Request to Amend the Special Rule to Control the Trade of Threatened Beluga Sturgeon

Submitted to the Chief, Scientific Authority
U. S. Fish and Wildlife Service
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Introduction

The beluga sturgeon (*Huso huso*) was listed as a threatened species pursuant to the Federal Endangered Species Act, (ESA), as amended, 16 U.S.C. Section 1531 *et seq*. on April 21, 2004. Implementation of the threatened listing was delayed until October 21, 2004 to allow time for the USFWS to propose a special rule, request public comments, review comments, and issue a final special rule. This document and supporting documentation represent our comments related to the proposed special rule for beluga sturgeon.

Executive Summary

The Florida Department of Agriculture and Consumer Services on behalf of the State of Florida contends that the listing of beluga sturgeon as "threatened" is applied too broadly, and as such includes all wild and captive-bred populations. In our comments regarding the original listing, we recommended that wild beluga populations in their native regions be listed if necessary, and that all other captive-bred stocks be exempted from the listing. Alternatively, we can agree with the listing of beluga sturgeon as "threatened", with the condition that a special rule be adopted that will include a

provision to exempt all captive-bred beluga sturgeon. We request that 1) the special rule not be adopted as proposed and 2) that the proposed special rule be amended to include specific provisions to permit the commercial production of all captive-bred beluga sturgeon and captive-bred beluga sturgeon products. In the context of this request, captive-bred beluga sturgeon are defined as progeny which are at least one generation (F_1 generation) removed from the wild parental stocks. The amended special rule should allow for the take, transport, delivery, shipment and sale of captive-bred beluga sturgeon and their parts in interstate and foreign commerce.

The USFWS has authority to adopt a special rule for any species listed as threatened under CFR 17.31. Under these regulations, the special rule, when adopted, should contain all applicable prohibitions and exceptions related to that species or distinct population segment of that species. This request to amend the proposed special rule and include specific exemptions to permit the domestic commercial production of captive-bred beluga sturgeon is warranted because it would not harm existing wild populations of beluga sturgeon; contributes to the protection and conservation of wild beluga sturgeon in their native region; is consistent with the intent of the ESA; and it helps create a legal and regulated supply of sturgeon products which are in high demand in the United States.

The Florida Legislature has declared that there is a need to encourage the advancement of sturgeon production in Florida. In accordance with specific legislative mandates promoting the development of aquaculture, Florida has implemented management policies for the commercial production of sturgeon that are consistent with the state's resource management goals and are based on sound regulations, specific permitting procedures, and effective law enforcement. Within Florida's regulatory framework, the culture of captive-bred beluga sturgeon can be implemented under the Endangered Species Act without posing a threat to native sturgeon populations.

Florida has taken a progressive approach to the culture of native and non-native sturgeon for commercial purposes, while at the same time making a positive contribution to the conservation and protection of native species in the wild. This progressive concept

includes the management framework to promote the development of commercial production of sturgeon, to support the advancement of scientific understanding of sturgeon species, as well as to protect native sturgeon and their habitat.

Recommendations

The Florida Sturgeon Production Working Group, on behalf of the State of Florida, the Florida Department of Agriculture and Consumer Services, and Florida's fish farmers, recommends that the U.S. Fish and Wildlife Service amend the proposed special rule by:

adding provisions that will permit the take, transport, delivery, shipment and sale of captive-bred beluga sturgeon and their parts in interstate and foreign commerce;

adding a provision which allows captive-bred beluga sturgeon and captive-bred beluga sturgeon products originating in the United States to be sold in interstate and foreign commerce without threatened species permits (e.g., an exemption for U.S. producers);

adding a provision that recognizes specific jurisdictions (e.g., state, Florida) that have the administrative infrastructure and specific regulatory authority in place to responsibly manage the commercial production of captive-bred beluga sturgeon.

expanding the definition of captive-bred beluga sturgeon products to include products from successive generations (e.g., F_1 and F_2 generations) and hybrids which contain beluga genetic material, such as bester sturgeon.

Scientific and Commercial Information to Support Amending the Special Rule

This request to amend the special rule presents substantial scientific and commercial information supporting the position that specific exemptions should be included in the special rule that will permit commercial production of captive-bred beluga sturgeon in non-range countries, and more specifically Florida. The following points are presented to support our request to amend the special rule by including provisions for the commercial production of captive-bred beluga sturgeon and an exemption from the threatened species permits for the sale of captive-bred beluga sturgeon and their parts in interstate and foreign commerce.

The ESA listing should not include domestic captive-bred beluga sturgeon.

