

Request for Proposals

Economic Analysis of Critical Habitat Designations for Arctic Ringed Seals and the Beringia Distinct Population Segment (DPS) of Bearded Seals



Actual issue date: November 15, 2012

DEADLINE FOR PROPOSALS: November 26, 2012

Section I. Proposed Schedule

**ECONOMIC ANALYSES OF
CRITICAL HABITAT DESIGNATIONS FOR ARCTIC RINGED SEALS AND THE
BERINGIA DISTINCT POPULATION SEGMENT (DPS) OF BEARDED SEALS**

November 15, 2012 Requests for Proposals (RFP) distributed

November 19, 2012 Deadline for written questions on RFP

- **All questions should be directed to:
Michael Arredondo @ marredondo@psmfc.org**

**November 21, 2012 PSMFC answers to written questions posted on website:
<http://www.psmfc.org/procurements/blog>**

November 26, 2012 Deadline for proposals - 3:00 PM PST

- **Only e-mailed proposals will be accepted.**
- **Submit proposals to: marredondo@psmfc.org**

November 29, 2012 Proposal Review

December 3, 2012 Finalists Selected

STATEMENT OF WORK FOR THE PREPARATION OF ECONOMIC ANALYSES OF CRITICAL HABITAT DESIGNATIONS FOR ARCTIC RINGED SEALS AND THE BERINGIA DISTINCT POPULATION SEGMENT (DPS) OF BEARDED SEALS

Section II. Introduction

The National Marine Fisheries Service (NMFS) has proposed to list Arctic ringed seals and the Beringia distinct population segment (DPS) of bearded seals as threatened under the Endangered Species Act (ESA). Section 4(a)(3) of the ESA requires that, to the extent practicable and determinable, critical habitat be designated concurrently with the listing of a species. If critical habitat is not determinable at that time, NMFS may take up to one additional year from the date when the final rule to list a species is due to designate critical habitat (should ringed and bearded seals be listed, this date would be June 10, 2013).

Designation of critical habitat must be based on the best scientific data available and must take into consideration the economic, national security, and other relevant impacts of specifying any particular area as critical habitat. “Critical habitat” is defined as: (1) specific areas within the geographical area occupied by the species at the time of listing, if they contain physical or biological features essential to conservation, and those features may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation. The Secretary of Commerce may exclude an area from critical habitat if the benefits of exclusion outweigh the benefits of designation, unless excluding the area will result in the extinction of the species concerned.

Once critical habitat is designated, section 7 of the ESA requires federal agencies to ensure that they do not fund, authorize, or carry out any actions that are likely to destroy or adversely modify that habitat. This requirement is in addition to the requirement that federal agencies ensure their actions do not jeopardize the continued existence of the species. These complementary requirements apply only to federal agency actions, and the latter only to habitat that has been designated as critical. A critical habitat designation does not set up a preserve or refuge, and applies only when federal funding, permits, or projects are involved (i.e., a federal nexus). Critical habitat requirements do not apply to citizens engaged in activities on private land that do not involve a federal agency.

The geographical area occupied by Arctic ringed seals and the Beringia DPS of bearded seals is the same as their historical ranges. Within U.S. jurisdiction, the putative range of the Beringia DPS extends from about 45° N latitude in the Bering Sea, north into the Beaufort and Chukchi seas. The putative range of Arctic ringed seals within U.S. jurisdiction extends from Bristol Bay and the Pribilof Islands in the Bering Sea, north into the Beaufort and Chukchi seas. NMFS regulations prohibit designating critical habitat in foreign countries or in other areas outside U.S. jurisdiction. Normally, critical habitat does not extend to the entire range of a species.

Section III. Objective

Under the direction of, and in close coordination with, the Regional Economist, NMFS –Alaska Region, the Contractor shall perform (i) three principal tasks with respect to Arctic ringed seals,

(ii) three principal tasks with respect to the Beringia DPS of bearded seals, and (iii) one principal task with respect to Arctic ringed seals and the Beringia DPS of bearded seals combined. First, for each species, the contractor shall identify, compile, characterize, and synthesize data, capital investment, regional impacts, and associated information related to economic development and commercial activities in and around the areas of proposed critical habitat that have or may reasonably be assumed to have a federal nexus, from publically available sources (e.g., Annual Reports, Development Prospectuses, Public Permitting Applications, Governmental and Quasi-governmental Development Authorities). NMFS will determine the specific boundaries of the proposed critical habitat for each species, as well as those physical or biological features essential to their conservation, based on the best data available. NMFS will also provide information on any specific areas of CH that may be considered in the context of the 4(b)(2) provisions of the designation. Each of these will be provided to the contractor at the outset of the contract or as soon thereafter as practicable.

Second, for each species, the Contractor shall use this information to prepare a **separate** economic impact analysis of NMFS' proposal, and any alternative critical habitat designations that NMFS identifies. These analyses must satisfy ESA section 4(b)(2), Executive Order 12866, and Regulatory Flexibility Act (RFA) requirements and adhere to the standard content and format prescribed by each. Such analyses, for each species, will aid NMFS-Alaska Region in understanding whether the benefits of including any particular proposed critical habitat area outweigh the benefits of excluding that area. Additionally, they will provide the basis for assessing the economic benefits and costs, distributional effects, and net National benefit, as well as significant adverse economic impacts uniquely accruing to small entities.

Third, for each species, the Contractor shall compile, review, code, and summarize all public comments received on the proposed rules. This shall consist of a Comment Analysis Report (CAR). Should there be substantial duplication of comments received between the proposals for the two species, a single CAR may be produced that presents the combined results for both species. Such a combined CAR will include species-specific statements of concern where appropriate.

