

**Proposed Rulemaking to Establish Protective Regulations under Section  
4(d) of the Endangered Species Act for  
*Tridacna crocea*, *T. maxima*, *T. noae*, and *T. squamosa***

**Initial Regulatory Flexibility Analysis**

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**March 2024**



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This analysis considers the extent to which impacts resulting from the proposed issuance of protective regulations in association with the proposed listing of four species of giant clams under section 4(e) of the Endangered Species Act (ESA) could be borne by small businesses. This proposed listing is a component of the Proposed Listing Determinations for Ten Species of Giant Clams under the Endangered Species Act (89 FR 60498). The analysis presented is conducted pursuant to the Regulatory Flexibility Act (RFA) as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996. Information for this analysis was gathered from the Small Business Administration (SBA), Dun and Bradstreet, Inc., and the Law Enforcement Management Information System (LEMIS) trade database.

## Introduction

### *Requirements of the Initial Regulatory Flexibility Analysis*

First enacted in 1980, the RFA was designed to ensure that the government considers the potential for its regulations to unduly inhibit the ability of small entities to compete. The goals of the RFA include increasing the government's awareness of the impact of regulations on small entities and encouraging agencies to exercise flexibility to provide regulatory relief to small entities. Subject to certain exceptions, when a proposed regulation is published for public comment in the *Federal Register*, the RFA requires the agency to prepare and make available for public comment an analysis that describes the effect of the rule on small entities (i.e., small businesses, small organizations, and small governmental jurisdictions). For this proposed rulemaking, this analysis takes the form of an initial regulatory flexibility analysis (IRFA). As described in 5 U.S. Code § 603, each IRFA is required to contain:

1. "a description of the reasons why action by the agency is being considered;
2. a succinct statement of the objectives of, and legal basis for, the proposed rule;
3. a description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply;
4. a description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record;
5. an identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap or conflict with the proposed rule." (5 USC § 603(b)(1)-(5))

Additionally, each IRFA is required to contain "a description of any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities." (5 USC § 603(c)).

### *Scope of this IRFA*

Under the proposed rule, NMFS would list four species of giant clams – *T. crocea*, *T. maxima*, *T. noae*, and *T. squamosa* – as threatened under the authority of section 4(e) of the ESA. NMFS would further apply the section 9(a)(1)(A) prohibition of import into and export from the United States of these four species under section 4(d) of the ESA but would limit the prohibition to the "similarity of appearance" derivative parts and products for

which the species from which the products are derived cannot be visually determined (89 FR 60498)<sup>1</sup>. This IRFA examines the potential economic impacts on small entities of this proposed ESA section 9(a)(1)(A) prohibition, which would be limited to these “similarity of appearance” derivative parts and products that would otherwise be cleared by U.S. Customs and Border Protection officials and whose purpose of import or export is either commercial or for exhibition.

The proposed rule would not prohibit the import into or export from the United States or its territories of raw, unworked shells or live or intact specimens of *T. crocea*, *T. maxima*, *T. noae*, or *T. squamosa*, and no other prohibitions under section 9 of the ESA are proposed for these four species. The prohibition on import or export of products coded as personal property by U.S. Customs and Border Protection officials would not impact a small business or other small entity. Additionally, any imports or exports of parts accompanied by both a valid CITES export permit and an ESA section 10(a)(1)(A) permit for purposes of scientific research or the enhancement of the propagation or survival of the species would be exempted from the proposed prohibition (89 FR 60498).