The ESA includes a clear and concise statement of purpose that defines the congressional aim of the Act. "The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species and threatened species…." Section 4 of the ESA provides the listing process for determining which species are entitled to legal protection. Under this authority, species may be listed as endangered or threatened because of any combination of the following five factors:

- present or threatened destruction, modification, or curtailment of its habitat or range;
- over utilization for commercial, recreational, scientific, or educational purposes;
- disease or predation;
- the inadequacy of existing regulatory mechanisms; or
- other natural or manmade factors affecting its continued existence.

It is our contention that the ESA has been applied too broadly by including captive-bred beluga sturgeon in the listing, and consequently, too narrowly by limiting the trade of captive-bred beluga sturgeon to range countries in the special rule. Our most straightforward argument contends that exempting the domestic production of captive-bred beluga sturgeon from the listing does not jeopardize the existence of wild populations or their habitat. None of the five factors apply to captive-bred beluga stocks in Florida.

Listing all beluga sturgeon as threatened does not take into account the enormous technological advances in breeding and raising sturgeon when it includes captive-bred beluga sturgeon. We argue that beluga sturgeon that have been bred and raised in captivity do not directly warrant protection under the Act. To support this argument, we rely on the legislative purpose for enacting the Act, as well as the literal language in the Act. Combined, these factors clearly show that Congress never intended to provide protection to captive-bred animals when they can be reproduced in virtually limitless numbers. At the same time, we agree that the true conservation status of beluga sturgeon in their native regions should be considered in listing the species.

Vulnerable wild beluga populations should be given protection under the Act, regardless of the numbers of fish held in captivity. But, it is not necessary to extend protection to captive-bred populations in Florida just because the wild stocks are in jeopardy. In this case, we contend that domestic captive-bred stocks do not jeopardize the condition of wild stocks. The fact that USFWS does not generally consider captive-bred animal numbers in making determinations of whether to list or down list indicates that these animals are of minimal importance in evaluating the overall health of wild populations. Additionally, the explicit purpose of the listing should focus on the conservation of the vulnerable species within its ecosystem. It is unlikely that Congress intended for protection to extend to captive-bred species once technology reached a point where the species could be produced in quantities as numerous as chickens, cows and other common domesticated species. In summary, it should be clear that captive-bred

species are completely unrelated to wild populations and their relative numbers provide no indication of the species' true conservation status in the wild.

The special rule for beluga sturgeon should include an exemption for all captive-bred beluga sturgeon.

Once beluga sturgeon have been listed as "threatened", the USFWS may adopt a "special rule" that applies to captive-bred beluga sturgeon within various jurisdictions. Conditions and exemptions for permits for threatened wildlife are provided in 50 CFR ss 17.31-17.32. Generally, the rules that apply to the production and sale of endangered species apply to threatened species, with one substantial difference. Special rules may be adopted which apply to threatened species and provide specific exceptions {50 CFR ss 17.31(c)}. Thus, all applicable prohibitions and exceptions for the aquacultural production of beluga sturgeon can and should be included in the special rule.

If captive-bred sturgeon are included in the listing, then the appropriate action is to include an exemption for all captive-bred beluga sturgeon in the special rule. The special rule should be amended to allow for the commercial take, transport, delivery, shipment and sale of all captive-bred beluga sturgeon and their parts in interstate and foreign commerce. The special rule should not restrict such activities to range countries. Extending the exemption to all captive-bred beluga sturgeon will not harm existing wild populations of beluga sturgeon and would provide considerable economic benefit to U.S. fish farmers.

Since the intent of the Act is to protect wild beluga sturgeon and their habitat, protection should not be extended to include specific populations of captive-bred sturgeon. The special rule should include an exemption for all captive-bred beluga sturgeon which should be applied to sturgeon aquaculture in range countries as well as non-range countries. Currently, the proposed rule includes conditional exemptions from threatened species permits for the trade in caviar and meat taken from wild and hatchery-origin beluga sturgeon from range countries, but the proposed rule does not exempt the

international trade in live sturgeon or any beluga products derived from aquaculture outside of the range countries. This prohibition is unreasonable, because it does not fulfill the purpose of protecting wild populations; it is simply a trade prohibition that favors one group of producers over another group. In this case, the Act and the special rule are used to support foreign competitors at the expense of sturgeon farmers in the United States.

The ESA is not the appropriate policy document to regulate competition in international markets.

