

**SUPPORTING STATEMENT**  
**U.S. Department of Commerce**  
**National Oceanic & Atmospheric Administration**  
**Socioeconomics of Coral Reef Conservation**  
**OMB Control No. 0648-0646**

**Abstract**

This request is for a revision and extension of a currently approved information collection under OMB Control Number 0648-0646. No survey question concept or theory has changed since the first hybrid-generic clearance of this information collect request in 2021. However, NOAA sought feedback from survey administration teams and jurisdictional partners in American Samoa (2021), Puerto Rico (2022), and Guam (2023), as well as during preparation for survey administration in the CNMI (2024) and the USVI (2025). Responses came primarily from state and local natural resource management agencies, fisheries management councils and NGOs. In addition, NOAA adjusted each of the jurisdictional surveys based on respondents' feedback to the instrument. This feedback resulted in non-substantive survey instrument revisions that reduce question complexity, reduce respondent burden, simplify terminology for translation into other languages, improve clarity, and maintain consistent formatting.

This previously approved information collection is part of the National Coral Reef Monitoring Program (NCRMP), which was established by the National Oceanic and Atmospheric Administration (NOAA) Coral Reef Conservation Program (CRCP) under the authority of the Coral Reef Conservation Act of 2000. The administration of this program has potential economic and cultural impacts on the lives of nearby residents and citizens. In accordance with its mission goals, NOAA developed a survey to track relevant information regarding each jurisdiction's population, social and economic structure, the benefits of coral reefs and related habitats, the impacts of society on coral reefs, and the impacts of coral management on communities.

The purpose of this information collection is to obtain human dimensions information from residents in the seven inhabited U.S. jurisdictions containing coral reef ecosystems: Florida, U.S. Virgin Islands (USVI), Puerto Rico, Hawai'i, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI). The survey has a core set of questions that are the same for all jurisdictions to allow for information to be tracked over time. The survey also includes questions that are specific to the local context and developed in collaboration with jurisdictional partners. Survey administration is repeated in each jurisdiction every five to seven years in order to provide longitudinal information for managers to effectively conserve coral reefs for current and future generations.

## A. JUSTIFICATION

**1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.**

The Coral Reef Conservation Program (CRCP), developed under the authority of the [Coral Reef Conservation Act \(CRCA\) of 2000](#) (P.L. 106-562; 16 U.S.C. 6401 et seq.), is responsible for programs intended to “preserve, sustain, and restore the condition of coral reef ecosystems” in America’s States and Territories, and to “promote the management and sustainable use of coral reef ecosystems to benefit local communities and the Nation.” Under this authority, CRCP works with local partners in each of the seven jurisdictions to implement management strategies that aim to reduce key threats to coral reefs, such as land-based sources of pollution and impacts from fishing.

Since 2012, CRCP has implemented the National Coral Reef Monitoring Program (NCRMP) as one of its strategies mandated by the CRCA (2000). This program is a strategic framework for conducting sustained observations of biological (benthic composition and reef fish), climatic, and socioeconomic indicators in U.S. states and territories that contain coral reefs. The socioeconomic component of NCRMP collects and monitors data on various human dimensions topics, including human use of coral reef resources, knowledge, attitudes and perceptions of coral reefs and coral reef management, and demographics of the populations living in coral reef areas. As a whole, the resulting data collected by all NCRMP indicators provide a holistic understanding of the condition of U.S. coral reef ecosystems and the human communities connected to them, and how conditions are changing over time.

**2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.**

### **2.1 How will this information be used?**

CRCP intends to use the information collected through this survey instrument for research purposes as well as for measuring and improving the results of coral reef conservation programs. Following each jurisdictional data collection, data have been analyzed and published as NOAA National Ocean Service (NOS) CRCP technical memoranda prior to archival with NOAA’s National Center for Environmental Information. Following technical publication, data have also been synthesized into infographics to support jurisdictional communication and outreach needs. In addition, these data have been used in the development of periodic NCRMP status reports (tools that synthesize and integrate data from all NCRMP pillars (biological, climate, and socioeconomic)), as well as socioeconomic indicator measurement and assessment once every monitoring cycle. These uses of the data and resulting products will continue in perpetuity within the NCRMP. Because many of our efforts to protect reefs rely on education and changing attitudes toward reef conservation, the information collected will be used by CRCP staff to ensure that programs are designed appropriately, future program evaluation efforts are as successful as possible, and communication and outreach efforts are targeting the intended

recipients with useful information. Successful conservation requires an informed and engaged public, and these surveys are one way to assess the public’s general knowledge, attitudes, and perceptions about coral reef ecosystems.

## **2.2. Who will use this information?**

The information collected will be used by managing partners in each U.S. coral reef jurisdiction and the CRCP, which is housed within the National Ocean Service (NOS), Office for Coastal Management (OCM). Because the CRCP is a matrix program – a partnership among the NOS, Oceanic and Atmospheric Research (OAR), National Marine Fisheries Service (NMFS), and National Environmental Satellite, Data, and Information Service (NESDIS), this information will be shared with multiple NOAA line offices. Other government entities, such as the relevant regional fishery management councils established under the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.) or National Marine Sanctuaries established under the National Marine Sanctuaries Act (16 U.S.C. 1431 et seq.), also have management authority over coral reef ecosystems. This information collection allows for collaboration and a multidisciplinary approach to conserving and understanding coral reef ecosystems, and conducting sound science to inform management. Additionally, state and local government groups are often interested in the results of these surveys. For example, outreach and education coordinators for the state of Florida may be interested in whether or not residents are aware of coral bleaching or other threats to coral reefs.

## **2.3 How frequently will this information be used?**

This is an ongoing information collection. Information on residents in each jurisdiction will be used following each data collection. The data are collected in each jurisdiction via a survey (face-to-face, mail, or internet) conducted at regular intervals every five to seven years.

## **2.4 For what purpose will the information be used?**

The purpose of this information is to understand jurisdictional residents’ knowledge, attitudes, and perceptions of coral reefs and coral reef management practices, and to evaluate how this information changes over time. This information collection is required in order for the CRCP to maintain compliance with its mandate under the Coral Reef Conservation Act (2000). This information is used for the NCRMP and is meant to be integrated with the biological and climatic indicators to provide a robust depiction of the health and condition of U.S. coral reef ecosystems and the communities around them. This information on jurisdictional residents will also be used to identify and address information gaps to “increase public knowledge and awareness of coral reef ecosystems and issues regarding their long-term conservation (16 U.S.C. § 6403).”

