveSpecies.cfm>) (“Draft Environmental Assessment”).

cases, sickness and death. The worms' eggs are deposited in fish farm ponds through pelican droppings, which hatch into larvae and infect the ram's-horn snail, reproduce asexually, then erupt to infect the fish. Since pelicans are federally protected and farmers cannot kill them, black carp are used to eliminate ram's-horn snails from fish farm ponds, denying the parasitic worms the intermediate host organism they require to infect catfish and other economically valuable products.¹² Black carp are extremely effective at removing ram's-horn snails, and have been used by fish farmers for this purpose for the past two decades. No other method of ram's-horn snail control has been proven to be 100% effective, and even a small population of snails can infect an entire pond's fish stock with trematodes.

II. Certification.

Pursuant to its statutory duty to monitor agency compliance with the Regulatory Flexibility Act (RFA),¹³ Advocacy has reviewed the proposed rule to list the black carp as an injurious species under the Lacey Act, and Advocacy has concluded that FWS should not certify this rule under the RFA as not having a significant economic impact on a substantial number of small entities. Based on the comments in the administrative record and FWS' draft economic analysis, it appears that the factual basis for certification published by FWS in 2002 does not accurately reflect the likely impacts of its rule on small entities, and the draft economic analysis provided in August of 2005 does not reflect the majority of costs likely to be incurred by small entities.

The certification FWS published with its proposed rule no longer appears to be supported by the factual basis provided because: (1) empirical comments submitted by experts indicate a substantial number of small entities will be affected, and (2) the evidence indicates that the rule will impose significant burdens on affected small entities.

A. Empirical comments submitted by experts indicate a substantial number of small entities will be affected.

Should FWS list the black carp as an injurious species, interstate transportation of the fish will be prohibited. Catfish farmers located in states which do not allow the possession of diploid fish—such as Mississippi and Louisiana—would be prohibited from importing additional triploid fish from out of state. These new restrictions would apply to about half of all catfish farmers.

However, FWS certified this rule under the RFA in part based on its conclusion that trematode outbreaks only harm a very small percentage of fish farms, and hence, any rule limiting those farms' ability to respond to infestations could also only affect a small

¹² See, e.g., Jeffrey S. Terhune, David J. Wise, Jimmy L. Avery, Lester H. Khoo, and Andrew E. Goodwin, *Infestations of the Trematode *Bolbophorus* sp. in Channel Catfish*, SOUTHERN REGIONAL AQUACULTURE CENTER, Pub. No. 1801 (Jan. 2003) (available online at http://aquanac.org/publicat/usda_rac/efs/srac/1801fs.pdf).

¹³ 5 U.S.C. § 611.

number of fish farms. This conclusion does not appear to be supported by the record, and Advocacy recommends the withdrawal of FWS' certification of the rule.

1. *The rule will affect a substantial number of small fish farms because black carp are the only effective means available to control trematode outbreaks.*

Black carp are currently almost the only effective control measure used for trematodes. In its draft economic analysis, FWS summarizes scientific comments received to date on the importance of the black carp for snail control, outlining the common approach to controlling infections using both chemicals and carp:

While these chemical treatments can control algae and weeds along the pond margin, they are not an effective choice for the deeper sections of the pond. To control the snail after chemical treatments, and the deeper areas, about 10 black carp per acre are stocked. *Draft Economic Analysis*, at 9.

The data provided by FWS appears to support this conclusion. FWS cites to a voluntary 2003 USDA survey that concluded that trematodes affected 4.3% of fry/fingerling size catfish farms and 1.3% of foodsize catfish farms, and that 3.8% of all fry/fingerling size catfish farms and 1.8% of foodsize catfish farms used biological controls of some sort (black carp or some other controls) to control the snails.¹⁴ As Advocacy discusses below, this survey data appears to greatly underestimate infection and carp usage rates due to its voluntary nature and non-corrected sample, but the responses USDA did get indicate that almost all fish farm responders affected by trematodes were using black carp to control snails.¹⁵

2. *The scientific evidence demonstrates that the rate of trematode infestation appears to be quite high, approaching 30% of all fish farms.*

Existing research conducted by scientists in the field and previously cited in this administrative record indicates that instead of the 1-4% infection rate cited by FWS, the true trematode infection rate is closer to 30% of catfish farms. Advocacy does not believe it is proper to certify a rule under the RFA that would negatively affect up to 30% of an industry dominated by small businesses.