The *Supplementary Information* section (preamble) contains the statement "This special rule ... would not exempt beluga sturgeon or any beluga products derived from aquaculture or growout operations outside the range countries from the provisions of the Act, which we [USFWS] believe could undermine the economic incentives for sustainable harvests of wild *Huso huso* in the range countries." It appears that the listing is linked to economic purposes instead of to the factors identified as criteria for listing. This statement strongly suggests that the listing and special rule are designed to provide an economic advantage to range countries by providing them with exclusive access to valuable U.S. markets**.** This action begs the question: is eliminating domestic competition in international markets the best way to reduce the nation's $7 billion trade deficit in seafood products? Also, this listing and special rule appear to be in direct conflict with the US Department of Commerce's aquaculture policy (The US Department of Interior and the US Department of Commerce have shared responsibilities for carryout the ESA). Specific objectives of the policy include increasing the volume and value of domestic aquaculture production to help offset the annual U.S. trade deficit in seafood.

Additionally, the section contains the statement "We [USFWS] believe the issuance of this special rule is necessary and advisable for the conservation of the species for the following reason: 1) exempting the commercial trade in wild-origin and hatchery-origin beluga caviar and meat from permit requirements, with conditions, will expedite transfer of specimens into and out of the United States without compromising the species

recovery." This discussion contains the rationale for exempting aquacultural products from range countries by presenting the benefits for conservation in the range countries, but the discussion does not describe how aquacultural production in non-range countries would adversely affect conservation of the species. We [Florida] believe that there are no adverse impacts to conservation of the species in range countries resulting from commercial production of captive-bred beluga sturgeon in the U.S. The USFWS raised the issue that animals will have to be taken from wild stocks to serve as brood stocks and that this form of take will be detrimental to the survival of wild stocks. In response to this issue, there are currently sufficient brood stocks in Florida to eliminate the need for wild fish from range countries.

The information provided in the rule's preamble identifies the benefits of the conditional exemption to range countries and the expected contributions to the conservation of beluga sturgeon. But the rule's preamble does not provide substantial information or data that would support a conclusion that commercial aquacultural production of captive-bred beluga sturgeon in the United States would be detrimental to conservation efforts or would undermine the economic incentive for the range countries. There does not appear to be a logical link between conserving wild beluga populations and denying U.S. producers access to lucrative U.S. markets that are otherwise open to range countries. The special rule eliminates competition from U.S. producers as an enticement to encourage range countries to comply with the terms and conditions of the conditional exemption from the threatened species permit**.**

Presently, there is no commercial production of beluga sturgeon in the United States and it may be years before domestic fish farmers produce a substantial amount of caviar. Therefore, it is unlikely that domestic producers will have any economic impact on international markets for some time. The world leaders in producing, processing, and selling sturgeon products are well established in the range countries; suppliers already dictate quantities and prices and are positioned to control international markets without additional economic incentives. U.S. producers will have to seek niche markets to even enter the domestic markets. Burdensome trade barriers will only diminish the

opportunity for U.S. producers to compete in the international marketplace. Sturgeon production in many of the range countries has a long history and these businesses do not need additional economic advantages when they are already the market leaders.

The commercial production of captive-bred beluga sturgeon will provide a positive contribution to conserving wild sturgeon by providing a legal and regulated supply of quality sturgeon products.

Aquacultural production of captive-bred sturgeon has been identified as a positive alternative for reducing fishing pressure on wild stocks. Creating supplies of captive-bred sturgeon would help meet the market demands for wild species that are currently captured in both legal and illegal fisheries. In the case of beluga sturgeon, over-harvesting has been identified as one of the primary reasons for their decline.

Aquacultural production of captive-bred beluga sturgeon should be viewed as a compatible approach when coupled with the listing, further increasing protection and conservation of wild beluga populations. The listing of beluga sturgeon as threatened and adopting a special rule suggest that aquaculture is indeed viewed as a positive conservation tool. The special rule protects wild populations through management, as well as by establishing a mechanism to encourage aquaculture. The problem is the special rule is too restrictive; it encourages aquacultural development only in range countries. The conservation benefits from aquaculture can be gained whenever and wherever captive-bred beluga products are supplied to meet market demands and reduce pressure on wild stocks. The special rule should encourage the culture of captive-bred sturgeon on a domestic level rather than obstruct commercialization.

There is a strong sentiment for conservation of sturgeon worldwide, and support for commercialization of sturgeon aquaculture products is seen as both a management and economic tool that will reduce fishing pressure on wild stocks. Likewise, domestic aquaculture of sturgeon has also been recognized as an alternative approach to the conservation of wild sturgeon populations. Several criteria have been identified as

critical factors necessary to make sturgeon aquaculture an effective and environmentally sound mechanism for sturgeon conservation (*Roe to Ruin*, Caviar Emptor, 2000). Florida has effectively incorporated the following factors into its regulatory framework to advance the culture of captive-bred native and non-native sturgeon.