Fourth, the Contractor shall provide support services for three public hearings to be held on the proposed critical habitat designations for Arctic ringed seals and the Beringia DPS of bearded seals (one each in Anchorage, Barrow, and Nome) to include: a recorder to be present at and transcribe each public hearing; a staff member to be present at each hearing; a meeting room equipped with a public address system, including microphones, a Powerpoint projector and screen, and a speakerphone; light refreshments at the Barrow and Nome hearings; an Inupiat interpreter in Barrow; and photocopies of any informational handouts prepared by NMFS and provided to the Contractor in advance of the hearings.

Section IV. Scope of Work

Under E.O.12866 and RFA, NMFS must consider all attributable economic benefits, costs, and distributional impacts of designating critical habitat. These include incremental economic effects uniquely associated with critical habitat designation, co-extensive impacts when "listing" effects cannot be satisfactorily differentiated and isolated from critical habitat designation effects, and indirect effects (to the extent that they may be identified and meaningfully measured). The

Contractor shall, under the guidance of the NMFS Project Manager/Regional Economist, and individually for Arctic ringed seals and the Beringia DPS of bearded seals, identify all relevant uses and users of the areas proposed as critical habitat and immediately adjacent uplands that may reasonably be expected to be impacted (i.e., positively or adversely), either directly or indirectly by the proposed critical habitat determinations. For each species, the Contractor shall analyze this information and characterize the expected nature, size, and duration of these impacts and will employ this information and analysis in the preparation of a fully compliant RIR and RFA.

Under section 4(b)(2) of the ESA, the Secretary of Commerce may, at his discretion, exclude any particular area from designation as critical habitat, if the benefits of exclusion can be shown to outweigh the benefits of inclusion, provided that exclusion of that particular area will not result in the extinction of the species. In the course of acquiring data and preparing analyses for the RIR and RFA, the Contractor shall specifically identify development/use activities that have or reasonably may have a federal nexus, for subsequent use by NMFS in preparing its 4(b)(2) analyses for the Arctic ringed seals and for the Beringia DPS of bearded seals. For each of these two species, the Contractor shall compile, condense, and summarize available information on these uses, users, and future development plans for the respective areas proposed for critical habitat. For each of these two species, the Contractor shall incorporate this information into a document that provides the Secretary and NMFS the salient conclusions from secondary economic and socioeconomic data sources, such as existing Environmental Impact Statements, business plans, industry association publications, Chamber of Commerce data syntheses, and other local, regional, state, federal government planning and permitting sources.

Section V. Government Furnished Data

NMFS-Alaska Region will provide the Contractor with maps and other descriptive and biological information on alternative critical habitat designations for Arctic ringed seals, and for the Beringia DPS of bearded seals, for purposes of preparing the appropriate baseline analyses for use by NMFS in conducting the 4(b)(2) assessments.

NMFS may, at its discretion, provide the Contractor with a discussion paper on non-market use (e.g., subsistence use, passive-use valuation) of ringed and bearded seal habitat for inclusion, either as an element for inclusion in the RIR, or as a stand-alone chapter of the economic analysis for each species. This determination will be based upon NMFS' interpretation of economic and socio-cultural evidence, developed by the Contractor, during the initial information gathering phase of the project. The draft and final economic analysis for Arctic ringed seals and the Beringia DPS of bearded seals will be prepared by the Contractor to meet the requirements of ESA section 4(b)(2), Executive Order 12866, and the Regulatory Flexibility Act, strictly adhering to content and format specified under each. The Project Manager/Regional Economist will provide detailed guidelines, oversight, and technical assistance in identifying these document requirements.

Section VI. Period of Performance

The start date for this task is driven by the finalist selection date and whatever time is needed to complete the sub-contracting process between PSMFC and the winning bidder. The end date for this work is September 30, 2013.

Section VII. Contractor Performance Requirements

The Contractor shall undertake comprehensive research into the economic, socioeconomic (including, subsistence-economic and cultural use), and capital investment aspects of planned or ongoing development and commercial activities in the vicinity of those areas proposed for critical habitat designation for Arctic ringed seals and for the Beringia DPS of bearded seals, that have or reasonably may be expected to have a federal nexus; synthesize the available information; and deliver a separate, concise summary of all substantive comments for Arctic ringed seals and the Beringia DPS of bearded seals, in a written format that is acceptable to NMFS for use in meeting the relevant requirements (i.e., ESA 4(b)(2), EO12866, RFA) for an economic analysis of the consequences of critical habitat designation for each of these two species.

Section VIII. Specific Objectives/Tasks

TASK 1: The Contractor shall collect and synthesize economic and socioeconomic information regarding major development activities within the areas proposed for critical habitat designation for Arctic ringed seals, including the following:

- A. Oil and gas exploration, development, and production
 - i. costs, anticipated benefits, and schedules
 - ii. dredging volumes, frequency, disposal, duration, and disposal site location
 - iii. tidelands filling volumes, duration, location
 - iv. drilling platforms, piers, causeways, transfer facilities
 - v. effluent discharge before/during/post-development
 - vi. restoration/mitigation provisions
- B. Mining development plans
 - i. costs, anticipated benefits, and schedule
 - ii. dredging volumes, frequency, disposal, duration, and disposal site location
 - iii. tidelands filling volumes, duration, location
 - iv. tidelands alteration and piers, causeways, transfer facilities
 - v. effluent discharge before/during/post-development
 - vi. restoration/mitigation provisions
- C. Other large-scale development adjacent to the areas proposed for critical habitat designation
- D. Indigenous Peoples' use (economic, subsistence, cultural)
- E. Commercial fisheries economics and use of the areas proposed for critical habitat
 - i. economic value of fisheries that occur or may reasonably be anticipated to occur within or immediately adjacent to the proposed critical habitat designation areas
 - ii. fisheries infrastructure that could be affected by the critical habitat designation
 - iii. interactions
- F. Interactions between Arctic ringed seal habitats and other protected species and their habitats
- G. Recreation and tourism economics and use of the areas proposed for critical habitat designation
- H. Military activities in the areas proposed for critical habitat designation

- I. Educational, scientific, non-consumptive use of Arctic ringed seals and their habitat
 - i. Expenditures by state/federal/private entities in support of Arctic ringed seal critical habitat protection, restoration, enhancement
 - ii. Expenditures to forestall Arctic ringed critical habitat protection, restoration, enhancement

TASK 2: Utilize the above types of information and conduct an economic impact analysis of the proposed Arctic ringed seal critical habitat designation identified by NMFS-Protected Resources. Documents will be prepared to meet the requirements of the economic portion of NMFS's 4(b)(2), E.O.12866, and the RFA analyses.

