

**1 Supporting Statement A for
Paperwork Reduction Act Submission**

**OMB Control Number 1018-XXXX
National Initiative to Understand and Connect Americans and Nature**

Terms of Clearance. None — this is a new collection

1. Explain the circumstances that make the collection of information necessary.

The U.S. Fish and Wildlife Service's (USFWS) legislative authority for this information collection is the Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j, not including 742 d-l; 70 Stat. 1119), as amended. The Act of August 8, 1956, as frequently amended, establishes a comprehensive national fish, shellfish, and wildlife resources policy with emphasis on the commercial fishing industry but also with a direction to administer the Act with regard to the inherent right of every citizen and resident to fish for pleasure, enjoyment, and betterment and to maintain and increase public opportunities for recreational use of fish and wildlife resources.

The USFWS mission is, working with others, to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people. The USFWS administers National Wildlife Refuges (NWR), a network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. Fishing, hunting, wildlife observation, photography, and environmental education are among the outdoor activities within NWR. About 46 million people visit NWR each year, generating almost \$1.7 billion in sales for regional economies, and supporting 27,000 jobs and \$543 million in employment income (Carver and Caudill, 2013).

Yet profound changes appear to be occurring in the American public's relationship to nature and wildlife. Various indicators suggest Americans are becoming increasingly disconnected from nature and the outdoors. Indeed, work published in Proceedings of the National Academy of Sciences of the United States provides strong evidence through various metrics for a "fundamental and pervasive shift away from nature-based recreation" (Pergams and Zaradic, 2008, p. 2295). For example, the U.S. is an increasingly urban nation, where now approximately four of every five Americans live, and an ever more indoor-oriented public, where Americans on average spend 90% of their time (Kellert, 2005). The percentage of the U.S. population 16 years old and older participating in fishing fell from 19% in 1991 to 14% in 2011, the most recent years for which comparative data are available (USDI Fish and Wildlife Service, 2013). Percent of U.S. population participating in hunting fluctuated around 6% from 1991 to 2011, but hunting participation across seven of the nine Census Divisions trended downward from 1991 to 2011. Wildlife-watching around home fell from 39% of the U.S. population in 1991 to 29% in 2011; and wildlife-watching away from home decreased from 16% of the U.S. population in 1991 to 9% in 2011.

And what of the future? In a study of American children's time, the largest activity declines from 1997 to 2003 occurred in sports and outdoor activities—in fact, for children aged 6 to 12, there was a 37% decline in participation in outdoor activities, from 16% to 10% (Hofferth, 2009). African-American children spent less time outdoors than their Hispanic and white counterparts, and white children were more likely than their Hispanic- and African-American counterparts to prefer nature-based activities when playing outdoors (Larson et al., 2011). The potential effects on health and social vitality of decreased time outdoors and variability in racial/ethnic preference

for nature-related play are compounded in unknown ways by findings that the average child (aged 8-18 years) engaged in electronic media more than 50 hours in a typical week (Rideout et al., 2010). In addition, many children multi-task—e.g., surf the Internet while listening to music—thus consuming a total daily average of nearly 11 hours of media content in the daily 7.5 hours devoted to electronic devices. Restated, children spent practically every waking minute—apart from time in school—using a smart phone, computer, TV, or other electronic devices (Lewin, 2010).

Factors propelling these changes are not well known, though urbanization, loss of open space, a built environment discouraging interaction with nature, increasing isolation from sources of natural production, an aging population, difficulties accessing recreational areas and opportunities, costs of outdoor equipment, lack of training or background in outdoor and nature-oriented activities, primacy of vehicular transportation, fixation on numerous and rapidly-evolving modern electronics, fear of letting children play outside on their own, over-structuring of children's time, and fear of racial or ethnic intimidation in outdoor or natural settings are among candidate variables (Kellert, 2005; Hofferth, 2009; Kellert, 2012). Inevitable cultural change and increasing globalization also may be giving rise to profound transformation in how Americans think about and experience the natural world.

Despite the evidence of a growing separation between people and nature in American society, increasing theoretical understanding and scientific evidence have revealed that contact with the natural environment, rather than being a dispensable recreational amenity, is critical to people's physical and mental health (Wilson, 1984; Kellert and Wilson, 1993). This evidence of nature's contribution to our nation's wellbeing holds profound importance for current and future management and outreach programs of USFWS.