In 2002, Dr. David Wise of Mississippi State University's Thad Cochran National Warmwater Aquaculture Center published the results of actual random samples of fish from 821 fish ponds in eight counties of Mississippi for trematode infection.¹⁶ His results were startling: of the 821 ponds his team sampled, 262 contained at least one fish with

¹⁴ FWS, *Rulemaking to List Black Carp Under the Lacey Act: Draft Economic Analysis*, at 9-10 (Aug. 2005) (available online at <http://www.fws.gov/contaminants/Issues/InvasiveSpecies.cfm>) ("Draft Economic Analysis").

¹⁵ This correlation appears even stronger than at first glance, given that the 2003 USDA survey data was collected from four states, and of these four, two states currently ban the use or possession of black carp. See *Draft Economic Analysis*, at 9 (FN 1), 7 (Table 5).

¹⁶ Jeffrey S. Terhune, David J. Wise, and Lester H. Khoo, *Bolbophoros confuse Infections in Channel Catfish in Northwestern Mississippi and Effects of Water Temperature on Emergence of Cercariae from Infected Snails*, 64 NORTH AMERICAN J. OF AQUACULTURE 70 (Jan. 2002).

trematode infection, for a positive rate of more than 30%.¹⁷ Mississippi State University followed up on the 2002 study by analyzing the relative infection levels of 40 ponds to determine which suffered minor, moderate, and serious infections.¹⁸ The results of this second physical sampling showed infection rates far in excess of the 4% maximum infection rate that FWS inferred from USDA's survey data, with the 2005 study finding a 30% severe infection rate. For those operations in the severe infection category, the data indicates that those farms would not have sufficient returns per acre to remain economically viable, absent some infestation control measures.¹⁹

Advocacy believes a substantial question exists as to whether FWS should rely solely on USDA's voluntary survey data. The scientific evidence in this administrative record indicates that infection rates are substantially in excess of USDA's 1-4% rates, and may be more likely in the range of a third of all farms.²⁰ Since higher rates of infection were immediately discovered when scientists physically inspected the fish, Advocacy believes FWS cannot reasonably determine that voluntary survey results are a more reliable indicator of actual levels of disease. Both Dr. Wise's and Dr. Hanson's studies have been entered into the administrative record for this rulemaking.²¹ In light of the evidence in these studies, Advocacy does not believe FWS may properly conclude that the rate of trematode infection is low, and that the listing of the black carp would not affect a substantial number of small entities.

B. The evidence indicates that the rule will impose significant burdens on affected small entities.

FWS has concluded that benefits to northern firms will eliminate or offset the economic impacts to southern catfish farmers.²² However, catfish farmers have contacted Advocacy, and based on their concerns and the evidence in the record, Advocacy has concluded that the rule will significantly affect those small fish farms that suffer trematode infestations and are unable to secure black carp for control of their infestation. Further, Advocacy has determined that FWS has applied improper analysis to conclude that the rule would not have a significant economic impact to small entities.

¹⁷ Terhune, et al., 64 NORTH AMERICAN J. OF AQUACULTURE at 70. Based on the FWS' industry analysis included with its draft economic analysis, it appears that the 821 pond sample represents more than 10% of all ponds in the state of Mississippi. *Draft Economic Analysis*, at 13 (Table 8).

¹⁸ Although this data has not yet been published, the researcher has summarized its findings for FWS' benefit and entered a brief synopsis into the record. See Letter from Dr. Terrill Hanson, Mississippi State University, to Chief, Division of Environmental Quality, FWS (Oct. 28, 2005).

¹⁹ Dr. Hanson determined net returns for catfish farms were around \$455 per acre, and found that a severe infection resulted in a loss of \$631 per acre. See Letter from Dr. Terrill Hanson to Chief, Division of Environmental Quality (Oct. 28, 2005).

²⁰ Advocacy believes the USDA survey data may not reflect actual infection rates because the respondents were self-selected (and were being asked to admit their product was inferior) or may not have been aware of existing infestations.

²¹ Advocacy has attached a copy of the study to this comment letter to be entered again into the administrative record. FWS is required by Executive Order 13272 to its response to Advocacy's comments in its *Federal Register* publication. E.O. 13272, at § 3(c).