Recent agency-prepared economic analysis of critical habitat designations that can serve as examples of format and content can be found at:

- A. Final RIR/4(b)(2) Preparatory Assessment / FRFA for the Critical Habitat Designation of Cook Inlet Beluga Whale Critical Habitat
[<http://www.fakr.noaa.gov/protectedresources/whales/beluga/management.htm>]
- B. Regulatory Impact Review and Final Regulatory Flexibility Act Analysis For Final Endangered Species Act 4(d) Regulations for Elkhorn and Staghorn Corals and Final Economic Impacts Analysis (two separate documents)
[<http://sero.nmfs.noaa.gov/pr/esa/acropora.htm>]
- C. Impacts of Northern Right Whale Critical Habitat Designation in the North Pacific Ocean, October 27, 2005 (single document)
[<http://www.fakr.noaa.gov/index/analyses/analyses.asp>; see *North Pacific Right Whales* in the *Table of Contents*].

TASK 3: The Contractor shall collect and synthesize economic and socioeconomic information regarding major development activities within the areas proposed for critical habitat designation for the Beringia DPS of bearded seals, including the following:

- A. Oil and gas exploration, development, and production
 - i. costs, anticipated benefits, and schedules
 - ii. dredging volumes, frequency, disposal, duration, and disposal site location
 - iii. tidelands filling volumes, duration, location
 - iv. drilling platforms, piers, causeways, transfer facilities
 - v. effluent discharge before/during/post-development
 - vi. restoration/mitigation provisions
- B. Mining development plans
 - i. costs, anticipated benefits, and schedule
 - ii. dredging volumes, frequency, disposal, duration, and disposal site location
 - iii. tidelands filling volumes, duration, location
 - iv. tidelands alteration and piers, causeways, transfer facilities
 - v. effluent discharge before/during/post-development
 - vi. restoration/mitigation provisions
- C. Other large-scale development adjacent to the areas proposed for critical habitat designation

- D. Indigenous Peoples' use (economic, subsistence, cultural)
- E. Commercial fisheries economics and use of the areas proposed for critical habitat designation
 - i. economic value of fisheries that occur or may reasonably be anticipated to occur within or immediately adjacent to the proposed critical habitat designation area
 - ii. fisheries infrastructure that could be affected by the critical habitat designation
 - iii. interactions
- F. Interactions between Beringia DPS (of bearded seals) habitats and other protected species and their habitats
- G. Recreation and tourism economics and use of the areas proposed for critical habitat designation
- H. Military activities in the areas proposed for critical habitat designation
- I. Educational, scientific, non-consumptive use of the Beringia DPS of bearded seals and their habitat
 - i. Expenditures by state/federal/private entities in support of Beringia DPS (of bearded seals) critical habitat protection, restoration, and enhancement
 - ii. Expenditures to forestall Beringia DPS (of bearded seals) critical habitat protection, restoration, enhancement

TASK 4: Utilize the above types of information and conduct an economic impact analysis of the proposed Beringia DPS (of bearded seals) critical habitat designation identified by NMFS-Protected Resources. Documents will be prepared to meet the requirements of the economic portion of NMFS's 4(b)(2), E.O.12866, and the RFA analyses.

Recent agency-prepared economic analysis of critical habitat designations that can serve as examples of format and content can be found at:

- A. Final RIR/4(b)(2) Preparatory Assessment / FRFA for the Critical Habitat Designation of Cook Inlet Beluga Whale Critical Habitat
[<http://www.fakr.noaa.gov/protectedresources/whales/beluga/management.htm>]
- B. Regulatory Impact Review and Final Regulatory Flexibility Act Analysis For Final Endangered Species Act 4(d) Regulations for Elkhorn and Staghorn Corals and Final Economic Impacts Analysis (two separate documents)
[<http://sero.nmfs.noaa.gov/pr/esa/acropora.htm>]
- C. Impacts of Northern Right Whale Critical Habitat Designation in the North Pacific Ocean, October 27, 2005 (single document)
[<http://www.fakr.noaa.gov/index/analyses/analyses.asp>; see *North Pacific Right Whales* in the *Table of Contents*].

Final document format will be determined in consultation with the Project Manager/Regional Economist.

TASK 5: The Contractor shall review all comments received by NMFS on the proposed designation of critical habitat for the Arctic ringed seal and provide a Comment Analysis Report

(CAR). Comments will be received directly from the agency website and mapped to a comment-tracking database. NMFS assumes no more than 150,000 comments will be received and that the majority (>90%) of those comments will be form letters. Comments received by NMFS via mail and Fax will be provided to the Contractor as PDFs in a timely manner during the comment period. The Contractor will review and code comments for NMFS' analysis. The CAR will summarize the ringed seal critical habitat comments. The Contractor will not prepare responses to comments. However, NMFS may request clarifications from the Contractor regarding coding of comments or comment summaries in preparing responses to comments. Should there be substantial duplication of comments received between TASK 5 (ringed seal) and TASK 6 (bearded seal) (which was the case for the listing proposals), a single CAR may be produced that presents the combined results of TASK 5 and TASK 6. Such a combined CAR (that presents results for both species) will include species-specific statements of concern where appropriate. Recent examples of CARs can be found at:

- A. Public Comment Analysis Report for Proposed Endangered Species Act Listing of Bearded and Ringed Seals
[<http://alaskafisheries.noaa.gov/protectedresources/seals/ice.htm>]

- B. Comment Analysis Report for Cook Inlet Beluga Whale Proposed Rulemaking Critical Habitat Designation
[<http://alaskafisheries.noaa.gov/protectedresources/whales/beluga/management.htm>]

TASK 6: The Contractor shall review all comments received by NMFS on the proposed designation of critical habitat for the Beringia bearded seal and provide a Comment Analysis Report (CAR). Comments will be received directly from the agency website and mapped to a comment-tracking database. Comments will also be accepted during three (3) public hearings. A transcript of each of these hearings, including any written comments received during the hearings, will be included as part of the comments to be analyzed. NMFS assumes no more than 150,000 comments will be received and that the majority (>90%) of those comments will be form letters. Comments received by NMFS via mail and Fax will be provided to the Contractor as PDFs in a timely manner during the comment period. The Contractor will review and code comments for NMFS' analysis. The CAR will summarize the bearded seal critical habitat comments. The Contractor will not prepare responses to comments. However, NMFS may request clarifications from the Contractor regarding coding of comments or comment summaries in preparing responses to comments. Should there be substantial duplication of comments received between TASK 5 (ringed seal) and TASK 6 (bearded seal) (which was the case for the listing proposals), a single CAR may be produced that presents the combined results of TASK 5 and TASK 6. Such a combined CAR (that presents results for both species) will include species-specific statements of concern where appropriate. Recent examples of CARs are listed under TASK 5.

TASK 7: Three public hearings of approximately three (3) hours duration each will be held on the ringed and bearded seal critical habitat proposals: one in Anchorage, one in Barrow, and one in Nome, Alaska. These hearings are estimated to be held during the months of April and May, 2013. Comments will be accepted on the proposals for both species at each hearing. The Contractor will provide a court reporter to record and prepare a transcript of the proceedings of each hearing. In addition to the court reporter, the Contractor will provide a staff member to attend each hearing. The Contractor shall assume that the Barrow hearing will require an

overnight stay in Barrow. A hard copy and an electronic copy of the hearing transcripts will be provided by the Court Report for incorporation into NMFS's Administrative Record, and for incorporation into the public comments database and analyses (see TASK 5 and TASK 6). The Contractor will provide a meeting room for each of the hearings, with seating for at least 100 people in Anchorage, and for at least 75 people in Nome and Barrow. The hearing rooms will be equipped with a public address system, including microphones, a PowerPoint projector and screen, and a speakerphone to potentially accommodate telephone access to the hearings in Barrow and Nome. The Contractor will make available an Inupiat interpreter in Barrow. The Contractor will also provide light refreshments in Barrow and Nome, as well as photocopies of any informational handouts produced by NMFS and provided to the Contractor in advance of the hearings. For purposes of budget preparation, assume that this will be a total of 1,200 grayscale copies.

Section IX. Analyzing the Impacts of Critical Habitat Designation

NMFS guidelines for preparation of economic analyses specify the theoretical frame of reference required in designing, carrying out, and reporting economic impacts of proposed actions. These guidelines are fully compliant with mandates contained in E.O.12866, as well as OMB directives, as outlined in Circular A-4. That frame of reference, which shall be adopted by the contractor, specifies a full accounting of all benefits and all costs attributable to the action. These shall include direct, indirect, and induced benefits and costs. All attributable benefits and all attributable costs will be monetized, to the extent that such estimates can be meaningfully provided. For benefits and costs not amenable to monetization, each will be quantified in physical units, to the extent practicable. When neither monetization, nor quantification is practicable, attributable benefits and costs will be identified and interpreted qualitatively, consistent with accepted economic theory and practice. The Contractor shall prepare these analyses from a "National Accounting" perspective, including a summarization of the expected "net benefit to the Nation", inclusive of the full suite of benefits and costs identified, no matter the mechanism of their assessment (i.e., monetized, quantified, qualitative).

Distributional impacts attributable to the Arctic ringed seal and Beringia DPS of bearded seal critical habitat designations are also relevant in evaluating the proposed actions. They shall be characterized and estimated, as described above (i.e., monetized, quantified, etc.), although they will be clearly distinguished from, and interpreted independently of, economic "benefits" and "costs". Because these impacts are technically "transfers", rather than economic benefits or costs, they do not enter into the "net benefit to the Nation" calculus.

The Contractor shall conduct an analysis of the economic and other impacts of critical habitat designation for Arctic ringed seals and an analysis of the economic and other impacts of critical habitat designation for the Beringia DPS of bearded seals. The primary objective will be to analyze the incremental impacts uniquely attributable to habitat designation for each of these two species. Notwithstanding this emphasis, it is recognized that fully disentangling "habitat designation" impacts from "listing" impacts will not be possible in every instance. Therefore, when isolation of these two distinct sources of impact cannot be achieved, the analysis will identify and analyze these as co-extensive impacts of critical habitat designation, as applies to each of these species. By including co-extensive impacts, any action subject to section 7 provisions that may destroy or adversely modify critical habitat will be considered in the analysis, whether or not the action would have been modified or prohibited by the jeopardy

provision of section 7, in the absence of designated critical habitat. Because the adverse modification applies only to actions for which a federal nexus exists, the majority of impacts will be borne by federal agencies, non-federal parties whose federally permitted activities are altered to avoid destruction or adverse modification, and those parties who are otherwise affected by the alteration of these activities. The designation of critical habitat may also trigger other relevant impacts on non-federal activity, however. For example, state environmental laws may contain provisions that are triggered, if a state-regulated activity occurs on federally designated critical habitat. Both types of impacts will be considered in the analyses.