The previously cited participation data for fishing, hunting, and wildlife watching were collected in an extraordinary longitudinal study first fielded by the USFWS and Census Bureau in 1956. That year, and every five years since, the USFWS has sponsored the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. Survey content from 1955 to 1975 focused on measuring *participation* in fishing and hunting, with limited attention on respondents' sentiments toward nature. However, from 1980 through the most recent study in 2011, core objectives have been to assess *participation and expenditures* related to fishing, hunting, and wildlife observation, with virtually no inquiry to respondent attitudes toward outdoor involvement or values for nature.

In the late 1970s, to help close this gap in our understanding of public perceptions of nature and the outdoors, USFWS supported research by Dr. Stephen R. Kellert of Yale University, resulting in a benchmark characterization and classification of Americans' perceptions of and sentiments toward wildlife and nature (Kellert, 1979). With later contributions by colleagues such as Dr. E.O. Wilson of Harvard University, these early data made significant contribution to the emergent theory of "biophilia" (Wilson, 1984)—affinity for nature instrumental to people's health and well-being (Kellert and Wilson, 1993).

Now, a research team, with Dr. Kellert working as principal investigator and aided by social scientists from D.J. Case and Associates and a sub-contractor (Toluna) on the forefront of contemporary survey methodology, proposes to update and expand this earlier research. This project will build upon seminal research underwritten by USFWS to describe adult Americans' present values for nature, linking values for nature with perceptions of personal health and wellbeing, with programmatic implications for current and future management and outreach programs of the USFWS.

References

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- USDI Fish and Wildlife Service, 2013. U.S. Department of the Interior, U.S. Fish and Wildlife Service, and U.S. Department of Commerce, U.S. Census Bureau. 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. 161pp.
- Wilson, E.O. 1984. *Biophilia: the human bond with other species*, Cambridge: Harvard University Press, 176pp.
- 2. Indicate how, by whom, how frequently, and for what purpose the information is to be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, explain how the collection complies with all applicable Information Quality Guidelines.**

We will conduct a one-time online survey of 8,950 total individuals, consisting of three segments: (1) a nationwide survey of English- and Spanish-speaking Americans, including oversamples of African Americans, Asian Americans, and Hispanics; (2) a representative State-level survey of Florida; and (3) a representative State-level survey of Texas.

