

**Proposed Rulemaking to Establish Protective Regulations under Section  
4(d) of the Endangered Species Act for the Threatened Banggai  
Cardinalfish**

**Initial Regulatory Flexibility Analysis**

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This analysis considers the extent to which impacts resulting from the Proposed Rulemaking to Establish Protective Regulations under Section 4(d) of the Endangered Species Act for the threatened Banggai Cardinalfish could be borne by small businesses. 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 interviews with industry stakeholders and academic researchers.

## Introduction

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. 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)

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."

## Summary of Findings

The total annualized impacts of the proposed rule to small entities are estimated to range from \$1.12 million to \$1.32 million (2022 dollars). Exhibit 1 presents a summary of these estimated impacts. The low end estimate represents annualized impacts to a single importer/wholesaler that accounts for between 80 and 90 percent of the U.S. wholesale market for Banggai cardinalfish. Per SBA small business size standards and employment level data obtained from the Dun and Bradstreet Hoovers database, this company qualifies as a small business. The high end estimate of \$1.32 million represents total annualized impacts on all entities that import Banggai cardinalfish to the U.S. and sell the fish wholesale to U.S. retailers. The range reflects uncertainty regarding whether the businesses that import the remaining 10-20 percent of Banggai cardinalfish are small entities, per SBA small business size standards. Based on estimated total annual revenue of \$20.1 million for the largest wholesaler of Banggai cardinalfish, the \$1.12 million in annualized impacts equates to approximately 5.6

percent of the company’s annual revenues.<sup>1</sup> Data informing these calculations were obtained from the SBA Table of Small Business Standards, queries of the Dun and Bradstreet Hoovers Database, and interviews with pet industry trade group representatives and academic researchers. Based on interviews with industry trade group representatives, absent the proposed rule, no increase or decrease in the level of imports of Banggai cardinalfish to the U.S. is anticipated over the foreseeable future.

As noted above, the estimated range of impacts of \$1.12 million to \$1.32 million is specific to U.S. entities that sell Banggai cardinalfish wholesale. According to interviews with industry trade group representatives, wholesale and retail of the Banggai cardinalfish accounts for nearly all U.S. trade of the fish. In comparison, import by aquaria and export for commercial or other purposes account for a small fraction of U.S. trade of the species. Quantification of potential impacts to wholesalers and retailers therefore captures the large majority of potential impacts of the proposed rule on small entities. Additionally, the small entity that accounts for 80-90 percent of the U.S. Banggai cardinalfish wholesale market sells the imported fish to a pet store retailer with employment levels well above the SBA standard for small businesses in the Pet and Pet Supplies Retailers industry. Potential impacts of the proposed rule on small entity retailers are therefore limited relative to potential impacts on small entity wholesalers in terms of both magnitude of lost revenues and lost revenues as a percentage of average annual revenues. Absent market share data for the companies that comprise the remainder of the U.S. retail market, quantification of potential impacts of the proposed rule on these entities would be conjecture. The scope of this IRFA’s quantitative analysis is therefore limited to potential impacts on entities that import and sell the Banggai cardinalfish wholesale.

**EXHIBIT 1 . SUMMARY OF ESTIMATED IMPACTS ON SMALL ENTITIES**

Metric	Estimate
Number of Banggai cardinalfish imported annually to the U.S. and sold wholesale	120,000
Revenue per Banggai cardinalfish sold by directly regulated entities <sup>1</sup>	\$11.00
Total annualized impacts of the Rule to directly impacted wholesalers	\$1,320,000
Largest wholesaler’s estimated percent share of Banggai cardinalfish imported and sold wholesale <sup>2</sup>	85%
Annualized impacts of the Rule to largest wholesaler <sup>3</sup>	\$1,122,000
Estimated average annual revenues of small entity wholesaler <sup>4</sup>	\$20,100,000

<sup>1</sup> Estimated annual revenues for this company were obtained from the Dun & Bradstreet Hoovers database.