## Summary of Findings

Annualized impacts of the proposed application of the section 9(a)(1)(A) prohibition to the derivative parts and products of *T. crocea*, *T. maxima*, *T. noae*, and *T. squamosa* in association with their proposed listing as threatened species under section 4(e) of the ESA are anticipated to be minor, and few small entities are expected to be impacted. Law Enforcement Management Information System (LEMIS) trade data provided by the U.S. Fish and Wildlife Service for the years 2016-2020 indicates that there were two imports into and two exports from the 50 states and the District of Columbia of “similarity of appearance” giant clam products that were cleared by U.S. Customs and Border Protection officials and whose purpose of import or export was either commercial or for exhibition. Of the two imports, one was for commercial purposes and was valued at approximately \$1,500 (2023 dollars). The second import was of a carving that was imported for a traveling exhibition and was valued at approximately \$44,000 (2023 dollars). An additional ten imports of giant clam meat from the Marshall Islands had a total value of \$357 (2023 dollars) but were refused clearance by U.S. Customs officers and, therefore, generated no revenue for U.S. entities. Of the two exports, one, a jewelry item, was for commercial purposes and valued at approximately \$17,000 (2023 dollars). The second export was likely the same carving reported in the LEMIS data as having been imported, as the purpose (traveling exhibition), year (2018), and value (approximately \$44,000) reported in the respective import and export records were identical. Meanwhile, the CITES trade database reveals 22 records of imports of giant clam meat from Palau to Guam and CNMI over the years 2016-2021, all for the purpose of movement of personal property, but no imports into or exports from U.S. Pacific Island territories of “similarity of appearance” parts or products for commercial purposes. As there is no basis for expecting an increase in the rate of U.S. import or export of giant clam “similarity of appearance” products over the foreseeable future, this IRFA assumes that the number, type, and dollar value of imports and exports of these products over the years 2016-2020 reasonably represents the composition of trade of these products that would occur in the future, absent the proposed rule.

The small entities most likely to be directly impacted by the proposed rule include those classified under the

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<sup>1</sup> According to the proposed rule, “derivative parts and products” are defined as: “(a) any tissue part that has been removed from the shell, including mantle tissue, adductor muscle, portions thereof, or the whole flesh of the animal comprising both the mantle and adductor muscle; (b) any worked shell product, including handicrafts, sculptures, jewelry, tableware, decorative ornaments, and other carvings, but not raw, unworked shells; and (c) pearls or any product derived from a pearl” (89 FR 60498).

North American Industry Classification System (NAICS) as Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers (NAICS industry code 423940) and Museums (NAICS industry code 712110). According to data gathered from the Dun and Bradstreet Hoovers database, there are approximately 25,000 U.S. small entities classified as Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers and approximately 47,000 museums in the U.S. that qualify as small entities. Under the proposed rule, wholesalers could lose revenue that would otherwise be generated through the importation and sale, or exportation, of the similarity of appearance products for commercial purposes. Based on a combined value of \$19,000 of U.S. imports and exports of giant clam derived “similarity of appearance” products from 2016 to 2020, this IRFA estimates that the proposed rule would result in annualized impacts on wholesalers of \$3,700 (2023 dollars). Museums or similar entities that would otherwise import and exhibit similarity of appearance products could lose revenue if attendance declines as a result of an artistic item not being exhibited. However, available data do not allow for quantification of such potential revenue losses to museums. While it is possible that the proposed rule could result in a small entity wholesaler or museum with low annual revenue bearing impacts that constitute a large percentage of their annual revenue, this outcome is highly uncertain and, based on the low volume of annual U.S. imports and exports of giant clam “similarity of appearance” products, would be limited to a very small number of small entities.

## Why Action by the Agency Is Being Considered

In January 2024, NMFS completed a comprehensive status review of seven species of giant clams (*Hippopus hippopus*, *H. porcellanus*, *Tridacna derasa*, *T. gigas*, *T. mbalavuana*, *T. squamosa*, and *T. squamosina*). Based on this status review, NMFS is proposing to list *H. porcellanus*, *T. mbalavuana*, *T. squamosina*, *T. derasa*, and *T. gigas* as endangered species due to their extinction risk. NMFS is proposing to list *H. hippopus* as a threatened species due to its extinction risk and to extend the section 9(a)(1) prohibitions to *H. hippopus*. NMFS is further proposing to list *T. crocea*, *T. maxima*, *T. noae*, and *T. squamosa* as threatened species under section 4(e) of the ESA “due to the similarity of appearance of products derived from these species and those derived from the six aforementioned species proposed to be listed based on their extinction risk,” and to apply the section 9(a)(1)(A) import/export prohibition to these “similarity of appearance” products (89 FR 60498). According to the proposed rule, the four species that would be listed as threatened under section 4(e) of the ESA “have ranges that overlap the Pacific region where virtually all of the shipments of giant clam meat to the U.S. originate,” and “(t)aking this action would alleviate an enforcement challenge that has the potential to contribute to unauthorized commerce of endangered and threatened giant clam species in the U.S. and would provide for the conservation of these species under the ESA” (89 FR 60498). Without the prohibition of the import into and export from the U.S. of the “similarity of appearance” products of these four species, the six species of giant clams proposed for listing due to their extinction risk may face further declines in population and increased risk of extinction.

