

Appendix

Notice of Proposed Information Collection - Cook Inlet Beluga Whale Economic Survey: Comments and Responses

NMFS provided notice on February 7, 2012 (77 FR 6065) of the proposal to conduct the Cook Inlet Beluga Whale Economic Survey and invited public comments as required by the Paperwork Reduction Act. Comments were invited on: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden (including hours and cost) of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

NMFS received five letters submitted in response to the invitation, containing eight unique comments on the proposed data collection. The comments are summarized and responded to below.

Comment Letters Received

Commentor id	Commentor affiliation/location	Commentor Name
A	Marine Mammal Commission	Timothy J. Ragen, Ph.D. Executive Director
B	Alaska Oil and Gas Association	Kate Williams, Regulatory and Legal Affairs Manager
C	Cook Inlet Region, Inc	Bruce Anders, VP, General Counsel
D	Anglo American US (Pebble) LLC Anchorage, Alaska	Jason Brune, Public Affairs and Government Relations Manager
E	State of Alaska, Department of Fish and Game	Doug Vincent-Lang, Acting Director, Division of Wildlife Conservation

Summary of Comments and NMFS' Responses

1. NMFS has not adequately consulted with responsible entities in development of the proposed data collection, including State of Alaska, NMFS Recovery Team Stakeholder Committee, and Alaska Native entities.		
ID	Comment	NMFS Response
B	...never during the [Cook Inlet Beluga Recovery Team]'s planning process has the need for such an economic survey been discussed or recommended by NMFS or any recovery team member.	Initial development of the proposed research as a scientific research project began prior to the listing of the Cook Inlet beluga whale under the ESA (initial funding for developing the survey was obtained in 2007). While initiated in response to questions raised by NMFS Alaska Region staff responsible for preparing federal regulatory review documents required under the ESA, NEPA, and Executive Order 12866, this study was not designed for, directed by, or coordinated with any specific
C	...If NMFS does decide to move forward with the survey, CIRI asks that the Stakeholders Panel be provided a scope of work and information on the process and analysis to be used for review and comment prior conducting the survey, and the results of the survey prior to their general release.	

	<p>... CIRI considers the [draft survey] form to be ... disrespectful of the legally protected rights and interests of Alaska Native entities. To our knowledge, no effort has been made to develop the survey in consultation with affected Alaska Native entities, as required by federal law and policy.</p>	<p>NMFS management action. In fact, it followed a similar research effort by AFSC economists to estimate public values for protection of Steller Sea Lions. The Regional staff had indicated that there was insufficient information about the economic effects of species protection actions in general, and with respect to Cook Inlet, specifically. This information was desirable to include in economic analyses of the benefits and costs of a range of federal actions being contemplated at that time. Subsequently, a decision was made to list the Cook Inlet beluga whale as endangered, under ESA, consistent with NMFS' management responsibility. NMFS then recommended the study be made a priority for AFSC economic research. The bulk of the survey was developed and qualitatively tested during 2009-2010, prior to formation of the Recovery Team.</p>
D	<p>...it is my understanding through the state's ESA coordinator's email to the recovery team that the state was not consulted on this effort. This is unacceptable. This survey, if ever conducted, must include the state of Alaska's ESA coordinator in its development.</p>	<p>Regrettably, coordination between NMFS economic research staff and Regional management staff has been insufficient, resulting in failure to adequately communicate ongoing research to the CIBW Recovery Team. In addition, the Federal Register notice published on February 7, 2012 (77FR6065), did not accurately describe the purpose and intent of the research or the current status of the ESA process with regard to CIBW. We recognize these failures of communication and will endeavor to better inform the Recovery Team and stakeholders as this, and any other relevant economic research, proceeds.</p> <p>However, the comments reflect a number of apparent misunderstandings regarding the role of formal consultation with the Recovery Team or other entities in development of this survey. As noted above, the research was initiated prior to formation of the Recovery Team. As an economic research initiative, the survey project is intended to provide information for use, as appropriate, in decision analyses for future management actions not yet specified. In particular, the information is sought to support comprehensive evaluation of all</p>