## **2.5 Summary of Survey Questions**

The CRCP, in consultation with partners and stakeholders, developed a core set of long-term indicators for NCRMP that will be measured over time in each coral reef jurisdiction. The data gathered as part of this information collection request will allow for CRCP to continue tracking these indicators and improve the results of its existing and future programs. A list of each indicator and a description of its rationale is shown in Table 1. The first seven indicators (1-7) are primary indicators measured by questions in the survey instrument (summarized in Table 1 and described in more detail below), and are topics explicitly called for in the CRCA (2000). Indicator support questions were developed based on specific social theories and a long history of rigorous social science research and methods, as described below. The remaining six

indicators (8-13) are measured using secondary data sources. While they are not supported by the primary data collection proposed in this statement, they are included for contextual purposes.

While the indicators are applicable to all jurisdictions, there are considerable geographical, cultural and linguistic differences among residents living near these coral reef areas. To account for those differences, the survey questions include items that are specific to the local context and were developed based on jurisdictional partner feedback. Jurisdiction-specific questions and/or modifications also allow for the flexibility to ask about local resource management issues and emerging threats to reefs. In addition to the indicator-related questions, a number of demographic questions are also included in the survey for the purpose of allowing CRCP to sort the responses into different subgroups and analyze how demographics relate to question responses.

**Table 1: Socioeconomic Indicators for the National Coral Reef Monitoring Program**

<b>Indicator</b>	<b>Importance of Gathering Data to Measure Indicator</b>	<b>Survey Questions</b>
1. Participation in reef activities	Understand the economic and recreational importance of coral reefs to local residents; understand level of extractive and non-extractive pressures on reefs.	Q1, Q2, Q3
2. Perceived resource conditions	Complement biophysical information. Key to understanding public support for various management strategies.	Q7, Q8, Q9
3. Awareness of coral reefs and threats	Monitoring this information over time is key to tracking whether CRCP constituents understand threats to coral reefs. Data gathered will help inform management strategies and education and outreach efforts.	Q10, Q11, Q12
4. Cultural importance of reefs	Understand traditional and cultural significance of coral reefs to jurisdictional residents and whether their significance is changing over time.	Q4, Q5, Q6
5. Attitudes towards coral reef management strategies	Monitoring this information over time will be valuable to decision-makers. Information collected will assist decision-makers to evaluate and improve existing strategies and design new management approaches.	Q14, Q15
6. Participation in behaviors that may improve coral reef health	Improve existing knowledge, gain a better understanding on how human behaviors impact coral reefs positively and negatively, and conservation behaviors to promote.	Q16, Q17, Q18, Q19, Q20, Q21, Q22
7. Awareness of coral reef rules and regulations	Tracking this information over time at the jurisdictional or national level will provide a better understanding of the effect of investing in education and outreach.	Q13, Q23
8. Population trends change near coral reefs <sup>1</sup>	Determine how changing population trends increase pressure on coral reefs and reef-adjacent population.	N/A
9. Economic impact of coral reef fishing to jurisdiction	Track the economic contributions of coral reefs to reef fishing and justify government funding of coral reef protection programs.	N/A
10. Economic impact of dive/snorkel tourism to jurisdiction	Track the economic contributions of coral reefs to tourism and justify government funding of coral reef protection programs.	N/A
11. Governance	Provide information on the status of local institutions involved in coral reef conservation, number of functioning management strategies, and percent area of coral reefs under protection.	N/A
12. Community well-being	Tracking changes in health, basic needs, and economic security enhances understanding of linkages between social and coral reef conditions.	N/A
13. Physical Infrastructure	Assess coastal development footprint, physical access to coastal resources, and waste management/water supply infrastructure provides a general understanding of human impact to the coast.	N/A

Below are summaries and justifications for Indicators 1-7, to include objective, background, and

<sup>1</sup> CRCP will track information for Indicators 8-13 indirectly using secondary sources and separate data collection activities. This will reduce the burden on survey participants.

how they will be measured per the question items included in the survey instrument. Following indicator descriptions, screening and demographic questions are presented. In addition to literary support, the following indicators and questions have been peer-reviewed by external researchers and have been further tailored by extensive jurisdictional partner input (please see Section A.8 for a full description of these two efforts). Note: where alternate text is possible, the alternate versions are shown in brackets.

### **Indicator 1 – Participation in reef activities**

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**Objective:** To determine the frequency of resident participation in a range of marine-based activities related to direct and indirect uses of reefs such as snorkeling, swimming, diving, fishing, and harvesting marine resources. This will help us understand the economic and recreational importance of coral reefs to local residents, as well as the level of extractive and non-extractive pressures on reefs.

**Background:** Coral reefs provide diverse ecosystem services, including recreation, tourism, and cultural values (Paterson & Loomis, 2014). Understanding participation in coral reef activities provides a baseline from which to evaluate the social and economic benefits of reefs, and examine a variety of human dimensions relevant to coral reef management.

#### **Measurement:**

1. *In the past 12 months, approximately how often did you participate in each of these activities in [jurisdiction]?*

Question 1 collects activity participation frequency for coral reef-related activities. There are a core set of activities as well as optional jurisdictional activities. It limits to the “past 12 months” because a one-year time frame captures the seasonality of activities. This is the same question format used in surveys by the U.S. Forest Service (English et al., 2001), NOAA ONMS (e.g., Leeworthy & Wiley, 1997, 2001) and NMFS, and the National Park Service “pool of known questions” (OMB Control Number 1024-0224). Frequency is measured by four categories: never, once a month or less, 2-3 times a month, and 4 times a month or more. While asking respondents to report on their memories of a previous year’s activity is subject to recall bias, studies of angling and boating participation have found the estimated mean number of days based on a 1-year recall period was just as accurate as – but less precise (fewer errors) than – the estimates based on shorter recall periods (Osborn & Matlock, 2010). Due to the 5-7 period between data collection cycles and seasonality and variability in activity participation, a 1-year recall period is necessary.

