

**INFORMATION REPORT: APPENDIX C**  
**INITIAL REGULATORY FLEXIBILITY ACT ANALYSIS**  
**DECEMBER 2016**  
**(UPDATED 2019)**

This initial regulatory flexibility act analysis (IRFA) considers the extent to which the potential economic impacts associated with the designation of critical habitat for the listed Indo-Pacific coral species could be borne by small entities. The IRFA 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 IRFA was gathered from the U.S. Small Business Administration (SBA) and the U.S. Census Bureau's 2012 Economic Census of Island Areas.

*SUMMARY OF FINDINGS*

Consultations on in-water and coastal construction and dredging and disposal (as determined by the 4(b)(2) economic impact analysis report, which is Appendix B of the Information Report) all have the potential to involve third parties, such as recipients of Clean Water Act Section 404 permits. These activities were combined into one broad industry category that may experience impacts to small entities: In-Water and Coastal Construction and Dredging. Information presented in Section 4.0 of the economic impact analysis report demonstrates the lack of third party involvement in consultations on the effects of federal fishery management, protected area management, shipwreck removal, scientific research and monitoring, and military activities on ESA-listed marine species in the three Territories as these consultations are done directly between NMFS and the federal action agency with no third party involvement. For example, these five types of consultations are all represented in the consultations completed in 2005-2019 that were reviewed for the economic impact analysis, and third parties were not involved in any of them. As a result, no incremental costs are assigned to small entities for these activities.

This IRFA relies on the estimated incremental impacts resulting from the proposed critical habitat designation, as described in Section 6.0 of the economic impact analysis report. To be consistent with this analysis, the IRFA provides low-end and high-end estimates of the impacts to small entities.

The low-end estimate assumes no incremental project modifications occur because baseline permit conditions/regulations would provide sufficient protection to avoid adverse modification of critical habitat. Impacts to small entities would be due solely to the additional administrative costs of considering the potential for adverse effects to critical habitat during section 7 consultations. In addition, the low-end estimate assumes that trends in the frequency of informal consultations over the next ten years will resemble those of the past ten years (Section 6.0 of the economic impact analysis report).

The high-end estimate of the impacts to small entities assumes that all future projects related to in-water and coastal construction and dredging will require formal consultations, and it assumes that there will be incremental project modification costs for all these future projects (Section 6.0 of the economic impact analysis report).

For some projects related to in-water and coastal construction and dredging most of the administrative costs and project modification costs will likely either be borne directly by, or passed onto, federal agencies. However, in order to present a conservative estimate of the impacts to small entities (i.e., an estimate more likely to overstate impacts than understate them), this IRFA assumes that all administrative and project modification costs are borne by third parties rather than federal agencies.

Table 1 and Table 2 present a summary of the low-end and high-end estimated impacts to small entities, respectively. These impacts are anticipated to be borne by the small entities engaged in in-water and coastal construction and dredging that consult with NMFS regarding the listed Indo-Pacific coral species critical habitat in the next ten years. Impacts are presented for each of the three U.S. Pacific jurisdictional areas where one or more of the listed coral species occur and where small businesses engaged in the relevant activities have been identified – American Samoa, Guam, and CNMI. According to Section 6.0 of the economic impact analysis report, a small number (0.2) of in-water and coastal construction projects are forecasted to occur in the PRIA. However, because there are no businesses located in the PRIA, it is not possible to determine what small entities, if any, would be affected. In any case, given both that very few consultations are expected occur and that these consultations are likely be informal, the potential costs to small entities

associated with in-water and coastal construction projects in the PRIA are anticipated to be negligible.

Due to the uncertainty regarding the number of small entities that may be affected by critical habitat designation, this IRFA estimates impacts to small entities under two different scenarios. Scenario 1 assumes that all small entities bear an equal share of costs, while Scenario 2 assumes that one small entity bears all costs. To assess the relative impact of regulatory costs on business and industry viability, costs per entity were expressed as a percentage of the average annual revenues of a business engaged in in-water and coastal construction or dredging.