	<p>costs and all benefits attributable to Federal actions which may be proposed to be taken pursuant to the Recovery Plan, as must be prepared under provisions of the National Environmental Policy Act, the Regulatory Flexibility Act, and Executive Order 12866 prior to adopting such action (see response to Comment Item 6 below).</p> <p>The research itself does not represent a conservation action or Federal program warranting formal consultation under the terms of the Cooperative Conservation Partnership between NMFS and the State of Alaska or Alaska Native entities. The research seeks to gather unbiased information that describes the opinions and preferences of the general U.S. public regarding CIBW recovery for potential use in decision analyses that may arise over the foreseeable future. The study will, in no way, alter the role, authority, or responsibilities of the Recovery Team Stakeholder Panel or its members, or the protected rights and interests of Alaska Native entities.</p> <p>The survey questionnaire will be distributed to a representative sample of U.S. households solely for the purpose of soliciting information from members of the public with which to assess their familiarity, opinions, and preferences regarding potential outcomes for CIBW recovery. The information content of the survey has been reviewed by NMFS scientific and management staff in an effort to ensure its accuracy for the purpose of the survey, but the survey questionnaire is not designed or intended as an instrument for use in educational outreach or as a statement of federal policy or management intent to the general public.</p> <p>Moving forward, we will take necessary action to better inform the Recovery Team about the survey and its findings. In fact, we have begun the process of providing information about the purpose and scope of the project (see Jon Kurland's e-mail); and, regular updates on progress with the survey</p>
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	will be provided as it moves to implementation and from implementation to analysis. The results of the analysis will be presented to the Recovery Team as they become available.
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2. The research will not provide sufficient benefit to CIBW recovery, and funding for the survey should be redirected towards research and management activities more directly related to CIBW recovery		
ID	Comment	NMFS Response
A	...money that the Service would use to conduct and analyze the results of the survey would be better directed at more concrete conservation activities.	<p>Funding for the research was provided by NMFS Office of Science and Technology from a pool of funds earmarked exclusively for use in economic research and data collection. It is not part of the Agency’s budget for recovery efforts. These research funds were allocated for this survey, specifically to collect the data necessary to fill gaps in economic information regarding the non-consumptive benefits of protecting the Cook Inlet beluga whale. Generally, funds allocated for economic research cannot be diverted for non-research activities (including to the Alaska Region’s operating funds for Cook Inlet beluga whale management activities). Moreover, since a contract has been signed with a survey firm to conduct the survey, and funds obligated accordingly, cancellation of the survey will result in the funds being returned the U.S. Treasury, and NMFS will not have discretion over reallocating the funds to CIBW management or any other alternative purposes.</p> <p>The research is intended to provide unbiased information about the value accruing to the U.S. public (including Alaska residents), associated with reducing the risk of extinction of CIBW and up-listing or recovering the species. The research, in itself, will not directly benefit CIBW recovery. However, by improving understanding of public preferences regarding resource management, this information will support improved decision making regarding allocation of federal funding and other scarce resources to management of protected species and other agency mandates, which may benefit CIBW</p>
B	...we do not believe that scarce federal resources should be expended on actions that will not benefit a species.	
C	...the proposed economic survey is not a good use of recovery resources, and will not result in any benefit to the recovery process; ...The limited resources of the [Recovery Team] would best be focused on ... determining what set of critical habitat areas is required to conserve the species and what special management considerations must be implemented to mitigate certain activities within that critical habitat.	
E	... the monies would be better used... on additional biological or management research for belugas.	