2. *Please look at the map of [jurisdiction] and the boundaries of each zone. Which zone did you most often use for each activity?*

Question 2 collects most frequent areas of activity participation, and refers only to the activities a respondent participates in (as indicated in Q1). The map will be segmented into zones based on jurisdictional feedback on reef areas of interest. This question will be

used to identify high- and low-use areas (Alessa, Kliskey, & Brown, 2008) and the types of activities (Q1) that occur spatially in a jurisdiction (Dalton, Thompson, & Jin, 2010; Leeworthy et al., 2018), and used to examine perceptions and other human dimensions spatially (Andrew, Burns, & Allen, 2019; Beeco & Brown, 2013; Loerzel et al., 2017).

3. Which of the following best describes your most common motivation for fishing and gathering [or replacement jurisdictional word choice]? (Choose one).
  - a. *Recreational: I fish mostly for sport or pleasure, but may also sell a few fish.*
  - b. *Subsistence: I fish mostly to catch fish to feed myself, my family, and/or my community.*
  - c. *Commercial: I fish mostly for some or all of the money I make in one year.*
  - d. *Cultural: I fish mostly to keep traditional practices alive.*

Question 3 collects primary fishing or gathering motivation. These four motives have been used in previous studies (e.g., Loomis, Allen, & Hawkins, 2018) and have been identified as important distinctions between different types of fishing categories/identities (Leong et al., 2020; Madge, 2016) or measures of resource dependence (Watson Claar, & Baum, 2016). The data can be compared by different types of fishing (e.g., recreational fishing, spearfishing, gathering of marine resources) indicated in Q1 to determine whether different fishing categories are associated with different motives (Leong et al., 2020).

## **Indicator 2 – Perceived resource conditions**

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**Objective:** This indicator accounts for residents’ perceptions of current marine resource conditions in the jurisdiction and how those resource conditions may change in the future. This indicator is also meant to complement biophysical information collected by other NCRMP components (fisheries, benthic, climate) and informs the need or success of management strategies.

**Background:** An extensive body of research has been devoted to perceptions of ecosystem conditions and change, because perception is a key process in the interaction between people and the natural environment (e.g., Giglio, Luiz, & Schiavetti, 2015; Gobster et al., 2007; Priskin, 2003; Uyarra et al., 2009). Ecosystem characteristics such as ecological condition or health, as defined by experts, do not always equal people's perceptions of such characteristics. People have different perceptions of what is considered a “natural” or “healthy” ecosystem (Cottet et al., 2013; Kaplan & Kaplan, 1989; Ode et al., 2009) leading to “discrepancies between human preferences for natural resources and the ecological status of those resources” (Carvalho-Ribeiro & Lovett, 2011, p. 47).

Long-term monitoring of Indicator 2 will inform how perceptions change over time and if those changes follow similar patterns observed in biophysical data being monitored. This information can also be used to modify outreach and education material based on actual knowledge levels ensuring a more efficient and effective approach. The indicator and its components can also be used to examine its relation to other indicators measured in this survey. People have different priorities and value marine resources in different ways (Van

Beukering et al., 2007). Perceptions may vary by activity participation, resource dependence, or other social-demographic characteristics (Ditton, Loomis, & Choi, 1992; Paterson et al., 2012).

**Measurement:**

7. *How important are each of these marine resources to your quality of life?*
8. *How would you rate the current condition of each of these marine resources in [jurisdiction]?*
9. *Over the next 10 years, how do you think the condition of each of these same marine resources will change in [jurisdiction]?*

Questions 7-9 collect importance to quality of life, perceived current condition, and projected change in future condition for a short list of marine resources. The list includes a core set of activities as well as optional jurisdictional items. Each of these questions is asked in a 5-point Likert scale format. Question 7 responses range from “Not at all important” to “Very important”, Q8 responses range from “Very bad” to “Very good”, and Q9 responses range from “Worsen greatly” to “Improve greatly”. These types of questions have been asked in previous surveys of snorkelers, SCUBA divers, and recreational anglers (Loomis et al., 2008a, 2008b, 2008c).

**Indicator 3 – Awareness of coral reefs and threats**

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**Objective:** This indicator aims to collect information on residents’ self-reported awareness of threats to the jurisdiction’s coral reef habitat and knowledge about specific ecological services the reef provides. Monitoring this information over time is key to tracking whether CRCP constituents understand threats to coral reefs and will help inform management strategies (and education/outreach efforts).

**Background:** People will differ in a) what they acknowledge or consider to be threats to coral reefs, and b) the magnitude or severity of those threats. Their perceptions or beliefs about threats may or may not align with expert opinion (Kain, de Jong, & Smith, 2010; Lazo, Kinnell, & Fisher, 2000). The accuracy of the beliefs is not the issue; instead, what matters is what people believe to be true, since these beliefs are real to people and often guide their behavior.

**Measurement:**

10. *How important are coral reefs in [jurisdiction] to each of the following?*

Question 10 collects perceived importance of coral reefs to a series of ecosystem services. This question uses a 5-point Likert scale format, ranging from “Not at all important” to “Very important”. The ecosystem services offered are consistent across all jurisdictions. The delivery of ecosystem services is dependent upon the status of marine

resource conditions (Kelble et al., 2013; Leeworthy & Ehler, 2010; Nuttle & Fletcher, 2013). Accordingly, the mean importance of ecosystem services (Q10) can be examined for their relationship to perceived resource conditions (Q8), threats to coral reefs (Q11-12), and how resource conditions are perceived to be changing (Q9) (Dearden et al., 2007; Uyarra et al., 2009).

11. *Which of the following do you believe are threats to coral reefs in [jurisdiction]?*

12. *How severe are each of these threats to coral reefs in [jurisdiction]?*

Questions 11 and 12 collect perceptions of threats to coral reefs and the severity of those threats. Both questions include a core set of potential threats as well as optional jurisdictional potential threats. Q11 includes response options of “yes”, “no”, and “not sure”. Q12 then asks only about the Q11 items where the respondent selects “yes”, and uses a 4-point Likert scale format, ranging from “Minor threat” to “Severe threat” (the lower pole of the full 5-point scale, “Not a threat”, is the “no” response in Q11). These questions are modified from previous NCRMP surveys and human dimensions surveys of coral reef conditions that were conducted by academics for Florida’s Reef Resiliency Program (Loomis et al., 2008a, 2008b, 2008c) and the National Park Service (Loomis, Allen, & Paterson, 2017; OMB Control #1024-0263).

#### **Indicator 4 – Cultural importance of reefs**

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**Objective:** To understand traditional and cultural significance of coral reefs to jurisdictional residents and whether this is changing over time.