1) Florida has established a certification program to identify all aquaculture producers and aquaculture products. The Aquaculture Certificate of Registration was created in Florida law and codified in the Florida Administrative Code. The certification program incorporates regulatory components that assure that best management practices are implemented and that aquaculture products are identified and can be traced.

2) Best management practices for aquacultural production of sturgeon are designed to minimize or eliminate the discharge of pollutants or contaminants into the waters of the state. Closed system production facilities are encouraged, and stringent water quality parameters are applied to all discharges from production facilities into waters of the state. Implementation of best management practices ensures that water quality standards are enforced by a public regulator agency, and compliance with the best management practices ensures that water quality is maintained.

3) Best management practices are also applied to select farm sites and establish operating procedures that will prevent the escape of cultured sturgeon. The best management practices include the use of redundant barriers to prevent escape, including; geographic, physical, biological, and chemical barriers. Geographic barriers include locating production facilities in areas where there is no foreseeable opportunity for fish to escape and reach waters where there is a high likelihood of survival. Physical barriers include design specifications such as: berm and ditch systems that surround production units; closed culture systems that may include containment and treatment systems to maintain water on-site; rearing tanks that can be managed independently to isolate fish; and the use of cover nets and filter screens to prevent movement. Biological barriers may include the use of predators in containment and treatment ponds to prey upon eggs, fry and juvenile fish that may escape to these systems. Chemical barriers may include kill tanks or similar

systems where all life stages can be held or trapped, and then killed with the appropriate chemical treatments.

4) Florida can also combine the aquaculture certification program with the use of modern forensic techniques to provide law enforcement with enhanced capabilities to distinguish sturgeon products. The aquaculture certification is a valuable tool to trace the source and track the distribution of farm-raised sturgeon products. Florida's agriculture law enforcement personnel also have the capability to intercept and inspect all aquacultural products as they move throughout the state.

5) There is an independent effort underway with Florida's sturgeon producers and feed manufacturers to reduce the amount of fish protein in sturgeon rations. Fish farmers are conducting feeding and growth trials to access the effects of replacing fish meal and fish oil with plant protein. There are obvious advantages to replacing fish protein with alternative plant protein (soy, corn and wheat), including cost and availability.

Florida strongly supports the concept that environmentally sound, commercial aquacultural production of sturgeon products acts as a proactive mechanism to reduce dependency on wild sturgeon populations. Florida also recognizes that the culture of captive-bred sturgeon is a challenge to both state and federal resource management agencies charged with the protection of wild stocks. The commercial production of sturgeon and the conservation and recovery of wild sturgeon stocks are both priorities for Florida. Supporting the commercial production of captive-bred sturgeon does not reflect a diminished obligation and desire by Florida to protect wild sturgeon stocks. In fact, Florida has historically developed strong conservation programs for all endangered and threatened marine species, including sea turtles, manatees, right whales, and sturgeon. Legislation to support commercial sturgeon production also included mandates to support conservation of native species, and funds have been available for many new research and assessment projects to advance sturgeon recovery.

Although commercial production of sturgeon is sometimes viewed as being in conflict with conservation, commercial production will likely increase recognition of the need for conservation. The identification of sturgeon as a "farmed-raised aquaculture product" should not detract from efforts to protect and conserve wild sturgeon populations. Marketing and consumer awareness programs will help consumers make the distinction between "farm-raised" and endangered or threatened species. The marketing of American alligator meats and skins offers an example of how consumers can distinguish between an animal that is grown for its meat and skin, and at the same time be protected by strong conservation laws.

Research and development efforts associated with the domestic production of captive-bred beluga sturgeon will contribute to the technical advancement of sturgeon aquaculture in range countries.

Currently in Florida, research and development projects associated with the aquaculture of captive-bred sturgeon have broad application and the information transfer is international in scope**.** Institutions such as the University of Florida and Mote Marine Laboratory are conducting sturgeon aquaculture demonstration projects directed toward expanding commercial sturgeon production, and this information is available to most countries interested in sturgeon aquaculture. Extension specialists at the Institute of Food and Agricultural Sciences at the University of Florida provide their expertise on an international level by traveling to foreign countries and by receiving visiting scientists and fish farmers. The Mote Marine Laboratory has established a state-of-the-art sturgeon fish farm to demonstrate recent advances in sturgeon aquaculture. The free interchange of scientific information from public and private institutions is vital to many worldwide aquacultural efforts. As an example, these institutions will host visiting scientists from one range country in September, 2004.