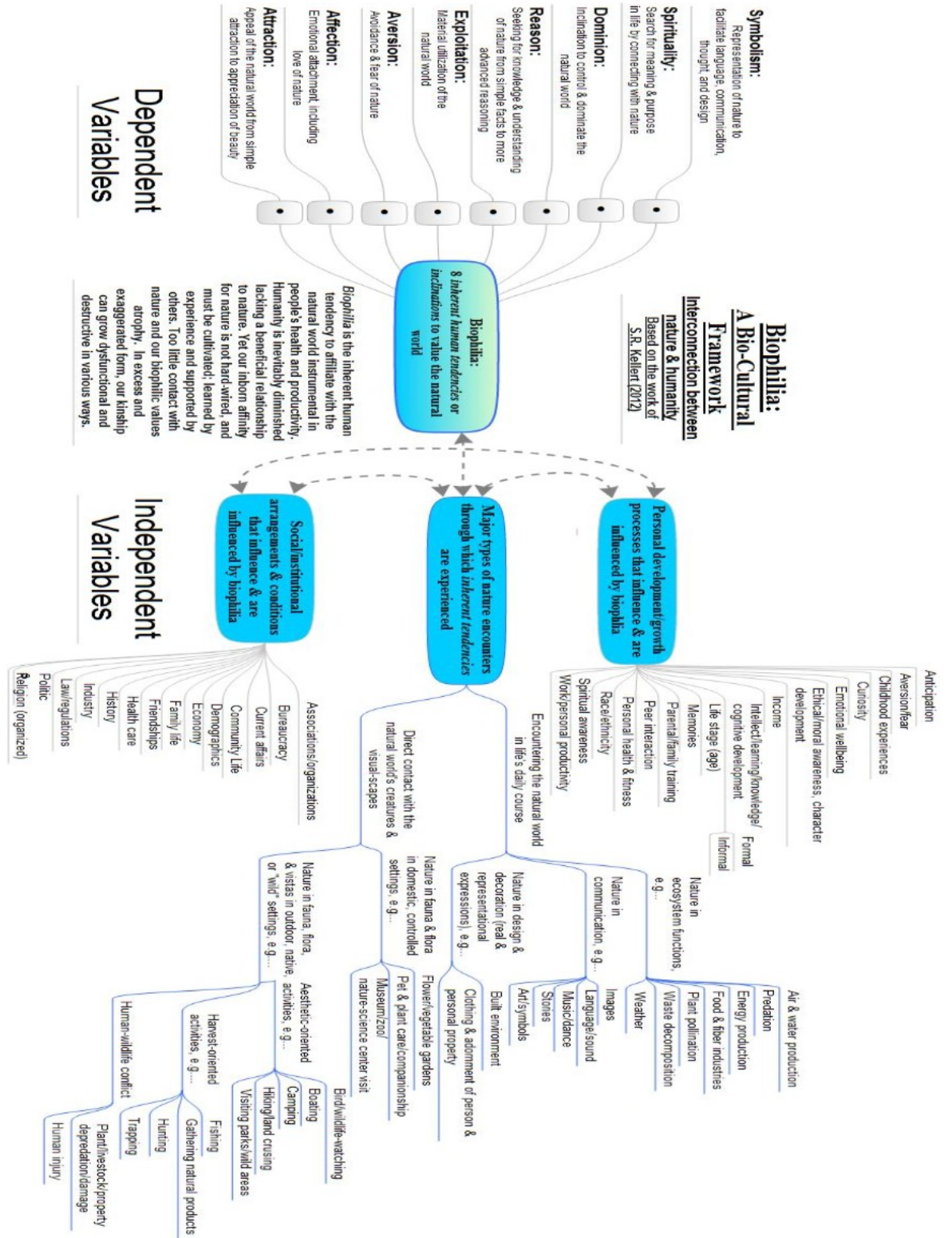
Fundamentally, the information collected will be used to better understand and connect Americans and nature. Information will be collected one time, analyzed, and then disseminated in multiple ways. For the USFWS, the research team will produce datasets and a final written report on the national-level survey. We anticipate the information obtained will give USFWS extraordinary insight to the U.S. citizenry's near-term and evolving sentiments toward nature and the role of nature in our nation's quality of life and health. Moreover, USFWS will gain critical understanding of the perceptions of the outdoors among a wide array of the public, including wildlife observers, anglers, and hunters. As USFWS deems appropriate, supplemental reports and peer-reviewed papers will be prepared for dissemination to attentive publics such as private and non-governmental organizations and to the public at large. We will also produce final reports of our state-level surveys of Texas and Florida for the Texas Parks and Wildlife Department and the Florida Fish and Wildlife Conservation Commission, respectively.

At key points during the data analysis process, the research team will be expected to seek the counsel of, and make progress reports to, USFWS. The research team has reviewed Information Quality Guidelines for Department of the Interior and USFWS, and understands that any technical assessments must adhere to these guidelines. The research team's publication record for books and peer-reviewed articles evidences its understanding of the importance of quality and credibility of scientific information deemed influential. The research team developed and relied on a bio-cultural model of values toward nature (biophilia) that included variable lists (Figure 1). The team, in consultation with other survey experts, developed and tested the survey based on the model. Every question in the survey relates back to specific variables in the model and over the course of survey development, every item or question deemed extraneous was eliminated.

To ensure strong evidence for the bio-cultural model of biophilia—and to help ensure clarity of question presentation—several quality-assurances were undertaken:

1. In August, 2011, Dr. Kellert and David J. Case, President, DJ Case & Associates, fielded (*at private expense*) two carefully worded questions (that is, two items deemed likely candidates for dependent variables in the proposed survey) in Opinion Research Corporation's CARAVAN telephone survey; a nationally-projectable study among a sample of 1,000 adults 18 years of age and older (1/2 male and 1/2 female) living in private households in the continental United States. Responses to these two variables were cross-tabulated by 10 socioeconomic variables measured in the same survey. Findings offered proof of concept for biophilia, as well as affirmation of question wording for key dependent variables, and the importance of measuring selected independent or explanatory socioeconomic variables in the proposed survey.

Figure 1. Biophilia: A bio-cultural framework¹



¹Kellert, S. R. 2012. Birthright: people and nature in the modern world. New Haven and London: Yale University Press, 242pp.