Drawing upon the broader RIR/RFAA assessment, the economic component of an ESA 4(b)(2) analysis for each species separately, will examine whether the economic benefits of excluding any “particular area” from designation, exceed the economic benefits of its inclusion, subject to the provision that exclusion will not result in the extinction of the listed species. NMFS will specifically identify each and every “particular” area (if any) proposed for exclusion. NMFS will also provide all relevant “biological and ecological” benefits and costs associated with each and every “particular area” (if any) proposed for exclusion. The Contractor shall then employ the economic benefits and costs data, along with the biological and ecosystem benefits and costs information to draw conclusions concerning whether the 4(b)(2) exclusion test has been met. NMFS will then take these data and tentative results and, along with other relevant considerations, conduct the critical habitat determination 4(b)(2) analyses for Arctic ringed seals and the Beringia DPS of bearded seals.

The rest of this section presents the framework the Contractor shall use for analyzing the impacts of critical habitat designation. The analysis will use standard economic concepts and tools as presented in guidelines, such as those produced by the U.S. Office of Management and Budget, U.S. Environmental Protection Agency, U.S. Small Business Administration’s Office of Advocacy, and NMFS.¹ An outline of the framework is given below (the same framework is identified for each of the two seal species), after which we discuss the contents of the analysis in more detail.

Outline of Draft Economic Analysis of Critical Habitat Designation for Arctic Ringed Seals

1. Contextual Information
 - a) Geographic scope and description
 - b) Current economic and social activity
 - c) Projected economic activity
 - d) Existing federal, state, and other statutes and regulations that constrain habitat-modifying activities or are related to critical habitat designation.
2. Impacts of Critical Habitat Designation (CHD)
 - a) Direct impacts (incremental, as well as co-extensive) of CHD
 - b) Indirect or Other (e.g., non-market, cultural) impacts of CHD

¹ Executive Order 12866 requires that social and economic analyses be conducted when federal agencies propose new regulations. The Regulatory Flexibility Act (RFA) requires agencies to consider the impact of their regulatory proposals on small entities, analyze effective alternatives that minimize small entity impacts, and make their analyses available for public comment.

- c) The location and volume of impacts
- 3. Benefits and Costs of CHD
 - a) Benefits
 - i. Biological benefits to listed species, other organisms, ecological service flows – [to be supplied by NMFS PRD]
 - ii. Other benefits (e.g., non-market, scientific, cultural, passive-use)
 - iii. Economic value of benefits
 - iv. Magnitude of benefits by area
 - v. Cumulative benefits of critical habitat designation
 - b) Costs
 - i. Economic costs of direct impacts
 - ii. Economic costs of indirect or other impacts (e.g., fishery development, shipping via NW Passage, domestic energy supply)
 - iii. Other non-economic costs – [to be supplied by NMFS PRD]
 - iv. Magnitude of costs by area
 - v. Cumulative costs of critical habitat designation
 - c) Summary of the Expected Net Benefit to the Nation
- 4. Distributional Economic and Socioeconomic Impacts
- 5. Potential Adverse Economic Impacts on Directly Regulated Small Entities

1. Contextual Information

This section will describe baseline economic and other information on an area basis (to be designated by NMFS). The description will include:

- a) The geographic scope of the analysis, including maps of the distribution of Arctic ringed seals, which show boroughs, metropolitan areas, conservation areas, and any specialized economic activities that are highly local.
- b) Current demographic, economic, and social characteristics (e.g., population/density, per-capita income, employment/density, job growth, key industrial/economic sectors).
- c) Projected economic activity.
- d) Existing federal, state, and other statutes and regulations that constrain habitat-modifying activities or are related to critical habitat designation.

2. Impacts of Critical Habitat Designation

This section will describe the impacts of critical habitat designation on various types of habitat-related activity. The emphasis will be on the “physical” nature of the impacts. The descriptions will form a common foundation for discussing the benefits and costs of the designations. They will include:

- a) Direct impacts (co-extensive and incremental) of critical habitat designation by action agency and type of activity.² These impacts are those that flow through a federal nexus. A modification to a federal project (affecting habitat) that results from a section 7 consultation is an example of a direct impact. The description of the direct impacts will cover the types of activities affected and the probable modifications to activities stemming from the application of section 7 of the ESA. The direct impacts of critical

² The action agency is the federal agency that consults with NMFS under the ESA concerning a project or other action that may affect a listed species or adversely modify its critical habitat.

habitat designation will be apportioned, to the extent feasible, between co-extensive and incremental impacts.³

- b) Indirect impacts (co-extensive and incremental) of the critical habitat designation by type of activity and action party. The indirect effects of critical habitat designation and co-extensive impacts will be apportioned, to the extent feasible. These impacts include:
 - i. “trigger” impacts: impacts on economic activity that flow through state or local laws and regulations triggered by federal critical habitat designation;
 - ii. non-economic impacts of critical habitat designation.
- c) The location and magnitude of direct and other impacts by action agency and type of activity.

3. Benefits and Costs of Critical Habitat Designation

This section will assess the benefits and costs of the critical habitat designation stemming from the impacts identified in the previous section (Impacts of the Critical Habitat Designation). The assessment will include:

a) Benefits of the Critical Habitat Designation:

This subsection describes the benefits that arise from the designation and will apportion, to the extent feasible, the benefits between those stemming from co-extensive impacts and those stemming from incremental impacts. The description will include:

- i. The biological benefits to listed species, by type of activity, including a description of the links between activity modifications and (beneficial) biological responses in the listed species, quantifying the response, to the extent feasible.
- ii. Other benefits by type of activity, including a description of the links between activity modifications and (beneficial) biological or other effects not borne by the listed species, quantifying the effect, to the extent feasible. These effects may include increases in ecosystem services (other than those directly supporting the listed species), social and cultural impacts, educational and scientific contributions, and so forth.
- iii. The economic value of benefits of critical habitat designation.
- iv. The magnitude of benefits (if any), as well as economic impacts, by particular area, using information on activities and impacts from sections 2a (Direct impacts), 2b (Indirect impacts), and 2c (Location and Volume), in combination with information on benefits from sections 3.a.i (Biological benefits), 3.a.ii (Other benefits), and 3.a.iii (Economic value), and other information provided by NOAA Fisheries.
- v. The cumulative benefits of the critical habitat designation, including a description of the possible effects of the accumulation of areas designated as critical habitat or the inclusion of particular types of critical habitat (e.g., migration corridors) in the critical habitat designation.

b) Costs of the Critical Habitat Designation:

This subsection describes the costs that arise from the designation and will apportion, to the extent feasible, the costs between those stemming from co-extensive impacts and those stemming from incremental impacts. The description will include:

³ The apportionment of impacts between co-extensive and incremental may be affected by the development of new standards for jeopardy and adverse modification.

- i. The economic costs of the direct or other impacts of the critical habitat designation, including a description and, to the extent feasible, a quantification of these costs.
 - ii. The economic costs of the indirect impacts of the critical habitat designation, including a description and, to the extent feasible, a quantification of these costs.
 - iii. Other non-economic costs of the critical habitat designation.
 - iv. The magnitude of costs (if any), as well as impacts, by area, using information on activities and impacts from sections 2.a (Direct impacts), 2.b (Indirect impacts), and 2.c (Location and volume), in combination with information on costs from sections 3.b.i (Direct costs), 3.b.ii (Indirect costs), and 3.b.iii (Non-economic costs), and other information provided by NMFS.
 - v. The cumulative costs of the critical habitat designation.
- c) Summary of the Expected Net Benefit to the Nation
4. Distributional Economic and Socioeconomic Impacts
5. Potential Adverse Economic Impacts on Small Entities

This section will describe and quantify, to the extent practicable, the adverse economic impacts of the critical habitat designation on directly regulated small entities (small businesses, small not-for-profit organizations, and small governmental jurisdictions). This information will be provided for the Arctic ringed seal critical habitat designation as a whole, not on an area-by-area basis.

Outline of Draft Economic Analysis of Critical Habitat Designation for the Beringia DPS of Bearded Seals

1. Contextual Information
 - a) Geographic scope and description
 - b) Current economic and social activity
 - c) Projected economic activity
 - d) Existing federal, state, and other statutes and regulations that constrain habitat-modifying activities or are related to critical habitat designation.
2. Impacts of Critical Habitat Designation (CHD)
 - a) Direct impacts (incremental, as well as co-extensive) of CHD
 - b) Indirect or other (e.g., non-market, cultural) impacts of CHD
 - c) The location and volume of impacts
3. Benefits and Costs of CHD
 - a) Benefits
 - i. Biological benefits to listed species, other organisms, ecological service flows – [to be supplied by NMFS PRD]
 - ii. Other benefits (e.g., non-market, scientific, cultural, passive-use)
 - iii. Economic value of benefits
 - iv. Magnitude of benefits by area

- v. Cumulative benefits of critical habitat designation
- b) Costs
 - i. Economic costs of direct impacts
 - ii. Economic costs of indirect or other impacts (e.g., fishery development, shipping via NW Passage, domestic energy supply)
 - iii. Other non-economic costs – [to be supplied by NMFS PRD]
 - iv. Magnitude of costs by area
 - v. Cumulative costs of critical habitat designation
- c) Summary of the Expected Net Benefit to the Nation
- 4. Distributional Economic and Socioeconomic Impacts
- 5. Potential Adverse Economic Impacts of CHD on Directly Regulated Small Entities

1. Contextual Information

This section will describe baseline economic and other information on an area basis (to be designated by NMFS). The description will include:

- a) The geographic scope of the analysis, including maps of the distribution of the Beringia DPS of bearded seals, which show boroughs, metropolitan areas, conservation areas, and any specialized economic activities that are highly local.
- b) Current demographic, economic, and social characteristics (e.g., population/density, per-capita income, employment/density, job growth, key industrial/economic sectors).
- c) Projected economic activity.
- d) Existing federal, state, and other statutes and regulations that constrain habitat-modifying activities or are related to critical habitat designation.

2. Impacts of Critical Habitat Designation

This section will describe the impacts of critical habitat designation on various types of habitat-related activity. The emphasis will be on the “physical” nature of the impacts. The descriptions will form a common foundation for discussing the benefits and costs of the designations. They will include:

- a) Direct impacts (co-extensive and incremental) of critical habitat designation by action agency and type of activity.⁴ These impacts are those that flow through a federal nexus. A modification to a federal project (affecting habitat) that results from a section 7 consultation is an example of a direct impact. The description of the direct impacts will cover the types of activities affected and the probable modifications to activities stemming from the application of section 7 of the ESA. The direct impacts of critical habitat designation will be apportioned, to the extent feasible, between co-extensive and incremental impacts.⁵
- b) Indirect impacts (co-extensive and incremental) of the critical habitat designation by type of activity and action party. The indirect effects of critical habitat designation and co-extensive impacts will be apportioned, to the extent feasible. These impacts include:

⁴ The action agency is the federal agency that consults with NMFS under the ESA concerning a project or other action that may affect a listed species or adversely modify its critical habitat.

⁵ The apportionment of impacts between co-extensive and incremental may be affected by the development of new standards for jeopardy and adverse modification.

- i. “trigger” impacts: impacts on economic activity that flow through state or local laws and regulations triggered by federal critical habitat designation;
- ii. non-economic impacts of critical habitat designation.
- c) The location and magnitude of direct and other impacts by action agency and type of activity.