**Table 1. Summary of Low-End Quantified Impacts to Small Entities by Area**

Metric	In-Water and Coastal Construction and Dredging			
	American Samoa	Guam	CNMI	Total
Estimated total annualized impacts of critical habitat designation to small entities <sup>a</sup>	\$9,573	\$24,436	\$5,455	\$39,464
Estimated average annual revenues for small entities <sup>b</sup>	\$1,225,000	\$6,232,773	\$664,750	\$4,822,667
Estimated number of small entities conducting activities in critical habitat areas being considered <sup>b</sup>	4	22	4	30
Scenario 1: Assumes that all small entities bear an equal share of costs				
Estimated number of small entities subject to section 7 consultation per year <sup>c</sup>	3.4	9.9	2.4	15.7
Estimated annual consultations per small entity <sup>d</sup>	0.9	0.5	0.6	0.5
Estimated impact per small entity per year	\$2,816	\$2,468	\$2,273	\$2,514
Estimated impact per small entity as a percentage of revenues	0.23%	0.04%	0.34%	0.05%

Scenario 2: Assumes that one small entity bears all costs				
Estimated impact per small entity per year	\$9,573	\$24,436	\$5,455	\$39,464
Estimated impact per small entity as a percentage of revenues	0.78%	0.39%	0.82%	0.82%
<p>Notes:</p> <p><sup>a</sup> This value is the low-end estimate of annualized total incremental costs expected to be borne by small entities engaged in in-water and coastal construction or dredging (Section 6.0 of the economic impact analysis report). This IRFA conservatively assumes that all administrative costs are borne by third parties rather than federal agencies</p> <p><sup>b</sup> The number of small entities and their average revenues were estimated through queries of the 2012 Economic Census of Island Areas database developed by the U.S. Census Bureau (2016). Small entities were identified based on the industry-specific criteria outlined in Table 3.</p> <p><sup>c</sup> The estimated maximum number of small entities subject to consultation annually reflects the total number of consultations projected to occur annually for in-water and coastal construction and dredging activities (Section 5.0 of the economic impact analysis report).</p> <p><sup>d</sup> These are annual averages for a 10 year period, and there are &lt;10 consultations projected for the 10 years.</p>				

**Table 2. Summary of High-End Quantified Impacts to Small Entities by Area**

Metric	In-Water and Coastal Construction and Dredging			
	American Samoa	Guam	CNMI	Total
Estimated total annualized impacts of critical habitat designation to small entities <sup>a</sup>	\$399,773	\$1,142,273	\$277,500	\$1,819,545
Estimated average annual revenues for small entities <sup>b</sup>	\$1,225,000	\$6,232,773	\$664,750	\$4,822,667
Estimated number of small entities conducting activities in critical habitat areas being considered <sup>b</sup>	4	22	4	30
Scenario 1: Assumes that all small entities bear an equal share of costs				
Estimated number of small entities subject to section 7 consultation per year <sup>c</sup>	3.4	9.9	2.4	15.7

Estimated annual consultations per small entity	0.9	0.5	0.6	0.5
Estimated impact per small entity per year	\$117,580.21	\$115,381.08	\$115,625.00	\$115,894.61
Estimated impact per small entity as a percentage of revenues	9.60%	1.85%	17.39%	2.40%
Scenario 2: Assumes that one small entity bears all costs				
Estimated impact per small entity per year	\$399,773	\$1,142,273	\$277,500	\$1,819,545
Estimated impact per small entity as a percentage of revenues	32.63%	18.33%	41.75%	37.73%
Notes: <sup>a</sup> This value is the high-end estimate of annualized total incremental costs expected to be borne by small entities engaged in in-water and coastal construction or dredging (Section 6.0 of the economic impact analysis report). This IRFA conservatively assumes that all administrative and project modification costs are borne by third parties rather than federal agencies. <sup>b</sup> The number of small entities and their average revenues were estimated through queries of the 2012 Economic Census of Island Areas database developed by the U.S. Census Bureau (2016). Small entities were identified based on the industry-specific criteria outlined in Table 3. <sup>c</sup> The estimated maximum number of small entities subject to consultation annually reflects the total number of consultations projected to occur annually for in-water and coastal construction and dredging activities (Section 5.0 of the economic impact analysis report).				