	<p>and other species indirectly. Congress and Executive branch agencies face difficult decisions about how to allocate scarce funding. An understanding of the relative economic value of protecting different ESA-listed species may help determine where comparatively more effort should be placed to maximize the net benefits to the Nation, while simultaneously meeting the statutory requirements of the ESA, MMPA, and other relevant statutes and policies.</p> <p>Under the ESA, neither decisions regarding species' listing status, critical habitat designation, or the mandate to recover species that are determined to be threatened or endangered, are subject to a strict benefit-cost test (also see the response to Comment Items 4 and 6 below). As such, the estimated benefit values provided by this study will not provide the sole basis on which any decision regarding CIBW recovery is determined. In designation of critical habitat and recovery plan development, consideration of costs is permitted and is essential to ensure cost effective actions are undertaken. However, application of the cost effectiveness framework to species recovery, as in all long-term planning activities involving uncertain outcomes, does not provide a single "cost-effective" solution for achieving a specific outcome. Rather, numerous cost effective solutions are identified, which are expected to achieve recovery, but with different degrees of uncertainty and with different outcomes in regard to the distribution of economic costs, as well as the timing, distribution, and nature of the benefit stream. In this context, more economic information regarding the value of reducing uncertainty in recovery planning, through improved biological research and/or more extensive or restrictive recovery actions, may help to inform decision making in the allocation of budget and other resources to CIBW recovery efforts.</p>
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3. NMFS funding for the survey should be directed towards improved quantification of costs and benefits of CIBW conservation and recovery measures, exclusive of non-consumptive (or passive use) benefits associated with CIBW preservation

ID	Comment	NMFS Response
C	...asks that NMFS focus its attention and resources on designing effective, comprehensive, and creative measures by which to achieve species recovery while simultaneously minimizing the economic costs and impacts on natural resource development in the region.	This research is intended to address the principal limitation identified in the RIR analysis related to the lack of primary data that precludes a full quantitative accounting of the benefits and costs associated with designation of critical habitat for Cook Inlet beluga whales. To the extent that improvements in the calculation of opportunity costs associated with resource development are warranted, such improvements are not limited by lack of primary data requiring research. As the funding for this research has already been allocated, additional efforts to further analyze costs of CIBW recovery actions are not limited by completion of this study, and would not be enhanced by cancellation of the research.
E	Alaska believes strongly that the 2010 RIR economic analysis produced for the critical habitat designation is deeply flawed, but the proposed study will add to, rather than resolve, the flaws in the RIR. ... the monies would be better used for more accurate research on the cost and benefits of designating critical habitat for belugas...	

4. Survey should not be conducted prior to completion of Recovery Plan development

ID	Comment	NMFS Response
B	...NMFS should wait on any decision regarding the proposed survey until the recovery plan is complete, to determine whether such a survey would aid in obtaining the recovery goals outlined in the plan...; NMFS provided a statement to the stakeholder panel of the Cook Inlet Beluga Recovery Team to clarify the intent behind the survey... this statement does not address... the need for such a survey before the recovery plan is complete.	Rigorous stated preference economic surveys take time to develop, test, and implement, particularly ones conducted by federal government agencies, often requiring several years to complete. Time is also required to ensure the quality of the data and to conduct the data analysis. Moreover, the survey has been designed to provide estimates of non-consumptive benefits of CIBW recovery, in terms of the tradeoff between risk of extinction and cost of recovery efforts to reduce this risk. Thus, it does not rely on the description of any specific recovery actions in the estimation of the economic benefit function. Because of the time required to fully develop and test surveys of this type, as well as the time required to navigate the administrative approval process under the Paperwork Reduction Act, the survey has been designed this way to ensure that the results are generally applicable in future stages of Cook Inlet beluga whale recovery plan development and implementation, rather
D	... I assume this survey therefore will make reference to potential recommendations from a recovery team that would go “beyond the current levels” of protection, otherwise who would they be coming from? As our team’s recommendations are not finalized, I think it is inappropriate for NMFS to be conducting this survey. I believe the recovery team’s efforts will be impacted by whatever data comes from this survey, as nebulous as these results will be, and subsequently will prejudice our process.	

	<p>than being limited in application to a specific recovery plan specification.</p> <p>For these reasons, we disagree that it is necessary or appropriate to delay the research pending completion of Recovery Plan development.</p>
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5. The Federal Register notice and survey questionnaire indicate that NMFS is considering additional conservation measures for CIBW, outside of the Recovery Plan process and consultation with the State of Alaska/ADF&G