3. Benefits and Costs of Critical Habitat Designation

This section will assess the benefits and costs of the critical habitat designation stemming from the impacts identified in the previous section (Impacts of the Critical Habitat Designation). The assessment will include:

a) Benefits of the Critical Habitat Designation:

This subsection describes the benefits that arise from the designation and will apportion, to the extent feasible, the benefits between those stemming from co-extensive impacts and those stemming from incremental impacts. The description will include:

- i. The biological benefits to listed species, by type of activity, including a description of the links between activity modifications and (beneficial) biological responses in the listed species, quantifying the response, to the extent feasible.
- ii. Other benefits by type of activity, including a description of the links between activity modifications and (beneficial) biological or other effects not borne by the listed species, quantifying the effect, to the extent feasible. These effects may include increases in ecosystem services (other than those directly supporting the listed species), social and cultural impacts, educational and scientific contributions, and so forth.
- iii. The economic value of benefits of critical habitat designation.
- iv. The magnitude of benefits (if any), as well as economic impacts, by particular area, using information on activities and impacts from sections 2a (Direct impacts), 2b (Indirect impacts), and 2c (Location and Volume), in combination with information on benefits from sections 3.a.i (Biological benefits), 3.a.ii (Other benefits), and 3.a.iii (Economic value), and other information provided by NOAA Fisheries.
- v. The cumulative benefits of the critical habitat designation, including a description of the possible effects of the accumulation of areas designated as critical habitat or the inclusion of particular types of critical habitat (e.g., migration corridors) in the critical habitat designation.

b) Costs of the Critical Habitat Designation:

This subsection describes the costs that arise from the designation and will apportion, to the extent feasible, the costs between those stemming from co-extensive impacts and those stemming from incremental impacts. The description will include:

- i. The economic costs of the direct impacts of the critical habitat designation, including a description and, to the extent feasible, a quantification of these costs.
- ii. The economic costs of the indirect or other impacts of the critical habitat designation, including a description and, to the extent feasible, a quantification of these costs.
- iii. Other non-economic costs of the critical habitat designation
- iv. The magnitude of costs (if any), as well as impacts, by area, using information on activities and impacts from sections 2.a (Direct impacts), 2.b (Indirect impacts), and 2.c (Location and volume), in combination with information on costs from

- sections 3.b.i (Direct costs), 3.b.ii (Indirect costs), and 3.b.iii (Non-economic costs), and other information provided by NMFS.
 - v. The cumulative costs of the critical habitat designation.
 - c) Summary of the Expected Net Benefit to the Nation
4. Distributional Economic and Socioeconomic Impacts
 5. Potential Adverse Economic Impacts on Directly Regulated Small Entities

This section will describe and quantify, to the extent practicable, the adverse economic impacts of the critical habitat designation on directly regulated small entities (small businesses, small not-for-profit organizations, and small governmental jurisdictions). This information will be provided for the Beringia DPS of bearded seals critical habitat designation as a whole, not on an area-by-area basis.

Section IX. PROJECT DELIVERABLES and DEADLINE FOR EACH

- § The Project Manager/Regional Economist will schedule a project “kick-off” meeting with the Contractor and NMFS-Protected Resources staff in Anchorage on December 6, 2012, (or at the earliest opportunity) to review the contract, scope of work, and project timeline. [Tasks 1-4 begin]
- § The Project Manager/Regional Economist will provide the Contractor with maps depicting the area(s) preliminarily identified for designation of critical habitat, suggested focal areas relative to 4(b)(2) exclusion, and the essential features of critical habitat (to be developed by NMFS-Protected Resources) for Arctic ringed seals and for the Beringia DPS of bearded seals by the date of the project “kick-off” meeting (or whenever practicable).
- § **The Contractor shall deliver to the Project Manager/Regional Economist a proposed outline and document format for the economic impacts analysis for Arctic ringed seals and a proposed outline and document format for the economic impacts analysis for the Beringia DPS of bearded seals by December 31, 2012.**
- § The Project Manager/Regional Economist will review the proposed format with NMFS-Protected Resources personnel and provide comments to the Contractor by January 15, 2013.
- § **The Contractor shall deliver to the Project Manager/Regional Economist a draft synthesis of economic data and information related to development activities within the areas proposed for Arctic ringed seal critical habitat and a draft synthesis of economic data and information related to development activities within the areas proposed for the Beringia DPS of bearded seal critical habitat by February 25, 2013.**
- § The Project Manager/Regional Economist will discuss the draft synthesis for each species with NMFS-Protected Resources and provide any comments to the contractor by March 4, 2013.
- § **The Contractor shall address NMFS comments and submit a final draft RIR/IRFA document for Arctic ringed seals, and a final draft RIR/IRFA document for the Beringia DPS of bearded seals by March 11, 2013.**
- § The Project Manager/Regional Economist and NMFS-Protected Resources will provide all comments received during public review of the proposed rule to designate critical habitat for the Arctic ringed seals and the Beringia DPS of bearded seals within seven days of the close of the comment period, (by date TBD). [Tasks 5 -6 begin]