## Objectives of and Legal Basis for the Proposed Rule

The ESA provides several means for the protection of threatened or endangered species. Section 7 of the ESA requires Federal agencies to consult with NMFS to ensure that any activity they authorize, fund, or carry out (called the “agency action”) is not likely to jeopardize the continued existence of an endangered or threatened species, or destroy or adversely modify its critical habitat. The protections under ESA section 7 automatically apply when a species is listed as endangered or threatened. Section 9 of the ESA prohibits any person subject to the jurisdiction of the United States from the following activities, with respect to endangered species:

1. Import any such species into, or export any such species from the U.S.;
2. Take any such species within the U.S. or the U.S. territorial sea;
3. Take any such species upon the high seas;
4. Possess, sell, deliver, carry, transport, or ship, by any means whatsoever, any such species taken in violation of (2) and (3) above;
5. Deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of commercial activity, any such species;
6. Sell or offer for sale in interstate or foreign commerce any such species; or
7. Violate any regulation pertaining to such species or to any threatened species of fish or wildlife.

All of the ESA section 9 prohibitions automatically apply when a species is listed as endangered. For threatened species, Section 4(d) of the ESA authorizes the Secretary to promulgate protective regulations the Secretary determines are necessary and advisable for the conservation of the threatened species. It also authorizes the Secretary to prohibit by regulation any act prohibited under section 9(a)(1) of the ESA. NMFS determines what regulations to apply based on the biological status, conservation needs, and potential threats to the threatened species, and may extend all ESA section 9(a)(1) protections in a blanket or categorical fashion as a form of ministerial action taken under the second sentence of ESA section 4(d).

Section 4(e) of the ESA authorizes the treatment of a species, subspecies, or population segment as endangered or threatened if: “(a) such species so closely resembles in appearance, at the point in question, a species which has been listed pursuant to such section that 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 policy of this Act.” It is under this provision that the proposed rule would list *T. crocea*, *T. maxima*, *T. noae*, and *T. squamosa* as threatened species and would apply the section 9(a)(1)(A) import/export prohibition to these species’ “similarity of appearance” parts and products. Without the prohibition of the import into and export from the U.S. of the “similarity of appearance” parts and products of these four species, the six species of giant clams may face further declines in population and increased risk of extinction.

## Description and Estimate of the Number of Small Entities to which the Proposed Rule Will Apply

The RFA defines three types of small entities:

- **Small Business.** Section 601(3) of the RFA defines a small business according to the definition of a small business concern provided in section 3 of the Small Business Act (SBA). The SBA broadly defines a small business concern as a business which is “independently owned and operated and which is not dominant in its field of operation.” (15 USC § 632(a)(1)) The SBA provides industry-specific criteria based on either revenues or number of employees that delineate which businesses meet this definition.
- **Small Organization.** Section 601(4) of the RFA defines a small organization as a non-profit enterprise that is independently owned and operated and not dominant in its field.

- **Small Governmental Jurisdiction.** Section 601(5) of the RFA defines a small government jurisdiction as a government of a county, city, town, township, village, school district, or special district, with a population less than 50,000.

The RFA requires consideration of direct impacts on small entities that may result from the proposed rule, which would directly regulate the import into and export from the U.S. and its territories of “similarity of appearance” derivative parts and products of four species of giant clams. Small entities most likely to be directly impacted by the proposed rule are jewelry wholesalers engaged in the import, export, or domestic trade of derivative products of giant clams, as well as museums or traveling exhibitions that import and display carvings or other artistic items derived from giant clams. Impacts to wholesalers would take the form of lost revenues from the sale of derivative giant clams products, while commercial exhibitions could potentially lose revenue if attendance declines as a result of a carving or other item derived from a giant clam not being exhibited. The proposed rule could also indirectly impact domestic retailers of such derivative products that would be imported in the absence of the rule, as well as entities that would otherwise create or produce products (e.g., jewelry or meat) that would be sold to wholesalers for export. However, indirect impacts are expected to be minor and there is significant uncertainty regarding the types of entities that would bear these impacts. The proposed rule is not expected to directly affect small governmental jurisdictions. Exhibit 1 lists the industries that are most likely to be directly impacted by NAICS code and SBA size standard. According to a query of the Dun and Bradstreet Hoovers database, there are approximately 25,000 U.S. small entities classified as Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers and approximately 47,000 museums in the U.S. that qualify as small entities. The proposed import/export prohibition would apply to all of these small entities. However, based on the limited historical and anticipated number of imports into and exports from the U.S. of “similarity of appearance” products, very few small entities would be impacted.