ID	Comment	NMFS Response
B	<p>...given the statutory and regulatory protections already in place for the Cook Inlet beluga whale, it is hard to understand what “additional protection, beyond current levels” NMFS is contemplating, and why this would be occurring outside of the recovery planning process, another ESA mandate;</p> <p>... Recovery Team is ...finishing the recovery plan for the beluga... to provide recommendations on recovery measures and goals and these will be included in the recovery plan as required by the ESA and associated regulations. Is NMFS already in the process of evaluating “alternative measures” even though no recovery measures have been identified yet? ... the language in the notice seems to suggest that NMFS is considering additional critical habitat.</p>	<p>We have acknowledged our failure to accurately and appropriately characterize the research study in the Federal Register Notice and regret the concerns that it raised. The text of the survey and the conduct of this research are separate from, and do not indicate any management initiative regarding CIBW outside of the recovery plan development process. Although the survey discusses a range of potential conservation measures in general terms, as noted above, the survey does not rely on the description of any specific recovery actions in the estimation of economic benefits, or whether such actions are taken by NMFS, the State of Alaska, or other entities. Any perception that the survey is evidence that NMFS is pursuing conservation measures for CIBW independent of the ongoing consultative process with the State of Alaska and the Recovery Team is incorrect.</p>
E	<p>...Notice indicates that these preferences are “needed to assist in the evaluation of alternative measures to further protect and recover the species’ population, such as in the evaluation of critical habitat designations.”</p> <p>...appears that the proposed survey may create “preferences” to support a predetermined outcome that will result in additional protections for belugas.</p>	<p>As stated in the March 5, 2012 letter to the CIBW Recovery Team from Jon Kurland, NMFS Alaska Assistant Regional Administrator for Protected Resources, “Even though Critical Habitat has already been designated, the results from this survey should be useful to NMFS and the public in the future as we consider various recovery actions under the CIB recovery plan that you are helping to develop. We hope to have the results from this survey by spring of 2013, and will keep you posted. NMFS is not contemplating any CIB protection measures outside the context of the recovery planning process. The information from this survey will inform future decisions regarding the</p>

		<p>need for any actions identified via the recovery plan. Any regulatory actions would include analyses of costs and benefits, as well as opportunities for public input. NMFS is committed to working with you all to consider appropriate actions to include in a CIBW recovery plan. Unfortunately, this Federal Register notice did not provide much context, and we did not do a good enough job of explaining to you all what we were doing or why. We will strive to do better in the future.”</p>
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6. Quantification of passive use/non-consumptive benefits is not relevant to CIBW recovery planning under ESA, MMPA, or other relevant legal mandates		
ID	Comment	NMFS Response
C	<p>...First, the value of the Cook Inlet beluga whales is not being contested... unclear how NMFS and the Recovery Team may alter their decisions and behavior depending on how the whales are valued. In fact, it would be an improper metric for NMFS to set the species' population recovery goal at the point where the marginal cost of preserving a single whale equals the marginal benefit. Under the ESA, NMFS must provide critical habitat and protection that will conserve the species... to achieve the mandate of species recovery by balancing the benefits of various recovery measures with the economic costs imposed by their implementation.</p> <p>...In order to ...recover the [CIBW] while minimizing the associated costs to society, NMFS and the Recovery Team must make judgments about which habitat segments contain particular biological contributions, and the extent to which human activities may affect those contributions... ultimately an exercise in cost effectiveness, with the numerator of the balancing equation fixed at species conservation.</p>	<p>NMFS agrees that it would be improper to set the species' population recovery goal where marginal cost equals marginal benefit. The Agency has not indicated any intention to do so. NMFS also agrees with the comment that, “NMFS must...achieve the mandate of species recovery by balancing the benefits of various recovery measures with the economic costs...” (emphasis added). This clearly <u>requires</u> the Agency to acquire necessary information with which to evaluate benefits and costs.</p> <p>NMFS disagrees, however, with the premise that “NMFS and the Recovery Team may alter their decisions and behavior, depending on how the (research survey suggests) whales are valued.” As previously explained, the subject survey is part of an economic research project, not directly associated with the ESA listing, CHD, or CIBW recovery planning process. The ESA listing and CHD have been completed, and cannot benefit from the results of this research study, expected in 2013. Had the research results been available prior to the CIBW CHD, they may have contributed to additional monetized or quantitative measurement of the attributable impacts of that action. This would have been completely consistent with prevailing policy and applicable law. Under provisions of the ESA, as well as Executive Order 12866 and the Regulatory Flexibility Act, a</p>
E	<p>... State of Alaska does not believe that the proposed collection of information is necessary for the proper performance of the functions of the agency, nor will the information have any practical utility for resolving issues regarding the Cook Inlet beluga DPS.</p>	