The low-end estimate of the total annualized incremental impacts of critical habitat designation to small entities within the in-water and coastal construction and dredging category across the three areas is about \$39,000. Under Scenario 1, these costs are distributed evenly among the approximate 16 entities expected to be subject to section 7 consultations each year. As indicated in footnote c in the tables above, the estimated maximum number of small entities subject to consultation annually reflects the total number of consultations projected to occur annually for in-water and coastal construction and dredging activities. Per entity annualized impacts of critical habitat designation across the three areas are estimated to make up only 0.05 percent of the average annual revenues for a business engaged in in-water and coastal construction or dredging. Under Scenario 2, the \$39,000 in annualized impacts would be borne by a single small entity. Even under this

conservative assumption, the impact is expected to result in impacts that are less than 0.9 percent of average annual revenues.

The high-end estimate of the annualized impacts to small entities within the in-water and coastal construction and dredging category across the three areas is \$1,819,000. Under Scenario 1, per entity annualized impacts of critical habitat designation across the three areas are estimated to make up 2.4 percent of annual revenues for each affected small entity. Under Scenario 2, in which the more than \$1.8 million in annualized impacts are borne by a single small entity, the impact represents more than 38 percent of the average annual revenues.

The high-end estimate is almost certainly an overstatement of the costs borne by small entities, especially under Scenario 2. It is not likely that all projected future actions will require formal consultations, nor is it likely that one small entity would bear all the consultation costs. Moreover, this IRFA conservatively assumes that all administrative and project modification costs are borne by third parties rather than federal agencies. Consequently, it is probable that Scenario 2 of the high-end estimate understates the number of affected small entities and overstates the costs borne by these entities. On other hand, Scenario 1 of the low-end estimate likely overstates the number of small entities affected and possibly understates the costs borne by these entities. In other words, the scenarios in Table 1 and Table 2 present broad ranges of the number of potentially affected entities and associated revenue effects. The actual number of small entities affected and revenue effects are not expected to fall at either extreme end of the continuum.

#### *IRFA REQUIREMENTS*

The RFA, passed in 1980, requires federal agencies to consider the impacts of proposed regulations on small entities. When a proposed regulation is published for public comment in the Federal Register, it must be accompanied by an IRFA. As described in 5 U.S. Code § 603, each IRFA is required to contain several elements: (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; and (5) 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.”

#### ***WHY ACTION BY THE AGENCY IS BEING CONSIDERED***

In 2014, 15 Indo-Pacific coral species were listed as threatened under the Endangered Species Act (ESA) (79 FR 53851; September 10, 2014). Section 4(a)(3)(A) of the ESA requires that, to the extent prudent and determinable, critical habitat be designated concurrently with the listing of a species as endangered or threatened. (50 CFR 424.12). NMFS determined that designating critical habitat for seven of the listed Indo-Pacific corals is prudent, as these seven species are the only ones that have been confirmed to occur in U.S. waters. Designation of critical habitat is being proposed in order to fulfill this legal requirement of the ESA in marine waters off the coasts of American Samoa, Guam, CNMI, and the PRIA.

#### ***OBJECTIVES OF AND LEGAL BASIS FOR THE PROPOSED RULE***

The objective of this rule is to use the best scientific data available to designate critical habitat for the Indo-Pacific coral species listed as threatened under the ESA. The designation is designed to meet the conservation needs of the listed coral species and ultimately aid in species recovery. The ESA defines critical habitat as:

1. The specific areas within the geographical area currently occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (i) essential to the conservation of the species and (ii) that may require special management considerations or protection, and;
2. Specific areas outside the geographical area occupied by a species at the time it is listed upon a determination by the Secretary that such areas are essential for the conservation of the species (50 CFR 424.02).