²² 67 *Fed. Reg.* at 49283.

In states where FWS' rule would make black carp unavailable, catfish farmers would be required to rely on other control measures for trematode infestations. However, as discussed above, the use of chemicals does not eliminate 100% of the ram's-horn snails in ponds, and trematodes are still capable of propagating from even small percentages of snails. Thus, though other control methods may help to reduce the severity of trematode infestations, ponds will remain infested and farmers will incur economic harm.

FWS' current economic analysis greatly underestimates the cost the rule would likely impose, as it states that the rule would cost only \$350,000 over 10 years. FWS' economic analysis excludes discussion of those states which would be affected by the rule, as FWS chose to exclude states such as Mississippi because triploid fish are currently allowed and the agency assumed there would be enough as infestations progressed. Advocacy finds no evidence in the record to support the assumption that states which allow only triploid fish will be able to meet demand absent importation.

Dr. Terrill Hanson, of Mississippi State University's Thad Cochran National Warmwater Aquaculture Center, submitted comments to FWS illustrating the impacts of a trematode infestation using the example of a 452-acre catfish farm faced with light, moderate, and severe infestations. He determined that the farm would provide a \$455 return per acre without an infestation, but that even a light infestation would result in this return being reduced to \$87 per acre, or more than an 80% reduction in revenues. At the point of moderate infestation, the farm becomes unprofitable, losing \$506 per acre. By the time the infestation is severe, the farm is losing \$631 per acre. If these figures are accurate, any rule which would eliminate the ability of small fish farms to secure black carp for control of trematode infestation would impose significant economic impacts to those individual infected farms.

Advocacy believes that these results call into question FWS' certification of the black carp rule as not likely to result in significant economic impacts to individually affected small entities. Advocacy recommends that FWS withdraw its certification and complete the regulatory flexibility analyses under the RFA for this rulemaking.

III. Regulatory Alternatives.

As discussed above, Advocacy believes that FWS is required to complete an initial and a final regulatory flexibility analysis for its black carp listing rule, including a discussion of regulatory alternatives that could reduce compliance burdens for small entities.²³ Such analysis would address public comments received suggesting a burden-reducing alternative, and may also result in the formation of entirely new regulatory alternatives.

Based on FWS' public notices, draft economic analysis, and draft environmental analysis, Advocacy has concluded that FWS has not adequately considered a regulatory alternative suggested by regulated small entities that would eliminate almost all potential costs to fish farmers from the rule while achieving the benefits FWS seeks. Small entities have

²³ 5 U.S.C. §§ 603(c) (initial regulatory flexibility analysis), 604(a)(5) (final regulatory flexibility analysis).

suggested the listing of diploid versions of the black carp as injurious, while allowing sterile triploid black carp to be transported across state lines. FWS has raised this alternative in its environmental analysis, but FWS appears to have dismissed this alternative for reasons not supported by the evidence on the record.

Advocacy strongly recommends FWS conduct a full analysis of the regulatory alternative providing for listing only diploid black carp and allowing interstate transport of triploid fish. The evidence on the record indicates that this alternative would: (1) achieve the benefit the agency claims to be seeking, preventing widespread harm to northern fisheries and endangered species, and (2) avoid the massive increase in the potential for accidental release of fertile diploid fish that would likely exist if FWS banned the transportation of both fertile and sterile black carp.

IV. Conclusion.

Advocacy believes FWS has not provided a sufficient factual basis to support the certification of its proposed listing of black carp as injurious. Advocacy recommends that FWS withdraw its determination that the rule will not have a significant economic impact on a substantial number of small entities and publish regulatory flexibility analyses as required by the RFA. Finally, Advocacy also recommends that these analyses pay particular attention to the regulatory alternative presented by commenters, namely, that of listing only fertile black carp as injurious, while allowing sterile fish that have been certified by FWS to be used to combat the serious problem of trematode infestation in catfish and other fish farms. Thank you for your consideration and please do not hesitate to contact Michael See with any further questions at (202) 619-0312 or Michael.See@sba.gov.

Sincerely,

/s

Thomas M. Sullivan
Chief Counsel for Advocacy

/s

Michael R. See
Assistant Chief Counsel

cc: Dr. John Graham, Administrator, Office of Information and Regulatory Affairs
Dale Hall, Director, U.S. Fish and Wildlife Service