**Background:** There are many aspects of “culture” including cultural heritage, social identity, spiritualism, cultural norms, and traditional/customary practices that are tied to social-ecological interactions. Food, for example, connects current populations to the culture of place, a community’s heritage and ancestry (Delind, 2006). The types of food, how and when it is eaten, and who it is shared with can influence a person’s connection to place, identity, and well-being (García-Quijano et al., 2015; Khakzad & Griffith, 2016; Van Holt et al., 2016). In coral reef areas, such as in the Pacific Islands region, cultural practices include the sharing of fish to support social networks, fishing with family members to maintain generational and cultural ties, or fishing as a contribution to celebrations or ceremonies (Bell et al., 2009; Leong et al., 2020; Weijerman et al., 2016). Much of the fish caught in Guam, for example, is not traded in the market but is instead consumed within the household or shared with family, friends, and the local community (Pinhey, Rubinstein, & Vaughn, 2006).

**Measurement:**

4. *On average, how many of the meals eaten by you and members of your household include seafood?*
5. *On average, how many of the meals eaten by you and members of your household include seafood from local coral reefs in [jurisdiction]? (Examples include reef fish*

*such as [jurisdictional option 1] and [jurisdictional option 2], bottomfish such as [jurisdictional option 1] and [jurisdictional option 2], and other shellfish and marine life that depend on coral reefs such as [jurisdictional option 1] and [jurisdictional option 2]. This does not include pelagic fish such as [jurisdictional option 1] and [jurisdictional option 2].)*

Questions 4 and 5 collect seafood consumption frequency generally as well as from local coral reefs. Both use a 5-point Likert scale ranging from “None of the meals (0%)” to “All of the meals (100%)”, and local coral reef seafood examples are provided. These two questions will be examined for their relationship to fishing participation (Q1), demographics, or other variables measured in this survey to explore resource dependency (Watson et al., 2016).

6. *How important are coral reefs to each of the following in [jurisdiction]?*

Question 6 collects perceived importance of coral reefs to a list of cultural items. This question uses a 5-point Likert scale format, ranging from “Not at all important” to “Very important”. The cultural items offered are consistent across all jurisdictions, but allow for minor modification for jurisdictional language differences. Importance of reefs to culture can be further examined by different types of fishing participation (Q1) or fishing motives (Q3) to explore how importance of reefs to culture (Q6) is connected (Leong et al., 2020).

## **Indicator 5 – Attitudes toward coral reef management strategies**

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**Objective:** To understand resident attitudes (support or opposition) toward marine protected areas (MPAs) and different reef management strategies.

**Background:** There is a long and established line of research on attitudes. An “attitude” is defined as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (Eagly & Chaiken, 1993). This definition has been supported by various investigators (e.g., Ajzen & Fishbein, 1980; Ajzen, 2001) and used in a variety of natural resource management situations, such as restoring wildlife (Brooks et al., 1999; Enck & Brown, 2002), natural resource management activities (Bright & Barro, 2000; Teel & Manfreda, 2009), and marine protected areas (Johnston et al., 2020).

### **Measurement:**

14. *How do you think the establishment of MPAs [or jurisdictional word choice] impacted the following in [jurisdiction]?*

Question 14 collects perceptions of how the establishment of MPAs has affected a list of ecosystem services. “MPAs” are not defined in this question because they’re defined in the preceding question (Q13). This question is only asked of respondents who indicated “yes” to Q13. Q14 uses a 5-point Likert scale format, ranging from “Worsened greatly” to “Improved greatly”. The list of ecosystem services is structured as closely as possible

to the list offered in Q10, but required some minor contextual adjustments. The list is consistent across all jurisdictions, but allows for one optional jurisdictional item. The average perceived effect of MPAs on the different items will be calculated and compared across different subgroups.

15. *Next, how much do you oppose or support each of these management strategies to protect coral reefs in [jurisdiction]?*

Question 15 collects support level for a list of management options that may help to protect coral reefs. There are a core set of management options as well as additional jurisdictionally relevant management options. This question uses a 5-point Likert scale format, ranging from “Strongly oppose” to “Strongly support” (Krosnick & Abelson, 1992; Krosnick, Judd, & Wittenbrink, 2000). If residents are generally receptive to certain management options, managers can more confidently suggest implementing those initiatives to support coral reef health. At the same time, the management options may have differing impacts to different subgroups (e.g., anglers, divers). Mean comparisons of attitude scores can be compared across activity groups (Q1). Q15 can also be compared with perceptions of resource conditions (Q8) or perceived threats to coral reefs (Q11-12). This would show how the amount of residents’/subgroups’ support is connected to their perceptions.

## **Indicator 6 – Participation in behaviors that may improve coral reef health**

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**Objective:** To understand residents’ level of activity supporting coral reef habitats. Understanding the types of barriers that prevent residents from engaging in environmentally-friendly behaviors inform management on what needs improved to enable those types of behaviors.

**Background:** Pro-environmental behavior is conceptually defined as “actions which contribute to environmental preservation and/or conservation” (Axelrod & Lehman, 1993). A variety of behaviors or actions support coral reef stewardship and conservation and are encouraged by CRCP and management<sup>2</sup>. Behaviors are conceptually linked to values, beliefs, and attitudes (Ajzen & Fishbein, 2000; Alessa, Bennett, & Kliskey, 2003; Steg & Vlek, 2009; Vaske & Donnelly, 1999; Wynveen, Wynveen, & Sutton, 2015). There are many different constraints or barriers that individuals perceive to inhibit or prohibit participation in pro-environmental behaviors or activities. Constraints can be categorized into a) intrapersonal constraints, which are “internal” to an individual and are mainly related to the psychological states and attributes, such as lack of knowledge and perceived health problems, b) interpersonal constraints, which are related to social disapproval and inability to find partners, and c) structural constraints, which are “external-to-an individual” such as lack of resources, and lack of facilities (Crawford, Jackson, & Godbey, 1991; Kollmus & Agyeman, 2003; Metcalf, Burns, & Graefe, 2013; Rushing et al., 2019).

**Measurement:**

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<sup>2</sup> NOAA Coral Reef Conservation Program, “10 ways to protect coral reefs”:  
<https://oceanservice.noaa.gov/facts/thingsyoucando.html>

16. *How important is it for [jurisdiction] residents to participate in actions that help to protect coral reefs?*

Question 16 collects perceived importance for residents to engage in activities that help to protect coral reefs. It uses a 5-point Likert scale format, ranging from “Not at all important” to “Very important”.