***DESCRIPTION AND ESTIMATE OF THE NUMBER OF SMALL ENTITIES TO WHICH THE PROPOSED RULE WILL APPLY***

***Definition of a Small Entity***

The RFA defines three types of small entities:

- 1. 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. The Act 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 U.S.C § 632). The SBA provides industry specific criteria based on either revenues or number of employees that delineate which businesses meet this definition.
- 2. 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.
- 3. 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 a proposed rule. For critical habitat designation, all potential direct impacts are incurred through the section 7 consultation process. Though section 7 of the ESA only applies to activities with a federal nexus, small entities may be directly impacted if they are involved in actions that are funded or permitted through federal agencies.

Indirect impacts of critical habitat are unintended changes in economic behavior that may occur outside of the ESA, through other federal or non-federal actions, and that are caused by the designation of critical habitat. Economic effects expected to occur regardless of critical habitat designation are considered baseline impacts. While it is possible that indirect impacts to small entities may occur as a result of critical habitat designation, these impacts are not quantified in this IRFA.

The courts have held that the RFA/SBREFEA requires federal agencies to perform an analysis of impacts to small entities that are directly regulated by the proposed rule.



In the case of *Mid-Tex Electric Cooperative, Inc., v. Federal Energy Regulatory Commission (FERC)*, FERC proposed regulations affecting the manner in which generating utilities incorporated construction work in progress in their rates. The generating utilities that expected to be regulated were large businesses; however, their customers – transmitting utilities such as electric cooperatives – included numerous small entities. In this case, the court agreed that FERC simply authorized large electric generators to pass these costs through to their transmitting and retail utility customers, and FERC could therefore certify that small entities were not directly impacted within the definition of the RFA.

Similarly, *American Trucking Associations, Inc. v. Environmental Protection Agency (EPA)* addressed a rulemaking in which EPA established a primary national ambient air quality standard for ozone and particulate matter. The basis of EPA's RFA/SBREFA certification was that this standard did not directly regulate small entities; instead, small entities were indirectly regulated through the implementation of state plans that incorporated the standards. The court found that, while EPA imposed regulation on states, it did not have authority under this rule to impose regulations directly on small entities, and, therefore, small entities were not directly impacted within the definition of the RFA.

In its guidance on how to comply with the RFA, the SBA recognizes that consideration of indirectly affected small entities is not required by the RFA, but encourages agencies to perform an analysis of impacts on small entities even when the impacts of its regulation are indirect: “If an agency can accomplish its statutory mission in a more cost-effective manner, the Office of Advocacy [of the SBA] believes that it is good public policy to do so. The only way an agency can determine this is if it does not certify regulations that it knows will have a significant impact on small entities even if the small entities are regulated by a delegation of authority from the federal agency to some other governing body” (U.S. Small Business Administration 2003).

The regulatory mechanism through which critical habitat protections are enforced is section 7 of the ESA, which directly regulates only those activities carried out, funded, or permitted by a federal agency. By definition, federal agencies are not considered small entities, although the activities they may fund or permit may be proposed or carried out by small entities. Given the SBA guidance described above, this analysis considers the extent to which this designation could potentially affect

small entities, regardless of whether these entities would be directly regulated by the NMFS through the critical habitat designation or by a delegation of impact from the directly regulated entity.

*Description of Economic Activities for Which Impacts Are Most Likely*

This IRFA focuses on identifying small entities that may bear the incremental impacts of this rulemaking. Section 4.0 of the economic impact analysis report (Appendix B of the Information Report) identifies the following economic activities as potentially requiring modification to avoid destruction or adverse modification of the essential features of the listed Indo-Pacific coral species:

- In-water and Coastal Construction
- Dredging and Disposal
- Water Quality and Discharges
- Fishery Management
- Military Activities
- Shipwreck Removal
- Scientific Research and Monitoring
- Aquaculture
- Protected Area Management
- Beach Nourishment and Shoreline Protection

Though there is significant uncertainty regarding which future section 7 consultations will involve third parties, information presented in Section 4.0 of the the economic impact analysis report provides some indication of the probability of third party involvement for each activity category. This information is summarized in the paragraphs below.