Prohibitions on the sale of beluga products will have a negative impact on the sale of all legal sturgeon products in the U.S.

Florida's fish farmers strongly disagree with the statement in the *Regulatory Flexibility Act* section that "Given the apparently limited aquaculture use of beluga sturgeon, the section 9 prohibition on trade in live and aquacultured beluga sturgeon should have no significant economic impact in U.S. markets." The limited aquaculture of sturgeon does not reflect the interest of Florida's farmers in beluga sturgeon. Any apparent lack of interest in culturing beluga sturgeon is simply the result of the inability of U.S. producers to obtain beluga sturgeon fry, fingerlings, juveniles, or adults. Beluga sturgeon is one of the most highly sought after sturgeon species for commercial culture, and anytime that the highest valued product is removed from a producer's product list, there will be serious economic consequences. Producers in the United States can not expect to compete in the world marketplace when they are restricted from supplying a large volume, high-valued sector of the market.

Florida's fish farmers have an interest in farming many species of sturgeon, including beluga sturgeon. Any prohibition on the sale of commercially produced captive-bred sturgeon, regardless of the species, will have a negative effect on the demand and sales of all farm-raised sturgeon products. Listing beluga sturgeon carries concomitant negative implications for all sturgeon aquaculture products produced in the United States. Listing sends the wrong message to consumers, suppliers and producers of lawfully produced sturgeon products, and will have a substantial negative impact on current efforts to produce other farm-raised sturgeon products in the United States. Prohibiting the commercial production and sale of domestic captive-bred beluga sturgeon will create a high level of confusion between lawful sturgeon commerce in the U.S. and imports from the range countries.

The position of Florida's sturgeon farmers is that listing beluga sturgeon will harm their businesses before they have had the opportunity to demonstrate success. Secondly,

the prohibition is arbitrary and will create a negative economic disadvantage for domestic sturgeon farmers, regardless of which sturgeon species they produce.

Florida is well positioned to culture captive-bred beluga sturgeon while minimizing risks to native sturgeon populations.

The State of Florida, the Florida Department of Agriculture and Consumer Services, the Florida Sturgeon Production Working Group, and commercial fish farmers have a specific interest in farming many species of sturgeon, including captive-bred beluga sturgeon. Florida's interest reflects the growing international interest in culturing sturgeon for both caviar and as a high quality food fish.

Legislation in 1996 opened the door to sturgeon aquaculture and subsequent aquaculture legislation in 1998 obligated resource management agencies to facilitate native and non-native sturgeon aquaculture development (Appendix 1. *Florida Statutes*). In Section 370.31, Florida Statutes, the Florida Legislature declared that there is a need to encourage the continuation and advancement of sturgeon production. This law created the Sturgeon Production Working Group to develop and implement the Sturgeon Production Management Plan to promote commercial production of sturgeon. In accordance with these legislative mandates, Florida has implemented management policies that are based on sound regulations, specific permitting procedures, and law enforcement capabilities. The Florida Department of Agriculture and Consumer Services, the lead agency for aquaculture development in Florida, has implemented its statutory mandate to establish an aquaculture certification program that identifies Florida's aquaculture producers and aquaculture products. The Aquaculture Certificate of Registration provides a stringent regulatory program that is linked to compliance with best management practices to ensure environmentally sound aquaculture activities (Appendix 1. *Florida Statutes*).

Furthermore, Florida's proactive approach to commercial production of sturgeon is based on the belief that advancing our understanding of the biology, physiology, and

ecology of sturgeon can best be accomplished through applied research using captive and artificially propagated populations. Applied aquacultural research and development is seen as a valuable tool that can provide economic benefits to agricultural businesses, and at the same time, contribute to our understanding of sturgeon worldwide.

The preamble contains the statement "We [USFWS] also believe that aquaculture or growout of foreign sturgeon species in the United States poses a risk to the recovery efforts for several native sturgeon species listed under the Act or under interstate recovery plans. This risk comes from the potential competition between native sturgeons and unintentionally released fish from facilities culturing foreign sturgeon and disease transmission from foreign species." Although we understand the Service's position on the issue of risk to native populations, we [Florida] feel that Florida has taken adequate precautions to minimize the risk of introducing non-native species and associated diseases. Florida has taken a progressive approach to the culture of native and non-native sturgeon for commercial purposes, while at the same time making a positive contribution to the conservation and protection of native species in the wild. This progressive concept includes developing the regulatory framework to promote the commercial production of sturgeon, as well as protecting native fish and their habitat.