17. *Do you do routinely participate in any of these actions?*

19. *In the past 12 months, have you done any of these actions?*

21. *In the past 5 years, have you done any of these actions?*

Questions 17, 19, and 21 collect residents’ participation in pro-environmental behaviors that may help protect or improve the health of coral reefs. The first of these (Q17) asks about a list of frequent, routine activities; the second (Q19) asks about a short list of less frequent (in the past 12 months) activities; and the last (Q21) asks about a few least frequent (in the last 5 years) activities. For each item listed, respondents can select “yes” or “no”. Each of the question lists include a core set of items with optional jurisdictional language modifications, as well as optional, additional jurisdictionally relevant items. These data can also be examined for correlations to other survey questions, such as perceptions of current and future resource conditions and threats (Q8, Q9, Q11-12), or tested across subgroups, such as activity participation (Q1) or demographic variables (e.g., age group, tenure, born in jurisdiction).

18. *Why do you not participate in those activities routinely? (Check all that apply).*

- a. *I do not know how*
- b. *It is not convenient*
- c. *It is too expensive*
- d. *I have not had the opportunity*
- e. *None of these reasons*

20. *Why have you not participated in those actions in the past 12 months? (Check all that apply)*

- a. *I do not know how*
- b. *It is not convenient*
- c. *It is too expensive*
- d. *I have not had the opportunity*
- e. *None of these reasons*

22. *Why have you not participated in those actions in the past 5 years? (Check all that apply).*

- a. *I do not know how*
- b. *It is not convenient*
- c. *It is too expensive*
- d. *My system is already up to date*

- e. *I am not allowed to*
- f. *None of these reasons*

Questions 18, 20, and 22 are follow up questions to Q17, Q19, and Q21, and only include items that received “no” responses in Q17, Q19, and Q21, respectively. These questions collect information on why respondents did/do not participate in the listed items. The response options are consistent across each of these questions, with the exception of some minor contextual modifications to the response options in Q22. These questions provide management context on barriers to engaging in certain pro-environmental activities, and this information may help improve local and national outreach and education approaches.

### **Indicator 7 – Awareness of coral reef rules and regulations**

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**Objective:** This indicator measures resident awareness of local Marine Protected Areas (MPAs) and acceptable coral reef behaviors that are tied to rules and regulations. Tracking this information over time at the jurisdictional/national level will inform compliance with rules and regulations and investment in education and outreach.

**Background:** Over the past several decades in the U.S., there has been a dramatic increase in the number of MPAs established at all levels of government, and more than 1,600 federal and state/territory sites exist today. These conservation efforts were set-forth with two Executive Orders creating the U.S. Coral Reef Task Force (1998) and National System of MPAs (2000). Numerous policy options within MPAs exist concerning the combination of activity types and use levels that are allowed or restricted within a protected area boundary, including “no take” zones. Enforcement of activities in MPAs is challenging considering the geospatial scale and porous boundaries of these areas. Understanding whether people are aware of MPAs in their jurisdiction is important for enforcement and compliance with regulations. However, this is complex considering the multitude of regulations for different activities in different management zones. Because people will vary in their awareness and understanding of the rules and regulations related to corals and their surrounding ecosystems, they may or may not know whether they are breaking the rules by engaging in certain activities. Norms for acceptable and unacceptable behavior vary in strength and is one way to understand compliance (Heywood, 2002; Smith et al., 2006; Sorice, Oh, & Ditton, 2007; Vaske & Whittaker, 2004). Injunctive norms specify rules or standards for what people “should” do in a given situation (Cialdini et al., 2006). When norms influence behavior, people consider the positive or negative consequences associated with the behavior and feel a sense of obligation to comply (Chung & Rimal, 2016; Lapinski & Rimal, 2005). These normative influences are often shared and regulated by members of the same social network or group (Dunning, 2017; McDonald & Crandall, 2015), such as recreational SCUBA divers or anglers (Anderson & Loomis, 2011).

**Measurement:**

13. *A Marine Protected Area (MPA) [or jurisdictional word choice] is an area of the ocean [, optional “such as” description,] where particular human activities are restricted [or jurisdictional word choice] to protect living, non-living, cultural,*

*and/or historic resources. Before today, were you aware of existing MPAs [or optional jurisdictional word choice] in [jurisdiction]?*

Question 13 defines “MPA” and then collects awareness of existing, local MPAs. Question wording includes optional jurisdictional language modification. Response options include “yes” and “no”.

*23. The rules and regulations surrounding coral reefs are sometimes misunderstood. How unacceptable or acceptable are each of these practices in [jurisdiction]?*

Question 23 collects perceived acceptability of engaging in a list of items. The items offered are related to rules, regulations, and best practices for the protection of corals and coral reef ecosystems. The list of items includes a core set that are consistent across all jurisdictions with the potential of jurisdictional language modification, as well as a set of jurisdictionally relevant items. This question uses a 5-point Likert scale format, ranging from “Very unacceptable” to “Very acceptable”. The proportion of respondents with a certain level of awareness will also be examined. Collecting perceived acceptability of engaging in various actions enables the ability to indirectly assess respondents’ understanding of socially and environmentally responsible actions within coral reef ecosystems. The means can be tested for differences between subgroups based on activity (Q1), zone of participation (Q2), or attitudes toward management options (Q15). Awareness of MPAs and acceptability of reef behaviors could vary based on the types of activities a person engages in or the attitudes a person holds. This understanding can help improve outreach and education efforts to communicate coral reef rules, regulations, and best practices.

### **Demographic questions**

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*24. Do you identify as any of the following?*

*25. In what year were you born?*

*26. Were you born in [jurisdiction]?*

*27. How many years have you lived in [jurisdiction]?*

*28. What race/ethnicity do you consider yourself? (Check all that apply).*

*29. Do you speak a language other than English at home?*

*30. What is the highest level of education you have completed? (Choose one).*

*31. What is your current employment status? (Check all that apply).*

*32. Is your current or most recent occupation related to one or more of the following? (Check all that apply).*

33. *How many adults aged 18 years or older live in your household, including yourself?*
34. *What is your annual household income?*

Questions 24-34 collect socioeconomic and demographic information. This information will be used primarily to a) extrapolate from sample to population, b) determine non-response bias, and c) analyze patterns between responses and socioeconomic and demographic information.