Consultations on water quality management include both inter-agency consultations on regional water quality standards and project-specific consultations regarding

point source water pollution, such as NPDES permits issued to third parties. However, the third parties issued NPDES permits in American Samoa, Guam, and CNMI are either businesses with average annual receipts that exceed the SBA thresholds for determining whether a firm is small or are governments of a territory or commonwealth that have populations greater than 50,000. Consultations on water quality standards take the form of inter-agency consultations that do not involve third parties.

Consultations on aquaculture have the potential to involve third parties, such as recipients of CWA Section 404 permits and NPDES permits. However, the number of section 7 consultations that may result from aquaculture projects over the next 10 years could not be estimated due to the speculative nature of these projects and the lack of information about the number and location of potential projects (Section 5.0 of the economic impact analysis report). In addition, because no section 7 consultations occurred for beach nourishment and shoreline protection projects within the historical time frame selected for the economic impacts analysis (2005-2015), the number of section 7 consultations that may result from such projects over the next 10 years was not estimated (Section 5.0 of the economic impact analysis report).

Consultations on fishery management, protected area management, shipwreck removal, scientific research and monitoring, and military activities typically take the form of inter-agency consultations that do not involve third parties. As a result, no incremental costs are assigned to small entities for these activities.

Consultations on in-water and construction and dredging and disposal all have the potential to involve third parties, such as recipients of CWA Section 404 permits. These activities were combined into one broad industry category that may experience impacts to small entities: In-Water and Coastal Construction and Dredging. Table 3 lists potentially affected industries within this category by North American Industry Classification System (NAICS) code and SBA size standard. Given the uncertainty regarding the proportion of consultations on activities in this category that will involve third parties, this IRFA conservatively assumes that all future consultations on these activities will involve third parties.

This IRFA only considers industries that would be directly affected through consultation with NMFS. The two categories of direct incremental impacts of critical habitat designation are:

- The additional administrative costs of considering the potential for adverse effects to critical habitat during section 7 consultations; and
- Implementation of any project modifications recommended by NMFS through section 7 consultation to avoid potential destruction or adverse modification of critical habitat.

Ideally, this IRFA would directly identify the number of small entities which may engage in consultation with NMFS regarding potential effects of projects and activities on coral species critical habitat. However, significant uncertainty exists regarding what future projects may involve which small entities. Absent specific knowledge regarding which small entities may engage in consultation with NMFS over the next ten years, this analysis relies on industry and location-specific information on small businesses available through the U.S. Census Bureau's 2012 Economic Census of Island Areas (2016). Table 3 summarizes the NAICS codes that were identified as relevant to in-water and construction and dredging and disposal. The Economic Census of Island Areas was used to identify small businesses classified with these NAICS codes that operate in American Samoa, Guam, and CNMI.