The Florida Department of Agriculture and Consumer Services has given due consideration to its role in encouraging commercial production of sturgeon. After reviewing the statutory mandates, state and federal policies, scientific and technical information, regulatory responsibilities, and law enforcement capabilities, the Department believes that it can successfully manage the commercial cultivation of sturgeon. A key factor in this decision-making process was the completion of a balanced and in-depth assessment of the potential ecological and environmental risks associated with the culture of native and non-native sturgeon. Over two days, 46 governmental, fishery, academic and environmental representatives participated in discussions addressing potential ecological, disease (pathogen/parasite), and hybridization risks. Breakout groups were challenged to identify the means to mitigate potential risks. Many of the mitigation strategies identified in the workshop were incorporated into the

Aquaculture Best Management Practices Manual (Appendix 2*: Proceedings of the Florida Sturgeon Culture Risk Assessment Workshop*, 2000). Within this framework, Florida is positively situated to implement the cultivation of captive-bred beluga sturgeon without violating the intent of the Endangered Species Act (ESA), and without posing a threat to native sturgeon populations.

Florida has addressed many issues in making the decision to support the production of sturgeon, including developing a sound aquaculture management framework that is supported by broad-based regulatory authority to permit the cultivation of native and non-native sturgeon by private and commercial interests. This decision is based on the following factors.

1) Commercial production of sturgeon will provide for rural economic development. Growing sturgeon is considered to be a viable agricultural alternative and may be critical to sustaining existing agricultural interests and developing new innovative agri-businesses.

2) The regulatory authority is in place to manage the commercial production and sale of aquaculture products, including captive-bred beluga sturgeon. The following regulatory mechanisms are in place to regulate the production, transport, and sale of sturgeon products and to reduce the risk to native sturgeon populations.

> Facilities that maintain and produce captive-bred beluga sturgeon must comply with Best Management Practices (BMPs) for operating the facility. BMPs have been established for selection, design and operation of such facilities, and the BMPs impose strict regulations on facilities culturing non-native sturgeon. The aquaculture certification program is linked to the best management practices program and has been codified in the Florida Statutes and the Florida Administrative Code (Appendix 3).

Facilities and/or operators must maintain a valid certificate of registration issued by the Department of Agriculture and Consumer Services. In order to maintain the certification, facilities are subject to unannounced inspections to ensure compliance with the BMPs and all regulatory requirements.

Facilities are required to isolate captive-bred sturgeon. BMPs require redundant barriers to prevent escape or release of eggs larvae, juvenile and adult fish, including physical, geographical, biological, reproductive and legal barriers. State law prohibits the release of captive-bred sturgeon. An assessment of the effectiveness of best management practices in sturgeon aquaculture was completed by researchers at the University of Florida (Appendix 4. *Final Report - Assessment of the Effectiveness of Florida Aquaculture Best Management Practices (BMPs) for Sturgeon*, 2002).

Facility operators must maintain health records, report any major incidences of disease, and maintain documentation identifying the source of all sturgeon kept in the facility.

The Department has broad range authority in dealing with animal health, including regulating the introduction, movement, confiscation, quarantine, and destruction of animals to prevent, control, and eradicate infectious and contagious diseases.

State laws require that aquaculture products be identified by a certificate of registration number, and that the source of all aquaculture products be documented and traceable.

The Department has responsibility for enforcing laws related to agriculture and has jurisdiction over violations of law which threaten the security and safety of the state's agriculture, including aquaculture products (Appendix 5. Office of Agricultural Law Enforcement web page; *www.fl-aglaw.com*). The Department's

Office of Law Enforcement has the capability, through its agriculture inspection and interdiction stations, to regulate and control the lawful transport of all aquacultural products. The Office of Agriculture Law Enforcement also interacts with other law enforcement agencies, such as Fish and Wildlife Conservation Commission's wildlife officers, to protect natural resources.

The Department's Division of Food Safety is involved in forensic analyses to determine inter-specific and intra-specific differences in sturgeon products. Fatty acid assays have been conducted to develop an index of fatty acid profiles to differentiate between farm-raised sturgeon and wild sturgeon products. The Department continues to develop advanced techniques that will facilitate law enforcement by providing a rapid and effective method to identify and trace sturgeon products.

The Department has broad responsibility related to the production, manufacture, transportation, and sale of food. A food processor handling farm-raised sturgeon products must obtain a food permit, comply with a Hazard Analysis Critical Control Point plan (HACCP), and undergo periodic compliance inspections.

State laws prohibit the harvest and possession of native sturgeon.