### **Initial screening and nonresponse questions**

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*S1. Just one person is needed to complete this survey. May I please speak to the person 18 or older in your household who has had the most recent birthday?*

*S2. Are you willing to participate in this survey?*

*S3. Do you live in [jurisdiction] at least three months of the year?*

Questions S1-S3 are screening questions that are woven into the introductory script. QS1 identifies the intended respondent based on our random stratified sample design. Depending on resident response, the interviewer will either continue to QS2, re-read script 1 and QS1 with a new individual, proceed with the “not available” protocol, or proceed with the nonresponse questions, beginning with NR1. QS1 confirms the resident’s voluntary willingness to participate in the survey. QS3 determines further eligibility of the resident to continue with the survey.

*NR1. Are there any particular reasons why you would prefer not to participate in the survey that you would be willing to share?*

*NR2. [For Interviewer] Did the respondent make any of the following comments, whether or not these exact words were used? (Check all that apply)*

*NR3. [For Interviewer] Please record the following observations during your interaction with the respondent.*

Questions NR1-NR3 are nonresponse follow up questions for individuals who choose not to participate in the survey. QNR1 collects optional rationale for a resident’s decision to decline participation in the survey. QNR2 and QNR3 are internal questions for the interviewer to record resident responses and observed demographic features. QNR2 includes a list of potential responses for the interviewer to check off. QNR3 asks the interviewer to silently observe and record resident gender, relative age, and race, as well as the presence or absence of children in the household, as available. These nonresponse questions allow for the assessment of human behavior underlying survey participation and the presence of a nonresponse bias. When a bias exists, there are differences between respondents and nonrespondents on the variables of interest (see further discussion on nonresponse bias in Supporting Statement Part B.3). Information on nonresponse can be

used to increase the rate of participation and construct statistical adjustment techniques to reduce nonresponse error in survey estimates and draw more accurate inferences about the population (Groves, 2006; Groves & Couper, 1998).

## **2.6 Compliance with Information Quality Guidelines**

The information collected will be disseminated to the public or used to support publicly disseminated information. NOAA will retain control over the information and safeguard it from improper access, modification, and destruction, consistent with NOAA standards for confidentiality, privacy, and electronic information. See response to Question 10 of this Supporting Statement for more information on confidentiality and privacy. The information collection is designed to yield data that meet all applicable information quality guidelines. Prior to dissemination, the information will be subjected to quality control measures and a pre-dissemination review pursuant to [Section 515 of Public Law 106-554](#).

### **3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g. permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also, describe any consideration of using information technology to reduce burden.**

A combination of information collection techniques will be utilized with the objective of selecting the most cost-effective approach depending on the specific conditions in each jurisdiction, and at the same time, to reduce the burden on respondents. This information collection will employ online surveys in jurisdictions, such as Hawai'i and Florida, where Internet service is widely available to residential households. The advantages of administering a survey online include reduced costs, reduced dissemination time and response time, and automated data input. Online surveys are fast to administer and reduce human error in data entry. Implementing online surveys is also advantageous in that it facilitates large sample sizes, thus increasing the potential for subgroup analysis and decreased sampling variance. In jurisdictions, such as American Samoa and CNMI, where Internet service is not widely available, online surveys will not be feasible so alternative methods will be required.

### **4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Question 2.**

A literature review was conducted to identify studies analyzing knowledge, opinions, attitudes and reef use patterns and protection activities, including social and economic data related to the communities affected by coral reef conservation programs. To date, no peer reviewed publications related to all seven U.S. coral reef jurisdictions have been found, and there are no currently approved information collections requesting similar information in the seven jurisdictions containing coral reefs. Jurisdictional partners have also confirmed that the present survey effort does not duplicate other social science efforts in upcoming jurisdictions, and is instead complimentary to any related efforts and resource management projects (see Section A.8).

There are other types of socioeconomic efforts being done in the Pacific coral reef jurisdictions. While the data are collected and used for different purposes at different scales, they complement each other. NOAA Pacific Islands Fisheries Science Center (PIFSC) collects socioeconomic data in American Samoa, CNMI, Guam, and Hawai'i, but the survey is focused on fisheries industry and particular sectors. SEM-Pasifika, part of the Global Socioeconomic Monitoring Initiative for Coastal Management (SocMon), collects community-based data in the Pacific Islands (and other international regions) at the site management level (Wongbusarakum & Heenan, 2019). The SEM-Pasifika site-based assessments have been supported by the CRCP and local resource management partners. Unlike the PIFSC and SEM-Pasifika data sources, the NCRMP's socioeconomic data provide insights into the most critical issues for a variety of ecosystem services, including fisheries, recreation and shoreline protection, and provide information at the island/jurisdictional scale to examine the relationship between humans and the reef systems over time within specific island settings in ways allowing for regional comparison. The NCRMP survey also generates data that are important for climate resilience strategies, which other data sources do not cover.

There have also been economic surveys conducted in the coral reef jurisdictions, but no duplication of efforts has been identified. There was a previously approved collection (OMB Control Number 0648-0585) for the purpose of conducting a stated preference survey to estimate individuals' preferences and economic values of the Hawaiian coral reef ecosystem. This study has been completed but the scope of this study was only limited to one jurisdiction and its focus was only to evaluate a number of specific management actions provided in the survey. There was another previously approved collection (OMB 0648-0765) to collect expenditures and preferences related to recreational diving and snorkeling in Hawai'i that was conducted and is currently submitted for renewal; however, this recreational data collection does not duplicate the efforts of the present collection request and is instead complementary. There was also an approved information collection request for the purpose of conducting a stated preference survey of tourists and residents to estimate values of Puerto Rico's coral reefs. There was no duplication of effort with the NCRMP Puerto Rico survey, given the differences in content, sample, and mode of survey delivery.

It should be noted that many U.S. coral jurisdictions in conjunction with NOAA and other state, local and federal partners have indicated the desire to conduct their own integrated ecosystem monitoring where biophysical parameters are collected in conjunction with human dimensions data. In an effort to harmonize socioeconomic monitoring as well as to produce data that is comparable over time and space, state and other local U.S. coral reef jurisdictional partners have expressed the desire to draw from the existing question bank as they develop their integrated research efforts.