Estimated impacts as a percentage of revenues	5.6%
<p>Notes:</p> <ol style="list-style-type: none"> <li>1. This value is based on a Petco retail price of \$32.99 per Banggai cardinalfish as of December 2022 and an assumed retail markup of three times the wholesale price.</li> <li>2. This represents the midpoint of market share estimates for the largest Banggai cardinalfish importer/wholesaler obtained from industry trade groups.</li> <li>3. This value is 85 percent of total estimated impacts to directly impacted wholesalers.</li> <li>4. Estimates of number of employees and annual revenues for this entity were obtained from the Dun &amp; Bradstreet Hoovers database.</li> </ol>	

## Why Action by the Agency Is Being Considered

The Banggai cardinalfish is a marine fish species that is endemic to the Banggai Archipelago, Central Sulawesi, Indonesia. NOAA’s National Marine Fisheries Service (NMFS) listed the Banggai cardinalfish as a threatened species under the ESA on January 20, 2016 (81 FR 3023). Upon completion of a 5-year review of the species’ listing status, NMFS concluded that no change to the listing status of the Banggai cardinalfish was warranted at that time (Markin 2021). Among the primary threats to the fish’s survival are international trade as a live marine ornamental reef fish and disease linked to high mortality of wild-caught fish imported for the ornamental trade. Unless these threats are addressed, the Banggai cardinalfish 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”) does not jeopardize the continued existence of an endangered or threatened species, or destroy or adversely modify its critical habitat. The protections under ESA section 7 are automatically adopted 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 but not when it is listed as threatened. 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. The Secretary also has discretion to apply any of the prohibitions listed under Section 9(a)(1) of the ESA to the threatened species. NMFS determines what regulations to apply based on the biological status, conservation needs, and potential threats to the threatened species.

## Summary of Significant Issues Raised in Public Comment in Response to the IRFA

This IRFA has not yet been published for public comment.

## 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) 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 to small entities that may result from the proposed rule, which would directly regulate the import into and export from the U.S. of the Banggai cardinalfish, whether for commercial or other purposes. Small entities that could be directly impacted by the proposed rule include wholesalers, public and private aquaria, and commercial exporters. While not directly regulated by the proposed rule, domestic retailers of the Banggai cardinalfish would also be affected. The proposed rule is not expected to directly affect small governmental jurisdictions. Small organizations could be impacted if entities conducting scientific research on imported Banggai cardinalfish qualify as small organizations and have to obtain permits under Section 10 of the ESA due to implementation of the rule. However, the likelihood and extent of potential impacts on these types of organizations is too uncertain to assess. Exhibit 2 lists potentially affected industries by NAICS code and SBA size standard.

### EXHIBIT 2 . 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
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Domestic wholesale, Export	Other Miscellaneous Nondurable Goods Merchant Wholesalers	424990	100 employees
Import, Export	Zoos and Botanical Gardens	712130	\$34,000,000
Domestic retail	Pet and Pet Supplies Retailers	459910	\$32,000,000
Source: (U.S. Small Business Administration 2022).			

Information gathered for this IRFA indicates that revenue losses to wholesalers and retailers of the Banggai cardinalfish would constitute the large majority of impacts of the proposed rule. There is uncertainty regarding the number and commercial value of Banggai cardinalfish that are imported to and exported from the U.S. for purposes other than domestic sale, as well as the number of small entities that are involved in these activities. However, potential impacts on small entities from the prohibition of these activities are expected to be minor, particularly compared to impacts likely to be borne by domestic wholesalers and retailers. Information gathered for this analysis also indicates small businesses would bear a small percentage of total impacts on retailers (i.e. 20 percent or less of total lost revenues), as a pet store that exceeds the SBA’s small business size standard for pet and pet supplies stores accounts for the large majority of domestic retail sales of Banggai cardinalfish.

According to data provided by industry trade groups, fewer than six companies import the Banggai cardinalfish into the U.S. These companies sell the fish wholesale to pet stores and tropical fish and aquarium supply stores. A single small business accounts for the importation and wholesale of approximately 100,000 Banggai cardinalfish annually. This figure equates to between 80 and 90 percent of annual imports of the fish. According to data obtained from the Dun and Bradstreet Hoovers Database, this company has fewer than 100 employees and therefore qualifies as a small entity, per SBA small business size standards. Specific data is not available for the companies that comprise the portions of the U.S. wholesale and retail markets not accounted for by the largest wholesaler and retailer, respectively. Therefore, attempting to identify the exact number of such entities that may be affected by the prohibition of the import of the Banggai cardinalfish, or to quantify the potential impacts of the proposed rule to these entities, would be conjecture. Given the lack of data that would inform quantitative analysis of the impacts of the proposed rule to retailers and exporters of the Banggai cardinalfish, as well as information provided by industry trade groups indicating that the large majority of impacts to retailers would not be borne by small entities, this IRFA focuses on potential impacts of the rule on small entities that import the Banggai cardinalfish and sell it wholesale domestically.