2. In June and early July, 2015, 15 focus groups were conducted (OMB Control No. 1090-0011, expired July 31, 2015) to examine public sentiments toward nature, and in so doing, examine proof of concept for eight biophilic values and allied variables, such as outdoor interests, activities, and knowledge. These focus groups were conducted in the following cities with a focus on assuring representation of different racial/ethnic groupings (note: “general public” simply denotes that respondents were asked to participate regardless of racial/ethnic identification):
 - 1) Chicago IL (“general public” participants)
 - 2) Dallas TX 1 (Hispanic-Latino/a participants)
 - 3) Dallas TX 2 (Hispanic-Latino/a participants)
 - 4) Houston TX 1 (“general public” participants)
 - 5) Houston TX 2 (African-American participants)
 - 6) Jacksonville FL 1 (“general public” participants)
 - 7) Jacksonville FL 2 (African-American participants)
 - 8) Los Angeles CA (Asian-American participants)
 - 9) Miami FL 1 (Hispanic-Latino/a participants)
 - 10) Miami FL 2 (Hispanic-Latino/a participants)
 - 11) New York City NY (“general public” participants)
 - 12) San Antonio TX 1 (“general public” participants)
 - 13) San Antonio TX 2 (Hispanic-Latino/a participants)
 - 14) Tampa FL 1 (Asian-American participants)
 - 15) Tampa FL 2 (Hispanic-Latino/a participants)

 3. As a check for respondent understanding of survey questions, and as confirmation of time needed for survey completion (estimated at ~20 minutes), a pilot test of the final-draft survey was conducted with five content experts unfamiliar with the study and four members of the general public ($N = 9$); respondent experiences with the pilot test were solicited. The content experts indicated that the survey items were conceptually solid and clear. Members of the general public affirmed that they understood the survey, and indeed, found the survey items/questions interesting and thought-provoking.

 4. The research team requested that online-programming staff from Toluna (online survey subcontractor) estimate time for completion of the online survey. Toluna staff estimated survey completion at ~20 minutes; not an inconsequential confirmation by Toluna given that the firm’s pricing varies based on estimated time for completion.

 5. The research team submitted the research design (including consent to participate and human subject protocols) to Heartland Institutional Review Board (IRB), which on May 26, 2015, approved and classified the survey as follows: “There is no more than minimal risk to the subjects.”

 6. To ensure survey accessibility to all Hispanic-Latino/a subjects, a Spanish (Latin American Spanish) version of the survey was developed (Attachment B). The survey was first translated from English to Spanish by a Spanish-as-first-language translator (fluent in English). To check for accuracy in translation, this Spanish version was then back-translated to English by a Spanish-as-first-language translator (fluent in English).
- 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 [and specifically how this collection meets GPEA requirements.].

The research team's sub-contractor, Toluna, will collect all information online via personal computers or mobile devices. Individuals contacted via email voluntarily click an Internet link to participate in the survey. Individuals may also save the email to complete the survey later, or they may simply delete the email if they choose not to participate. If the target number of completed surveys is not achieved after the initial invitation, additional invitation messages are sent to non-respondents. These follow-up messages are identical to the original invitation. (Toluna has discovered it gets better participation by sending the same message again than it does by creating a "reminder" message.) Up to two reminders are sent to each non-respondent, after which communication regarding the survey is terminated. This automated information collection achieves enormous efficiencies in reducing contact and response burden on participants, as well as similarly large economies in data collection and entry, while using accepted methodology in survey research. The precise methods through which Toluna recruits participants and creates representative samples is described in Supporting Statement B.

4. Describe efforts to identify duplication.

In Phase 1 of this study, the research team spent considerable time and effort discussing the theoretical foundation and proposed methodology with myriad agencies, experts, and individuals, and reviewing other work that has been done in this arena. Although a great (and growing) body of knowledge exists that examines humans and the outdoors at various scales and in various ways, all are much more narrowly defined—focusing on specific aspects of the connection in specific geographic regions, etc. This proposed study is a comprehensive assessment Americans' varying affinity and connection with nature as a whole and the resulting influences of that connection.

The National Survey of Fishing, Hunting and Wildlife-Associated Recreation, which has been sponsored by USFWS every five years since 1955, is similar in that it is also a national study. However, that survey primarily measures participation in, and expenditures for, fishing, hunting, and wildlife watching. It does not ascertain the citizenry's values for and knowledge of nature, nor does it attempt to measure perceptions of nature's impact on one's health and wellbeing.

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

No such impacts.

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.

The conduct of this research (or lack thereof) influences the current and future relevance of USFWS programs. Without this information, USFWS understanding of Americans' sentiment toward nature and nature's potential impacts on health and quality of life will be more anecdotal and incomplete than if the data are collected and applied. Socio-demographic change in the U.S. is rapid, and USFWS management and outreach programs designed to meet the citizenry's perceptions of and expectations for nature-oriented programming should attempt to accommodate social change, providing exemplary service to a diverse clientele. There are no known technical or legal obstacles to reducing burden.