All efforts are being made to ensure that this data collection is not redundant with other efforts within NOAA. CRCP is currently collaborating with the National Marine Fisheries Service (NMFS), National Estuarine Research Reserves (NERR), the Office for Coastal Management (OCM), and the Office of Response and Restoration (ORR) on surveys led by the Office of National Marine Sanctuaries (ONMS). This collaborative effort will prevent overlap and duplication in surveys occurring in the jurisdictions to reduce survey fatigue and avoid

unnecessary expenditure of resources. The ONMS surveys focus on visitor use of National Marine Sanctuaries and economic expenditures. Because the surveys will be conducted in or adjacent to U.S. coral reef jurisdictions and include non-residents in the sample, the information complements the NCRMP surveys and can help address information gaps.

Furthermore, CRCP and NCCOS social scientists participate in monthly meetings with the PRA Community of Practice and Social Science Committee to stay up to date on social science projects and surveys being conducted across NOAA line offices. Efforts are also being made to prevent duplication of collection efforts with other federal agencies that have management authority over coral reefs or adjacent areas, including the National Park Service, U.S. Forest Service, and U.S. Fish and Wildlife Service. Interagency collaboration allows for consistency in the operationalization of survey questions.

**5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.**

This collection will not involve small businesses or other small entities. Only individuals representing their households will be surveyed.

**6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.**

In accordance with Congressional directives set forth in the Coral Reef Conservation Act of 2000 (CRCA)<sup>3</sup>, NOAA's Coral Reef Conservation Program authorizes a national program that includes "monitoring, assessment...and scientific research that benefit the understanding, sustainable use, and long-term conservation of coral reefs and coral reef ecosystems" (See 16 U.S.C. § 6401). The dire consequences of not collecting this data or conducting the data less frequently would be the inability of CRCP to fulfill the requirements to monitor and assess linkages between ecological management goals and human wellbeing, as mandated by the CRCA (2000) with particular references to parts (2) and (3). Not conducting this investigation would undermine CRCP's ability to effectively evaluate its programs and to ensure that they are achieving its mission. The immediate consequences of not collecting this data as requested is the inability of CRCP to track changes in reef health and impacts to people and local economies over time. Without collecting this socioeconomic information, CRCP will not have the best available science necessary to monitor changes in the coral reef ecosystems and coral reef-adjacent communities in each of the U.S. coral reef jurisdictions.

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<sup>3</sup> Coral Reef Conservation Act of 2000 [P.L. 106-562; 16 U.S.C. 6401 et seq; December 23, 2000]

Purposes: (1) to preserve, sustain, and restore the condition of coral reef ecosystems;

(2) to promote the wise management and sustainable use of coral reef ecosystems to benefit local communities and the Nation;(3) to develop sound scientific information on the condition of coral reef ecosystems and the threats to such ecosystems; (4) to assist in the preservation of coral reefs by supporting conservation programs, including projects that involve affected local communities and nongovernmental organizations; (5) to provide financial resources for those programs and projects; and (6) to establish a formal mechanism for collecting and allocating monetary donations from the private sector to be used for coral reef conservation projects.

**7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.**

No special circumstances are anticipated. The information requested will be voluntary and the collection will be conducted in accordance with OMB guidelines.

**8. If applicable, provide a copy and identify the date and page number of publications in the Federal Register of the agency's notice, required by 5 CFR 1320.8 (d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.**

A 60-day Federal Register Notice was published on January 5, 2024 (89 FR 752). No public comments were received.

**Jurisdictional Partner Review and Feedback**

No survey question concept or theory has changed since the first hybrid-generic clearance of this information collect request in 2021. However, NOAA sought feedback from survey administration teams and jurisdictional partners in American Samoa (2021), Puerto Rico (2022), and Guam (2023), as well as during preparation for survey administration in the CNMI (2024) and the USVI (2025). Responses came primarily from state and local natural resource management agencies, fisheries management councils and NGOs. In addition, NOAA made adjustments to each of the jurisdictional surveys based on respondents' feedback to the instrument. This feedback resulted in non-substantive survey instrument revisions that reduce question complexity, reduce respondent burden, simplify terminology for translation into other languages, improve clarity, and maintain consistent formatting. For example, Q20 was updated from "Which of the following are reasons why you have not engaged in any of those activities in the past 12 months?" to "Why have you not participated in those actions in the past 12 months?" to 1) reduce sentence complexity and decrease respondent burden, 2) minimize translation issues of the term "engaged", and 3) improve clarity by changing "activities" to "actions" since "activities" are described in Q1 and Q2. In another example, Q1 previously asked for the number of days in the past 12 months that respondents had participated in given recreational activities, but has resumed asking for monthly binned estimates (as was done in the first monitoring cycle) due to respondent cognitive burden reported by our survey vendors and analytical disadvantages.

These edits are provided line-by-line in the redline survey question bank included in this submission package. For historical comments and responses, please see previous supporting statements for this ongoing monitoring effort.

**Expert Review of Survey**

NOAA contacted external stakeholders to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported. No comments were received. (No survey question concept or theory has changed since the first hybrid-generic clearance of this information collect request in 2021. For historical comments and responses, please see previous supporting statements for this ongoing monitoring effort.)

**9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.**

No payments or gifts will be provided to respondents.

**10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a systems of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.**

No personally identifying information (PII) will be collected in the survey. As stated in correspondence with respondents (via mail, email, or in person), PII (name, address, telephone number, email address) will be used for the sole purpose of contacting respondents to administer the survey. This information will only be viewed by the contractor compiling the data, and will be destroyed at the end of the information collection.

Participants' names and addresses will be assigned an arbitrary number that will serve as the respondent ID number. The identification number will be linked to each questionnaire and respondents will be requested not to place their name or any personal identifiable information on the questionnaire. When a survey is completed and returned, the identification number will be used to record the return of the survey and end the mailing or distribution of any further reminders. The identification number will be entered with the responses to the survey in a separate data file. Once data collection is complete, the link between names/addresses and data will be destroyed. This process will maintain the confidentiality of the responses received, and all potential participants in the survey will be informed about this process.

All data received from the surveys will be stored on a secure server and will be password protected. This website will not be available to the public. All computerized data will be maintained in a manner that is consistent with NOAA's IT Security Program. No data files will contain personal identifiers. Aggregate and summary statistics will only be publicly available for the data which will allow the identities of survey respondents to remain confidential. CRCP will maintain the data in accordance with the highest standards of information security and will keep PII data only as long as is absolutely necessary to complete the survey.