**EXHIBIT 1 . INDUSTRIES MOST AFFECTED BY THE PROPOSED RULE AND A DESCRIPTION OF THE INDUSTRY SECTORS ENGAGED IN THOSE ACTIVITIES**

Relevant Activity	Description of Included Industry Sectors	NAICS Code	SBA Size Standard <sup>1</sup>
Import, Domestic wholesale, Export	Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers	423940	125 employees
Import, Export	Museums (e.g., Art galleries or Traveling museum exhibits)	712110	\$34,000,000

<sup>1</sup> SBA small business size standards are expressed either in number of employees or annual receipts in millions of dollars. The number of employees or annual receipts indicates the maximum allowed for an entity to be considered small (80 FR 7536).  
Source: (U.S. Small Business Administration 2023).

## Description of Reporting and Recordkeeping Efforts

Section 603(b)(4) of the RFA requires agencies to describe any new reporting, record-keeping, and other compliance requirements. This proposed rule does not contain any new or revised collection of information requirements. This rule, if adopted, would not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations.



## Identification of Relevant Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rule

The proposed rule will not duplicate or conflict with any other laws or regulations. *T. crocea*, *T. maxima*, *T. noae*, and *T. squamosa* are listed under Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora. However, currently there are no federal restrictions on the import into or export from the U.S. of these species or their derivative products.

## Description of Alternatives to the Proposed Rule Which Accomplish the Objectives and Which Minimize Impacts on Small Entities

The RFA requires consideration of alternative rules that would minimize impacts to small entities. Alternatives were evaluated based on alignment with the following objectives:

1. To conserve the six species of giant clams proposed to be listed as endangered or threatened under the ESA due to their extinction risk.
2. To comply with the mandates of the ESA.
3. To regulate activities to avoid or minimize take of the six species of giant clams proposed to be listed as endangered or threatened due to their extinction risk.
4. To allow ongoing conservation efforts to continue or promote further conservation and protective efforts for the six species of giant clams proposed to be listed as endangered or threatened due to their extinction risk.

We considered the following alternatives when developing the proposed rule.

### ALTERNATIVE 1: NO-ACTION ALTERNATIVE

Under the No-action Alternative, NMFS would not apply any protective regulations in association with the proposed listing of *T. crocea*, *T. maxima*, *T. noae*, and *T. squamosa* as threatened species under section 4(e) of the ESA, and there would be no change from current management policies of these four species. The No-action Alternative represents the regulatory status quo with respect to *T. crocea*, *T. maxima*, *T. noae*, and *T. squamosa*, but assumes that *H. porcellanus*, *T. mbalavuana*, *T. squamosina*, *T. derasa*, and *T. gigas* would be listed as endangered and *H. hippopus* would be listed as threatened under the ESA due to their extinction risk.

NMFS does not consider the No-action Alternative to be a reasonable alternative because it would not satisfy the objectives listed above and would undermine the purpose of the proposed “similarity of appearance” listings. Without extension of the ESA section 9(a)(1)(A) prohibition of import into and export from the U.S. of “similarity of appearance” products derived from *T. crocea*, *T. maxima*, *T. noae*, and *T. squamosa*, “similarity of appearance” products derived from any of the six species proposed to be listed due to their extinction risk could be misidentified by law enforcement officials as deriving from these four species. Thus, the No-action Alternative would undermine the listing of *T. crocea*, *T. maxima*, *T. noae*, and *T. squamosa* based on the similarity of appearance of their derivative products to those of the six species proposed to be listed due to their extinction risk, as their listing would provide no incremental benefit to the survival and recovery of six species proposed to be listed as endangered or threatened. Under the No-Action Alternative, no incremental impacts would be borne by small (or large) entities, but *H. porcellanus*, *T. mbalavuana*, *T. squamosina*, *T.*

*derasa*, *T. gigas*, and *H. hippopus* would continue to be at risk of further declines in abundance and increased risk of extinction due to international trade of their derivative parts.