- § The Contractor shall provide the following for each of three public hearings to be held on the proposed critical habitat designations (one each in Anchorage, Barrow, and Nome): a court reporter to be present at and transcribe each public hearing; a staff member to be present at each hearing; a meeting room equipped with a public address system, including microphones, a Powerpoint projector and screen, and a speakerphone to support potential teleconferencing; light refreshments at the Barrow and Nome hearings; an Inupiat interpreter in Barrow; and photocopies of any informational handouts prepared by NMFS and provided to the Contractor in advance of the hearings. The approximately 3-hour hearings, which will accept comments on the proposed critical habitat determinations for both species, are estimated to be held during the months of April and May, 2013. The court reporter will provide a hard copy and electronic copy of each hearing transcript to the Contractor for inclusion in the comment analysis (Tasks 5 and 6). [Task 7 begin and complete]
- § **The Contractor shall submit a draft Comment Analysis Report (CAR) for each seal species (or if there is considerable duplication of comments between the two species, a single CAR reporting on both species) by (date TBD), 2013.**
- § The Project Manager/Regional Economist and NMFS-Protected Resources will review the draft Comment Analysis Reports for Arctic ringed seals and Beringia DPS of bearded seals and will provide comments back to the Contractor by (date TBD), 2013.
- § **The Contractor shall submit a final Comment Analysis Report for each seal species (or if there is considerable duplication of comments between the two species, a single CAR reporting on both species) by (date TBD), 2013.** [Tasks 5 and 6 complete]
- § **The Contractor shall address NMFS comments and submit a preliminary final RIR/IRFA report and economic analysis for each species to the Project Manager/Regional Economist by (date TBD), 2013.**
- § The Project Manager/Regional Economist and NMFS-Protected Resources will review the preliminary final RIR/IRFA report and economic analysis and provide any final comments to the Contractor by (date TBD), 2013.
- § **The Contractor shall submit a final RIR/IRFA document and economic analysis for each seal species and invoice by (date TBD), 2013.** [Tasks 1-4 complete]

Section X. Reimbursable Travel

The Contractor should anticipate a need to travel to Anchorage, or Seattle to meet with the Project Manager/Regional Economist, the COTR, and Protected Resources Division staff. For purposes of this order, the Contractor shall budget for three (3), 1-2 day meetings between the Contractor team and NMFS for purposes of preparing a proposed budget. The contractor shall also anticipate travel for a staff member and a court reporter to attend the Anchorage, Barrow, and Nome public hearings. For purposes of budgeting, that Barrow hearing shall be assumed to require an overnight stay in Barrow.

Section XI. Project Manager and Point of Contact for Technical Information

Lewis Queirolo, Ph.D., NMFS-Alaska Regional Economist, is hereby designated as the government's Project Manager and point of contact for technical information for this project. In this capacity, he will meet and/or communicate with the Contractor to review and approve the document outline, provide direction on analytical methods to be used, and provide direction on all matters ranging from data collection and synthesis to providing technical review of all

working drafts (and final) economic impacts analyses. He will inspect services rendered in this contract and review all invoices and work products prior to approval by the COTR. The Project Manager can be reached by email at lew.queirolo@noaa.gov. The Project Manager can also be reached by phone at (360)387-4652. Tammy Olson, a biologist with NMFS-Protected Resources (Anchorage Field Office) will assist the Project Manager with this project (email: tammy.olson@noaa.gov; phone: (907)271-2373).

Section XII. Contractor Responsibilities for Property and Documents

The contractor shall protect from unauthorized disclosure or use of any equipment, materials, or information made available by the Government, or that the contractor may have access to by virtue of the provisions of this contract, that are not intended for public disclosure.

All data and information provided by the Government, or developed by the contractor, in performing this contract there under, remain the exclusive property of the Government. Within 10 days after completion or termination of this order, the contractor shall submit all Government materials (copies included) that were furnished to the contractor by the Government and all materials that were developed by the contractor in performing the order, except for email which will be submitted to the Government only upon specific request.

Section XIII. Evaluation Factors

The Government intends to make one call order award. The proposed award will be a time-and-material call order with reimbursable costs for actual travel expenses.

The proposal must be prepared in two parts: A technical proposal and a price proposal. Contractors shall submit one electronic copy of the technical and price proposal that specifically addresses the requirements of this SOW to **Michael Arredondo** @ marredondo@psmfc.org by 3:00 p.m. PDT on November 26, 2012. Additionally, one original and one hard copy of a technical and price proposals shall be submitted by regular mail after the deadline.

This is a best value requirement. The Government reserves the right to make an award without discussions based solely upon initial proposals. Therefore, contractors should ensure that their initial proposal constitutes their best offer in terms of both price and the technical solution being proposed. Award will be made to the contractor that offers the best value to the government.

The criteria stated below will be used in the evaluation of factors other than price (technical approach, conflict of interest, past performance and relevant experience) are considered to be more important than price. Factors are listed in descending order of importance.

1. Technical Approach (40%)
2. Experience (20%)
3. Past Performance (20%)
4. Cost (20%)

Provide the following information in the technical proposal:

Technical Approach: Describe the technical approach towards fulfilling SOW requirements and the appropriate personnel levels and skill mixes as required under this SOW.

Experience: Provide a list of names, **resumes**, education, background, work experience and proposed duties of the proposed key personnel.

Past Performance: The Government may use past performance information obtained from any available reliable source. However, the contractor shall provide a list of the last 3 contracts or subcontracts completed during the past three years that were the same or similar in nature to the proposed work herein. Contracts listed may include those entered into by the Federal Government, agencies of state and local governments and commercial customers. Include the following information for each contract and subcontract:

- a. Name of contracting activity
- b. Contract/order number
- c. Contract type
- d. Total contract value
- e. Brief description of work
- f. Contracting officer, telephone and fax number
- g. Program manager, telephone and fax number

--Provide information on problems encountered during each contract performance and describe corrective actions taken to resolve those problems.

--Describe any quality awards or certifications that indicate the offeror possesses a high quality process for work performed.

Provide the following information in the Price Proposal: Pricing details shall be itemized by task and shall show individual loaded hourly rates for as many people as are expected to participate in the project using the template in Appendix A below. Also, include Provide a separate line item for reimbursable travel as discussed in Section X herein.

Appendix A. Project Personnel Hourly Rates Template

Person 1:

Name:

Title/Role:

Hourly rate:

Residence (City, State):

Person 2:

Name:

Title/Role:

Hourly rate:

Residence (City, State):

Person 3:

Name:

Title/Role:

Hourly rate:

Residence (City, State):

Person 4:

Name:

Title/Role:

Hourly rate:

Residence (City, State):

Person 5:

Name:

Title/Role:

Hourly rate:

Residence (City, State):

Repeat as necessary.