## Description of Reporting and Recordkeeping Efforts

The proposed rule does not require “reporting” or “recordkeeping” efforts as defined by the Paperwork Reduction Act. However, the proposed rule would result in additional regulatory burdens, as it would require that any take (i.e. import and export) of Banggai cardinalfish for purposes of scientific research or that otherwise may help conserve or protect the species be reviewed by NMFS and covered under an ESA section 10 permit.



## 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. Currently, there are no federal restrictions on importing the Banggai cardinalfish into or exporting the fish from the U.S., and Banggai cardinalfish are not listed in any appendices of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, which would potentially place import or export requirements on the Banggai cardinalfish.

## 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 Banggai cardinalfish.
2. To comply with the mandates of the ESA.
3. To regulate activities to avoid or minimize take of Banggai cardinalfish.
4. To allow ongoing conservation efforts to continue or promote further conservation and protective efforts for the Banggai cardinalfish.

We considered the following alternatives when developing the proposed rule.

### ALTERNATIVE 1: NO ACTION ALTERNATIVE

Under the No-action Alternative, NMFS would not establish an ESA 4(d) Rule (i.e., no change from current management policies). The No-action Alternative represents the regulatory status quo.

NMFS does not consider the No-action Alternative to be a reasonable alternative because it would not satisfy the objectives listed above. Without regulations established in an ESA 4(d) rule, Banggai cardinalfish would remain vulnerable to a range of threats, including international trade as a live marine ornamental reef fish and disease linked to high mortality of wild-caught fish imported for the ornamental trade. No incremental impacts would be borne by small (or other) entities, but the Banggai cardinalfish would continue to be at risk of further declines in abundance and increased risk of extinction. Declining abundance of the species could lead to reduced imports of Banggai cardinalfish into the U.S. and/or higher costs per fish to importers as supply dwindles, which could ultimately negatively affect revenues of small entities that sell the fish wholesale or retail. Moreover, the No Action Alternative would not accomplish the stated objectives of the ESA, because it would not aid in the conservation of the threatened Banggai cardinalfish. Thus, the No-action Alternative is not necessarily a “no cost” alternative for small entities.

### ALTERNATIVE 2: Application of All ESA sec. 9(a) Prohibitions (FULL ACTION ALTERNATIVE)

The Full Action Alternative would apply all prohibitions under section 9(a)(1) of the ESA to Banggai cardinalfish. Prohibitions under this alternative would include, but not be limited to, the import, export, possession, sale, delivery, receiving, carrying, transport, or shipping of Banggai cardinalfish in interstate or foreign commerce or

for commercial activity. Incremental impacts to small entities could be substantially greater than those that would occur under the preferred alternative, in part because of the interstate commerce prohibition, which would significantly constrain the development of wholesale and retail markets for domestically bred Banggai cardinalfish. Take prohibitions would not apply to take that is permitted under an ESA section 10 permit.

### **ALTERNATIVE 3: Application of ESA sec. 9(a)(1)(A) Prohibitions (PROPOSED ACTION)**

The Proposed Action would adopt and apply section 9(a)(1)(A) of the ESA to Banggai cardinalfish, prohibiting the species' import into and export from the United States. This alternative would allow for delivery, receipt, carry, transport, or shipment, and sale or offer for sale of Banggai cardinalfish in interstate commerce. As with the Full Action Alternative, under this alternative import and export of Banggai cardinalfish into and from the U.S. would be limited solely to research or other activities that enhance the survival of the species and would need to be covered under section 10 of the ESA. Unlike under the Full Action Alternative, a section 10 permit would not be required for such activities if the Banggai cardinalfish are obtained domestically.

# References

5 USC § 603. Initial regulatory flexibility analysis.

15 USC § 632. Small Business Act.

Endangered and Threatened Wildlife and Plants; Final Listing Determinations on Proposal to List the Banggai Cardinalfish and Harrison's Dogfish Under the Endangered Species Act, 81 Fed. Reg. 3023 (Jan. 20, 2016).

Markin, E. 2021. 5-Year Review: Summary and Evaluation: Banggai cardinalfish (*Pterapogon kauderni*). 32 pages.

U.S. Small Business Administration. 2022. Table of Small Business Size Standards.