3) The responsible management of the cultivation of captive-bred beluga sturgeon will not jeopardize the continued existence or recovery of wild native sturgeon or adversely affect critical habitat of the species.

4) Encouraging commercial production of captive-bred beluga sturgeon will contribute to our understanding of all sturgeon species, enhance propagation, and contribute to recovery of sturgeon species worldwide, without diminishing the state's efforts to protect its listed native sturgeon.

Technology is well established worldwide to breed and grow sturgeon in captivity. Rapid improvements in sturgeon culture technology have encouraged aqua-farming businesses to begin developing lines of sturgeon for commercial cultivation. Because it may take years for sturgeon to reach reproductive maturity, it is important that fish farmers implement production strategies that will allow them to produce captive-bred fish in the near future. Plans for commercial production of sturgeon in Florida are based entirely on the use of sturgeon currently held in captivity.

Producing captive-bred stocks of beluga sturgeon will be a positive step for U.S. farmers as they face growing competition from foreign producers. Most seafood produced and consumed in the United States are high value products, and international competition has focused on these lucrative high value markets. Our growing dependence on imports adversely affects the national balance of payments and contributes to the uncertainty of supplies. Foreign imports supply 70 percent of the U.S. seafood market, greatly surpassing U.S. sources. Consequently, domestic producers are finding ever-increasing competition from imports, which increasingly rely on growth in the international aquaculture sector. As U.S. consumer demands for fish and shellfish continue to rise, domestic aquaculture must increase to meet the demand. In response to growing dependency on imported seafood and aquaculture products, Congress has declared that it is in the national interest, and our national policy, to encourage the development of aquaculture in the United States (*National Aquaculture Act of 1980*).

The Florida legislature has also declared that aquaculture is in the public interest and has recognized aquaculture as a resource management alternative to produce aquaculture products, to protect and conserve natural resources, to reduce competition for natural stocks, and to augment and restore natural populations. The legislature also declared that it shall be a policy to foster aquaculture development when the aquaculture activity is consistent with state resource management goals, environmental protection, and proprietary interests.

Status of pre-listed beluga sturgeon in Florida

Fish farmers in Florida have considered farming beluga sturgeon for several years, but the availability of beluga was problematic. Since beluga eggs, fry, or fingerlings were not readily available, farmers concentrated their efforts on species that were easier to find and import into Florida. However, one company was successful in locating juvenile and sub-adult beluga sturgeon, and these fish were lawfully imported (USFWS and CITES permits) into the state. The fish were successfully transported to a fish farm and have been maintained on the farm until now. The farm that possesses these sturgeon has put together a long-range business plan built on the projection that captive-bred beluga sturgeon would be farmed to supply U.S. markets for meat and caviar. The proposed special rule is expected to have a serious negative impact on the business plan and the future of this farm.

Threatened Species Permit

The special rule indicates that a threatened species permit can be obtained pursuant to 50 CFR ss. 17.31. Permits issued under ss. 17.31 must be for one of the following purposes: scientific purposes, or enhancement of propagation or survival, or economic hardship, or zoological exhibition, or educational purposes, or incidental taking, or special purposes consistent with the Act. These purposes do not include production for commercial sale, and as such do not encourage commercial production of captive-bred sturgeon.

Florida's sturgeon farmers do not feel confident that they can put together long-range business plans that are consistent with threatened species permits. They can not take on long-term investment risks while depending on annual permits that do not specifically meet their business and financial needs. Consequently, this alternative is not viable.

Exemption for pre-listed captive-bred beluga sturgeon.

The special rule could include a specific exemption that would exempt pre-listed sturgeon which were held on farms prior to the implementation of the listing. For such a listing to be of value, the special rule would also have to exempt all progeny and products from progeny.

Proposed Provisions in the Special rule

The State of Florida seeks specific provisions in the special rule to commercially produce captive-bred beluga sturgeon under current Florida aquaculture regulation, because such provisions will not harm existing wild populations of sturgeon and will provide considerable economic benefit. Once beluga sturgeon have been listed as "threatened" the USFWS may adopt a special rule that applies to captive-bred beluga sturgeon, within various jurisdictions. The special rule should contain all applicable prohibitions and exceptions related to that species. The special rule should be amended to include provisions to allow for the commercial take, transport, delivery, shipment and sale of captive-bred beluga sturgeon and their parts in interstate and foreign commerce; and should not restrict such activities to range countries.

This section provides an example of proposed provisions necessary for domestic (U.S.) commercial production of beluga sturgeon. The proposed special rule will require amendments to Title 50 C.F.R., Part 17, Subpart D-Threatened wildlife, section 17.44, special rules--fishes, Beluga sturgeon (Huso huso).