- 7. Explain any special circumstances that would cause an information collection to be conducted in a manner:**
- * requiring respondents to report information to the agency more often than quarterly;**
 - * requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**
 - * requiring respondents to submit more than an original and two copies of any document;**
 - * requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;**
 - * in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;**
 - * requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**
 - * that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**
 - * requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

There are no special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.

- 8. Provide the date and page number of publication 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 (or in response to a PRA statement) and describe actions taken by the agency in response to these comments.**

Describe efforts to consult with persons outside the agency 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. [Please list the names, titles, addresses, and phone numbers of persons contacted.]

On May 19, 2015, USFWS published in the Federal Register (Vol. 80, No. 96, Page 28638) a notice soliciting public comment on this information collection for 60 days. The comment period ended on July 20, 2015. There were no substantive comments.

The research team consulted with a wide range of experts on data collection parameters. See Supporting Document B, Question 5 for a list of names and agencies.

- 9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.**

The research team's sub-contractor, Toluna, uses a "point" system for survey participation. Prior to answering a survey, each prospective respondent is informed via email the number of points

s/he will accrue by completing the survey; points can be redeemed in a variety of ways. For this survey, each respondent will be awarded ~7,500 Toluna points.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

First, the research team’s sub-contractor, Toluna, has privacy policies to which respondents have agreed: <https://us.toluna.com/Privacy>. At no point will the research team or USFWS have access to the names or any identifying information of anyone solicited for this survey. Second, the research team submitted the research design (including consent to participate and human subject protocols) to Heartland IRB, which on May 26, 2015, approved and classified the survey as follows: “There is no more than minimal risk to the subjects.”

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.

There are no questions of a sensitive nature.

12. Provide estimates of the hour burden of the collection of information.

The National Initiative to Understand and Connect Americans to Nature is a one-time data collection and we estimate 8,950 responses at twenty minutes each = 2,983 annual burden hours contained in this request.

We estimate the total dollar value for this collection to be \$99,900.67. We used BLS Bulletin USDL-15-1132 (<http://www.bls.gov/news.release/pdf/ecec.pdf>) to estimate hourly wages and benefits. According to the BLS Bulletin, employer costs for employee compensation averaged \$33.49 per hour worked. This is calculated by adding average wages and salaries at \$22.88 per hour worked and average benefits at \$10.61 per hour.

ACTIVITY	NUMBER OF RESPONSES	COMPLETION TIME PER RESPONSE	TOTAL ANNUAL BURDEN HOURS	\$ VALUE OF ANNUAL BURDEN HOURS (\$33.49/hr)
Initial Contact				
Complete Survey	8,950	20 minutes	2,983	\$99,900.67
Reminders				
TOTALS				

13. Provide an estimate of the total annual [nonhour] cost burden to respondents or recordkeepers resulting from the collection of information.

This survey is conducted online. There is no non-hour cost burden to respondents. There is no fee for completing the survey or any other costs associated with responding to this survey.

14. Provide estimates of annualized costs to the Federal Government.

We estimate the total one-time cost to the Federal Government to be \$282,150.

The portion of our contract (Order#F14PC00250) with DJ Case and Associates supporting the on-line survey, administration, data analysis, and report writing is \$275,000.

Additionally, the Federal Government will incur approximately \$7,150 (rounded) in staff time for support of this information collection and review of resultant analyses and reports. We estimate approximately 120 hours of a GS-12/Step 8 Biologist's time to assist DJ Case and Associates with this portion of the contract. We used the Office of Personnel Management's Salary Table 2015-DCB to determine salary costs. The hourly wage for a GS-12/Step 8 is \$45.14. We multiplied this rate times 1.32 to account for benefits, resulting in an hourly wage of \$59.58 (rounded). We used BLS Bulletin USDL-15-1132 (<http://www.bls.gov/news.release/pdf/ecec.pdf>) to calculate benefits.

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

This is a new collection.

16. For collections of information whose results will be published, outline plans for tabulation and publication.

Data will be compiled, checked or "cleaned" to ensure accuracy, and analyzed using standard statistics appropriate for nominal-, ordinal-, and where appropriate, interval-level data. The USFWS will receive a final report, revised in a collaborative process with the research team, with USFWS sanctioning any subsequent distribution of data and submission of papers to peer reviewed journals.

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

The OMB control number and expiration date will be displayed on the survey.

18A. Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-I.

There are no exceptions to the certification statement.