## **ALTERNATIVE 2: PROPOSED ACTION**

The Proposed Action, or preferred alternative, would extend section 9(a)(1)(A) of the ESA to “similarity of appearance” products derived from *T. crocea*, *T. maxima*, *T. noae*, and *T. squamosa*, prohibiting their import into and export from the United States, in association with the proposed listing of these species under section 4(e) of the ESA. This alternative would allow for import into and export from the U.S. of live and intact specimens and shells of these species, as well as the delivery, receipt, carry, transport, or shipment, and sale or offer for sale of these species and their derivative parts and products in interstate commerce. This alternative would contribute to the survival and recovery of six species of giant clams proposed to be listed as endangered or threatened due to their extinction risk without constraining international trade of live or intact specimens or shells of *T. crocea*, *T. maxima*, *T. noae*, and *T. squamosa*, or domestic activities involving live or intact specimens, shells, or other derived products of these four species. Impacts on small entities would be limited to revenue losses borne by small entity wholesalers or museums or other exhibitors of giant clam products that, absent the Proposed Action, would engage in the import and/or export of “similarity of appearance” parts and products derived from these four species. Small entities that, absent the Proposed Action, would engage in the export of “similarity of appearance” parts and products derived from maricultured *T. crocea*, *T. maxima*, *T. noae*, and *T. squamosa* specimens would be impacted to the extent that they would otherwise generate revenue from such exports. However, no information is available suggesting this type of international trade would occur over the foreseeable future in the absence of the Proposed Action.

## **ALTERNATIVE 3: FULL ACTION ALTERNATIVE**

The Full Action Alternative would apply all prohibitions under section 9(a)(1) of the ESA to *T. crocea*, *T. maxima*, *T. noae*, and *T. squamosa*. Prohibitions under this alternative would include, but not be limited to, the import, export, possession, sale, delivery, carrying, transport, or shipping of these species – including live or intact specimens and shells – in interstate or foreign commerce or for commercial activity. Imports and exports of live specimens would be permitted under the Proposed Action but prohibited under the Full Action Alternative, which, relative to the Proposed Action and No-action Alternative, would incrementally impact small entities to the extent that they would otherwise generate revenue from sale of these four species of giant clams or their derivative products. LEMIS data indicate that there were 1,534 commercial imports into the U.S. and 124 exports from the U.S. of live specimens of *T. crocea*, *T. maxima*, *T. noae*, and *T. squamosa* from 2016 to 2020. The total value of the imports was approximately \$3.12 million (2023 dollars), while the exports had a total value of approximately \$113,000. LEMIS trade data for the years 2000-2014 indicate that small businesses in the Pet and Supplies Retailers and Other Miscellaneous Nondurable Goods Merchant Wholesalers industries (NAICS codes 424990 and 459910) would bear the vast majority of these impacts and that the majority of these impacts would be concentrated among a small number of companies. Incremental impacts of the Full Action Alternative on small entities could also be substantially greater than those that would occur under the Proposed Action in part because the prohibitions on take and interstate commerce would significantly constrain the development of giant clam mariculture projects in the U.S. According to the proposed rule, “*T. maxima*, in particular, is the target of several mariculture initiatives intended to establish a sustainable source of food and income for communities in American Samoa, Guam, and CNMI” (89 FR 60498). The Full Action Alternative would impact small entities to the extent that they would otherwise generate revenue from these mariculture projects. As the best available scientific and commercial information indicates that none of the six species proposed for ESA listing due to their extinction risk are extant within U.S. waters, but *T. crocea*, *T. maxima*, *T. noae*, and *T. squamosa* all occur within the waters of at least one U.S. Pacific island territory, the

Full Action Alternative would likely result in substantially greater impacts on small entities than the preferred alternative, without incrementally contributing to the survival or recovery of *H. porcellanus*, *T. mbalavuana*, *T. squamosina*, *T. derasa*, *T. gigas*, or *H. hippopus*.

# References

5 USC § 603. Initial regulatory flexibility analysis.

15 USC § 632. Small Business Act.

80 FR 7536. Size Standards Used To Define Small Business Concerns.

U.S. Small Business Administration. 2023. Table of Small Business Size Standards.