Amend the proposed draft special rule to include the following provisions.

No person may take beluga sturgeon except:

Any employee or agent of the Service, any other Federal fishery management agency, or state conservation agency, who is designated by the agency for such purposes, may, when acting in the course of official duties, take beluga sturgeon.

Any person may take beluga sturgeon when such sturgeon was born in captivity or lawfully placed in captivity, and may deliver, receive, carry, transport, ship, process, sell, offer to sell, purchase, or offer to purchase such captive-bred beluga sturgeon in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity in accordance with the laws and regulations of the State subject to the following conditions.

Any captive-bred beluga sturgeon, including live eggs, larvae, fry fingerlings, juveniles, adults, meats and caviar shall be sold or otherwise transferred in accordance with the laws and regulations of the State. The State has adopted laws, rules, or codes regulating the taking of captive-bred sturgeon for commercial purposes. Any violation of State law will also be a violation of this rule.

Any captive-bred beluga sturgeon entering commerce shall be accompanied by documents (labels) showing the state of origin, identification of licensed producer, and date of take.

Records showing the origin of captive-bred beluga sturgeon shall be maintained in the normal course of business, including bills of sale or lading, and retained according to the regulations in the State.

Except as provided, no person shall in the course of commercial activity deliver, receive, carry, transport, ship or sell any beluga sturgeon in interstate or foreign commerce. Captive-beluga sturgeon shall not be entered into commerce through the ornamental fish trade.

Conclusion

The Florida Department of Agriculture and Consumer Services, the Florida Sturgeon Production Working Group, and Florida's fish farmers strongly disagree with the conditional exemptions provided in the special rule which unilaterally exempt range countries from threaten species permits, while subjecting sturgeon producers in the United States to permit requirements that essentially prevent them from engaging in the commercial production of captive-bred beluga sturgeon. We find that the special rule is arbitrary and unreasonable in that the prohibitions applied to sturgeon producers in the United States do not accomplish the intended purpose of conserving and protecting beluga sturgeon or their habitat in their native regions.

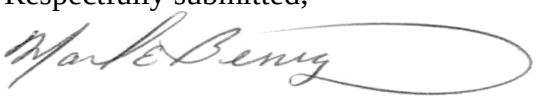
Furthermore, the proposed special rule, as written, unfairly provides range countries with exclusive access to valuable markets in the United States, while prohibiting U.S. fish farmers from growing and selling products for these same markets. These prohibitions will also result in direct adverse impacts to fish farmers in the United States who wish to produce captive-bred beluga sturgeon products for commerce in the United States, and will contribute directly to the growing national deficit expended on imported seafood products.

Finally, we request that the USFWS amend the proposed special rule by adding provisions recommended in this document related to the commercial production and sale of captive-bred beluga sturgeon. First and foremost, a provision must be included that will permit the take, transport, and sale of all captive-bred beluga sturgeon and their parts in interstate and foreign commerce. Additionally, a provision should be included that provides a specific exemption from the threatened species permit for U.S. producers.

This request to add provisions to the special rule to allow the domestic commercial production of captive-bred beluga sturgeon is warranted because exempting captive-bred beluga sturgeon from threatened species permits:

1) will not harm existing populations of wild sturgeon in their native regions;
2) will continue open access to U.S. commercial markets by range countries:
3) encourages aquacultural production of captive-bred sturgeon;
4) reduces the dependency on beluga products from wild populations;
5) reduces incentives for illegal harvests and black market distribution of wild products;
6) creates a legal and regulated supply of captive-bred sturgeon products;
7) reduces the U.S.'s dependency on imported seafood products; and
8) is consistent with the intent of the ESA.

Respectfully submitted;



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Appendices

Appendix 1	Chapter 370, Florida Statutes - Commercial Production of Sturgeon Chapter 597, Florida Statutes - Aquaculture (ss. 597.001 - 597.0041)
Appendix 2	Proceedings of the Florida Sturgeon Culture Risk Assessment Workshop prepared by the Florida Department of Agriculture and Consumer Services (April 6-7, 2000).
Appendix 3	Chapter 5L-3, Florida Administrative Code - Aquaculture Best Management Practices Aquaculture Best Management Practices Manual (October 2002)
Appendix 4	Final Report - Assessment of the Effectiveness of Florida Aquaculture Best Management Practices (BMPs) for Sturgeon, submitted by the University of Florida, Institute of Food and Agricultural Sciences (November 2002)
Appendix 5	Department of Agriculture and Consumer Services' Office of Agricultural Law Enforcement