**Table 3. Major Relevant Activities and a Description of the Industry Sectors Engaged in Those Activities**

Activity	NAICS Code	Description of Included Industry Sectors	SBA Size Standard (Average Annual Receipts)
<b>In-Water and Coastal Construction and Dredging</b>	237	<p>Heavy and Civil Engineering Construction -- This subsector comprises establishments whose primary activity is the construction of entire engineering projects, and specialty trade contractors, whose primary activity is the production of a specific component for such projects.</p> <p>The heavy and civil engineering construction subsector consists of these industry groups:            Utility System Construction: NAICS 2371            Land Subdivision: NAICS 2372            Highway, Street, and Bridge Construction: NAICS 2373            Other Heavy and Civil Engineering Construction: NAICS 2379            Dredging and Surface Cleanup Activities: NAICS 2379</p>	\$30 - \$39.5 million
<b>Aquaculture</b>	112	<p>Animal Production and Aquaculture – This subsector comprises establishments, such as ranches, farms and feedlots, primarily engaged in raising animals for sale of animals or animal products and/or raise aquatic plants and animals in controlled or selected aquatic environments for the sale of aquatic plants, animals, or their products.</p> <p>Finfish Farming and Fish Hatcheries: NAICS 112511            Shellfish Farming: NAICS 112512            Other Aquaculture: NAICS 112519</p>	\$1.0 million
<b>Farming</b>	111	Industries in the Crop Production subsector grow crops mainly for food and fiber. The subsector comprises establishments, such as farms, orchards, groves, greenhouses, and nurseries, primarily engaged in growing crops, plants, vines, or trees and their seeds	\$1 million
<b>Fishery Management</b>	114	<p>Fishing, hunting and trapping – This subsector comprises establishments primarily engaged in catching fish and other wild animals from their natural habitats.</p> <p>Finfish Fishing: NAICS 114111            Shellfish Fishing: NAICS 114112            Other Marine Fishing: NAICS 114119</p>	\$22 million (NAICS 114111) \$6 million (NAICS 114112) \$8 million (NAICS 114119)

#### ***DESCRIPTION OF REPORTING AND RECORDKEEPING EFFORTS***

The Proposed Rule does not require “reporting” or “recordkeeping” efforts as defined by the Paperwork Reduction Act. However, designation of critical habitat will require third parties to consult with NMFS and other federal action agencies

regarding any potential impacts to critical habitat from projects. This process is likely to involve communication with NMFS and federal action agencies through letters, phone calls, or in-person meetings.

***IDENTIFICATION OF RELEVANT FEDERAL RULES THAT MAY DUPLICATE, OVERLAP, OR CONFLICT WITH THE PROPOSED RULE***

Other aspects of the ESA may overlap with critical habitat designation. For instance, listing of the Indo-Pacific coral species as threatened under the ESA requires activities with a federal nexus to consult with NMFS to avoid jeopardy to the species. However, this IRFA only examines the incremental impacts to small entities from the proposed critical habitat rule.

***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. The alternative of not designating critical habitat was considered in this IRFA but was rejected because, in this case, it would violate the legal requirements of the ESA. However, Section 4(b)(2) of the ESA allows NMFS to exclude particular areas from critical habitat designation if it decides that the expected economic, national security, or other relevant impacts of critical habitat designation outweigh the benefits of inclusion. As a result, alternatives to the proposed rule could exclude various geographic areas from being designated as critical habitat.

***2019 UPDATE***

The economic impact analysis report was based on PIRO's consultation history between 2005 and 2015. The report provided a forecast of quantity and distribution of future section 7 consultations on coral critical habitat, based on the NMFS PIRO section 7 consultation database for 2005 to 2015, and interviews with key federal action and local agencies. To supplement the 2016 economic report, a comparison was conducted of the 2016-2025 projected Section 7 consultations vs. the 2016-2019

actual Section 7 consultations (see Appendix 3 of the economic impact analysis report), which is summarized below.

During the 3.6 year period from January 2016 to August 2019, 70 consultations were completed within potential proposed coral critical habitat on actions that were likely to affect listed corals, including two formal consultations and 68 informal consultations. The annual number of such consultations projected by the 2016 economic report (18.6/yr) was very similar to the annual number of consultations that were actually carried out (19.4/yr). However, the annual number of formal consultations projected by the 2016 economic report (1.8/yr) was three times higher than the annual number of formal consultations that were actually carried out (0.6/yr)( see Appendix 3 of the economic impact analysis report).

## ***REFERENCES***

- U.S. Census Bureau. 2016. 2012 Economic Census of Island Areas. Available online at <https://www.census.gov/econ/islandareas/>. Accessed February 15, 2016.
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