	<p>comprehensive evaluation of all costs and all benefits attributable to a proposed Federal action must, to the extent practicable, be prepared prior to adopting such action. These estimates are to be based upon the best available scientific data and commercial information.</p> <p>E.O. 12866, states (in relevant part), an analysis of all benefits and all costs (including, potential economic, environmental, public health and safety, and other advantages; distributional impacts; and equity) shall be prepared in conjunction with a Federal Regulatory action.</p> <p>OMB Circular A-4 (September 17, 2003) states that for all major rulemaking, a 'Benefit/Cost' framework is required. All costs and all benefits should be monetized to the extent that useful estimates can be made. OMB further directs that, even when a benefit or cost cannot be expressed in monetary units, one should still try to measure it in terms of its physical units. If it is not possible to measure the physical units, one should still describe the benefit or cost qualitatively. In unusual cases, where no quantified information on benefits, costs, and effectiveness can be produced, the regulatory analysis should present a qualitative discussion of the issues and evidence.</p> <p>From the foregoing, it is evident that the Agency is required, by law and regulation, to acquire data, conduct research, and prepare comprehensive benefit/cost analyses in support of all major regulatory actions, such as ESA designation of critical habitat for the listed Cook Inlet beluga whale. As such, "... collection of information is necessary for the proper performance of the functions of the agency...", despite the assertion to the contrary by the commentor.</p>
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7. Quantification of passive use/non-consumptive benefits in general employs scientifically unsound methods and the results are not reliable for use in comparison to costs of CIBW recovery measures		
ID	Comment	NMFS Response
C	<p>These non-market valuation techniques are relatively recent developments in economic literature and still in need of testing and refinement. For example, there is often a considerable difference between what a person says they might be willing to pay in a survey, and what they are actually willing to contribute from their household budget. The numbers resulting from this theoretical tool are not a reliable or consistent indicator that should be used to set national policy and balance large costs to be incurred by society. ...Real and measurable numbers, such as the costs to natural resource development associated with various recovery measures, are necessary to include in the Recovery Plan process; theoretical assessments of the social worth of a species are not. When these two sets of numbers are combined in a single analysis, the result is the appearance of benefit estimates that are equally reliable and comparable to costs. The result is the inappropriate minimization of the very real, and often avoidable, costs associated with species recovery.</p>	<p>Empirical applications of non-market valuation techniques, particularly stated preference methods like those employed in this survey, have been used extensively for over 40 years to value recreation sites, environmental quality, non-use benefits of resource conservation, and other non-market goods. A recent estimate indicates that over 7,500 studies have been conducted using the most common stated preference method, contingent valuation, in over 130 countries (Carson 2011). Over the past 40 years, methods have been substantially refined to address potential biases associated with the method (some of which are referenced in the comments), among other advances. Use of stated preference methods in damage assessment related to non-market goods was considered and upheld by U.S. courts in 1989 (<i>Ohio vs. Department of Interior</i>), and was the subject of a Blue Ribbon review commissioned by NOAA in 1993 following the Exxon Valdez oil spill. The review concluded that stated preference methods can provide reliable estimates when employing methodological best practices, which were identified in the review.</p>
E	<p>...the proposed economic survey adds nothing of value to the discussion of economic costs and benefits. It is based on a flawed, controversial economic survey theory that may be of theoretical interest to economists but does not inform the cost/benefit analysis required for the beluga critical habitat designation.... Studies such as this are controversial for several reasons: First, they ask respondents to state a preference based on a hypothetical situation that may not accurately represent reality. Second, when respondents are unfamiliar with the goods they are asked to value, preference surveys tend to <i>create</i>, rather than accurately measure, preference values for active and passive uses. And third, preference surveys used to value goods that are not traded in markets lack any “external validity” check.</p>	<p>Over nearly twenty years since the NOAA panel issued its findings, considerable research has been done to further improve stated preference methods, including the manner in which the questions themselves are asked, how the data are analyzed, and methods for minimizing potential biases (e.g., see Carson, Flores, and Meade 2001). The specific stated preference method used in this survey, stated preference choice experiments (SPCE), has been used extensively in economic applications in transportation and marketing (Louviere 1993, Polak and Jones 1997, Louviere, Hensher, and Swait 2000). Because the method has several advantages over the contingent valuation approaches frequently used at the time of the NOAA panel’s review (see Alpizar et al. 2001), SPCE has</p>