**11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior or attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.**

For this collection, no sensitive questions will be asked. All survey questions are voluntary, so the respondent can skip any question.

**12. Provide an estimate in hours of the burden of the collection of information.**

A variety of instruments and platforms will be used to collect information from respondents. The total annual burden hours requested (1,093 hours) are based on the maximum number of collections we expect to conduct over the requested period for this clearance, even though we do not expect 100% response (Table 3). The entire collection will be collected over a 7-year period (1 jurisdiction per year), and therefore, will not be collected more frequently than once every 3 years. Using average labor rates for the specific jurisdictions and for the nation as a whole when jurisdictional information is not available, the burden estimates result in expected labor costs of \$26,751.46.

**Table 3: Estimates of Total Burden Hours and Dollars**

Requirements	Number of Respondents	Responses Per Respondent	Total Number of Responses	Response Time (min)	Total Burden Hours	Total Burden Dollars
1. Florida <sup>4</sup>	2,000	1	2,000	20 min	667	\$17,948.97
2. Guam <sup>5</sup>	800	1	800	20 min	267	\$5,353.35
3. Hawai'i <sup>6</sup>	1,700	1	1,700	20 min	567	\$15,042.51
4. American Samoa <sup>7</sup>	815	1	815	20 min	272	\$8,094.72
5. Puerto Rico <sup>8</sup>	1,800	1	1,800	20 min	600	\$9,324.00
6. Commonwealth of Northern Marianas Islands <sup>7</sup>	1,600	1	1,600	20 min	533	\$15,862.08
7. U.S. Virgin Islands <sup>9</sup>	1,125	1	1,125	20 min	375	\$8,628.75
<b>Total Public Burden</b>	<b>9,840</b>		<b>9,840</b>		<b>3,280</b>	<b>\$80,254.38</b>
Annualized	3,280		3,280		1,093	\$26,751.46

The response burden is based on three different components that are explained by the survey administrator or read by the respondent: the purpose and need for respondent participation, the survey instructions and section transitions, and the survey questions (including demographic questions for statistical purposes). We acknowledge that not all respondents contacted will be willing to participate in the survey. Based on previous NOAA surveys of the targeted population we expect response rates for each survey mode to be consistent with industry standards. See Supporting Statement Part B.1 for more information on expected response rates.

4 Mean hourly wage in Florida is \$26.91 ([https://www.bls.gov/oes/current/oes\\_fl.htm](https://www.bls.gov/oes/current/oes_fl.htm))

5 Mean hourly wage in Guam is \$20.05 ([https://www.bls.gov/oes/current/oes\\_gu.htm](https://www.bls.gov/oes/current/oes_gu.htm))

6 Mean hourly wage in Hawai'i is \$26.53 ([https://www.bls.gov/oes/current/oes\\_hi.htm](https://www.bls.gov/oes/current/oes_hi.htm))

7 Mean hourly wage is based on national estimate: \$29.76 ([https://www.bls.gov/oes/current/oes\\_nat.htm](https://www.bls.gov/oes/current/oes_nat.htm))

8 Mean hourly wage in Puerto Rico is \$15.54 ([https://www.bls.gov/oes/current/oes\\_pr.htm](https://www.bls.gov/oes/current/oes_pr.htm))

9 Mean hourly wage in U.S. Virgin Islands is \$23.01 ([https://www.bls.gov/oes/current/oes\\_vi.htm](https://www.bls.gov/oes/current/oes_vi.htm))

**13. Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected on the burden worksheet).**

There will be no cost to respondents beyond burden hours.

**14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information.**

The cost to the Federal government for contract services, supplies, equipment, travel, etc., is approximately \$411,623 for FY2024, \$308,260 for FY2025, and \$294,950 for FY2026. The annualized cost for contract services, supplies, equipment, travel, etc., is approximately \$338,278.

The total annual cost for Federal labor on the project is approximately \$200,000 for FY2024, \$200,000 for FY2025, and \$200,000 for FY2026. The annualized cost for Federal labor is \$200,000.

The total annualized cost for the project is \$538,278 for the period of FY2024 to FY2026.

**15. Explain the reasons for any program changes or adjustments.**

There are no major program changes or adjustments as this is a revision and extension of a previous information collection request. Minor adjustments in cost are a result of changes in cost of living and minor adjustments in (respondent) sample sizes since the previous request. All changes in annual sample sizes are in accordance with approved non-substantive change requests since 2012; however, sample sizes for each jurisdiction have been increased because jurisdictional partners and CRCP leadership have requested higher resolution data to improve resolution of final products and better integrate the results from this data collection with complimentary NCRMP data (i.e., biological datasets). To allow for larger sample sizes with increased resolution without exceeding burden and budget limitations, CRCP has decided to reduce collection efforts from two jurisdictions per year to a single jurisdiction per year. Additionally, following the completion of the first socioeconomic monitoring cycle, indicators were developed and calculated. The survey instrument as well as the indicator development approach then underwent internal and external peer review. To address review comments, improve measurement of the final indicators, and incorporate updated standards for survey development and implementation, minor changes to the survey instrument have been made. Final question wording is presented and justified in Section A.2, and supporting summaries of external and partner review and contributions are found in Section A.8.

**16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used.**

**Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.**

Data collected under this clearance will only be used for research purposes, to measure and improve the results of CRCP programs, and to target outreach efforts. Aggregated statistics and other general findings will be presented to local jurisdictions and a final NOAA technical report will be published for each jurisdictional monitoring cycle. Additional products may include infographics, scientific posters, presentations, and two-page summaries of highlights from the survey results. All products will be available upon request and via CRCP web sites and other media.

In an effort to promote the use of scientific information for improved resource management the agency may publish some of the findings in peer reviewed journals. These will be in addition to NOAA technical documents and presentations. It should be noted that NOAA may receive requests to release some of its findings through congressional inquiries or Freedom of Information Act (FOIA) Requests. CRCP will disseminate the findings when appropriate, and strictly following NOAA's guidelines, and all applicable laws and regulations.

**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate.**

We are not seeking approval to not display the expiration date for OMB approval of the information collection.

**18. Explain each exception to the certification statement identified in "Certification for Paperwork Reduction Act Submissions."**

The agency certifies compliance with [5 CFR 1320.9](#) and the related provisions of [5 CFR 1320.8\(b\)\(3\)](#).

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