		<p>been increasingly used in environmental economics applications.</p> <p>While there are controversies related to stated preference methods, the considerable literature suggests that, when developed properly and rigorously, these methods can provide useful information. One survey technique that has been consistently shown to be effective in the literature in minimizing “hypothetical bias” (respondents’ tendency to overstate how much they would be willing to pay) is to include reminders of substitute goods and the household’s own scarce budget. The survey design incorporates several mentions of other public goods that the respondents may care about and want to spend money on (e.g., other social issues, other species), and reminders that the money they say they would be willing to pay comes from their pocketbooks and would not be available to spend on other things. In focus group review and interviews, subjects indicated that their responses in the survey valuation questions were constrained by recognition their budget constraint and spending priorities.</p>
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8. The design of the proposed survey is technically flawed		
ID	Comment	NMFS Response
C	<p>...CIRI further believes that the draft survey forwarded by email on April 5 is inappropriate. More detailed comments will be provided in the future, but, in general, CIRI considers the form to be too long and detailed, biased in favor of supporting restrictive recovery measures, misleading on applicable legal standards for recovery and subsistence, and disrespectful of the legally protected rights and interests of Alaska Native entities.</p>	<p>The design of stated preference choice experiment surveys is highly involved and technical. Similar surveys (of similar length and detail) have been successfully conducted and successfully implemented. While we appreciate the opinions about the survey length and other features of the survey, we have consulted with numerous scientists and managers to ensure the information about Cook Inlet beluga whales is technically correct and have rigorously tested the survey instrument using focus groups and cognitive interviews, and a small pretest implementation. Our testing suggests the survey is not overly long or biased. The survey describes very generally potential measures that may be taken to support CIBW recovery, but the focus of the stated preference questions in the survey is on the tradeoff between decreasing the extinction</p>
E	<p>... The study proposes to survey 4500 random U.S. households, including an undefined “oversampling of Alaska households,” about their preferences for passive and active use values. Only some unknown proportion of the Alaskans would have any actual basis for evaluating these values for belugas, and the remaining respondents— with no personal experience</p>	

	<p>whatsoever with belugas— will likely overestimate the value of protecting belugas, in part because it will cost them nothing personally.</p>	<p>risk and improving the status of CIBW population over the next 50 years, and household willingness to pay. The values estimated from the survey data will not be specific to, or contingent upon, individual recovery measures and are therefore not biased in favor of more or less restrictive measures.</p> <p>Moreover, since the Cook Inlet beluga whale is a national resource to be protected in the Public Trust, requiring expenditure of U.S. government funds collected from all taxpayers, it is critical to assess the U.S. public's preferences and values for CIBW recovery. This is the reason that the population of U.S. households is the target population of the survey, rather than the limited number of Alaska or other U.S. residents with personal experience with CIBW or other beluga whale populations. Even if the average U.S. resident does not have direct experience or knowledge of the Cook Inlet beluga whale, that does not mean his or her preferences should not be counted or considered in decisions made, at least in part, under the authority of the federal government. Because Alaska households may have more knowledge and feel closer to the issue, 1,200 Alaska households will be sent the survey. This sample size will enable us to generate Alaska-only estimates of non-consumptive benefits, which can be compared to the values estimated for the U.S. population as a whole.</p> <p>Finally, including information about the preferences of the U.S. population, including Alaska residents, regarding the long term expected outcome of CIBW recovery efforts does not diminish the role or participation of individuals and groups with more direct stakeholder interest in decision outcomes. By respecting and trying to measure the opinions and preferences of U.S. resident households in decisions made by the Federal government, no disrespect of Alaska Native entities or any other individual or group is intended or implied.</p>
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References:

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