

The Supporting Statement for OMB 0596-NEW

Subsistence Harvest Patterns in Prince William Sound

November 2008

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.**

Laws, Statutes, and Regulations

- Restoration Plan for Prince William Sound
- Alaskan National Interest Lands Conservation Act (ANILCA), 1980
- Multiple Use Sustained Yield Act, 1960
- National Forest Management Act, 1976
- Chugach National Forest Revised Land and Resource Management Plan, 2002

See Appendix I for additional information regarding the items listed above.

In 1989, Prince William Sound (PWS), the heart of the Chugach National Forest (CNF), was severely impacted by the Exxon Valdez Oil Spill (EVOS). In the aftermath of the spill, federal and state trustees were awarded criminal and civil restitution funds to help with the recovery (and the evaluation of the recovery) of injured resources and human services, including traditional practices of subsistence harvest, which is still listed as "recovering." For a complete list of injured resources and services, please visit the Exxon Valdez Oil Spill Trustee Council's website at <http://www.evostc.state.ak.us/Publications/injuuredresources.cfm>.

The EVOS Trustee Council maintains the status of subsistence activities as an injured service of PWS. The original cause for concern relative to subsistence was that contamination from oil has altered the availability of safe subsistence resources in PWS. For example, in Chenega Bay prior to the spill, marine mammals made up about 40 percent of the subsistence harvest. Ten years later, in 1998, marine mammals make up only 3 percent of the subsistence harvest and 63 percent of the households in areas affected by the oil spill believe that subsistence resources have not recovered from the effects of the spill. At the same time, some subsistence community members reported having to increase efforts (i.e. traveling farther, spending more time and money) to achieve comparable harvests to those before the spill, in addition to their increasing reliance on fish (Fall 1999).

The CNF, as the major land-owning federal trustee in PWS, plays an important role in the recovery process. One area of critical importance to CNF managers, which has received less attention by researchers, is the distribution, behavior, and experience of

human users throughout the Sound and the impact of these users on EVOS recovering resources and services. Recreation use is increasing in the Sound, and there is concern that increased competition and rapid growth in commercial and independent recreation may be negatively impacting subsistence activities through direct competition for resources from sport fishers and hunters, but also indirectly by displacing subsistence harvesters from traditional harvest areas.

Understanding the subsistence harvest patterns in the Sound will add critical depth to the few existing PWS human use studies by:

- Describing the exact nature of overlap between subsistence and recreation use in Sound;
- Help managers better understand the dynamics around the resulting interactions between these two important user groups; and
- Allow managers to anticipate potential conflicts.

Conflicts between user groups have significant implications for EVOS impacted resources and services. Conflicts can diminish quality of life/experience for both subsistence and recreation groups (each already harmed by the spill) and push harvest and recreation activities into previously unused areas, potentially negatively affecting the 25 impacted and recovering resources.

Background on Subsistence harvest in Prince William Sound

Subsistence harvest is an important part of the rural Alaskan lifestyle. It is widely recognized in Alaskan land and wildlife management that subsistence harvest provides irreplaceable cultural, spiritual, personal, and sustenance value. The Alaska National Interest Lands Conservation Act (ANILCA) requires that federal land managers consider the effects of management on subsistence activities (USDA Forest Service 2002a). Residents of the native communities of Chenega Bay and Tatitlek as well as citizens of Cordova and Whittier partake in a variety of harvest activities in PWS. Fish and marine mammals comprise the majority of subsistence resources taken, but there is also significant use of other species including Sitka black-tailed deer, black bear, mountain goats, waterfowl, seabirds, river otters and mink as well as number of plant species (Stratton et al. 1986, Fall et al. 1999). Although many of these species use terrestrial habitats, the majority of time spent in pursuing harvest occurs in direct proximity to marine, inter-tidal and shoreline areas that are the focus of a variety of additional human uses (e.g., recreation). Furthermore, subsistence activities related to upland species are relevant for the purposes of evaluating the resource use as it impacts inter-tidal areas that serve as access points to inland subsistence gathering.

According to Fall et al. (1996) generally, "The subsistence cycle begins in the spring with harvests of herring and herring spawn as well as halibut, Dolly Varden, rockfish, smelt, and cod. Spring harvests also provide invertebrates (such as clams, octopus, and chitons), birds, eggs, harbor seals, and sea lions. Summer is traditionally the

busiest time of year, when people harvest and preserve large quantities of salmon for winter use. Autumn also is important for salmon fishing, as well as for hunting, gathering marine invertebrates, and harvesting wild plants. Subsistence activities in winter include hunting, marine fishing, gathering chitons, clams, and other invertebrates along the beaches, and trapping.”

Historically, subsistence communities have expressed concern that activities such as timber harvest, road building, and recreation development could impact fish and wildlife populations or increase competition for subsistence resources. In the Sound, subsistence users are concerned about increased competition for wildlife and fish resources from increasing numbers of private, urban users and commercial operations (J. Fall, ADF&G, Division of Subsistence, personal communication with A. Poe). They are also concerned about increased commercial recreation activity interfering with their subsistence practices. For example, many of the traditional harvest areas characterized by Stratton et al. (1986) of the people of Chenega Bay, have become popular for recreation activities and it is reasonable to assume that this may result in increased contact between these two user groups. Given that some recreationists using PWS may not understand the harvest traditions and rights of subsistence users, the potential for conflict is significant.

Recreational use is not evenly distributed in PWS. Certain areas are more desirable for a variety of reasons, including distance from access communities, presence of glaciers and post-glacial landscapes, availability of landing beaches, protected anchorages, sport fish streams, wildlife viewing opportunities, cabins, and wild game concentrations. PWS independent use is not well understood, though the majority of use happens during June, July, and August (Murphy et al. 2004).

While conflicts may occur between subsistence users and the public, PWS managers have the best ability to directly influence the location and timing of use by commercial operators under permit. Management strategies relative to facility development or education initiatives (which may minimize impacts to EVOS recovering and recovered resources) should be targeted at recreation users in specific locales hosting subsistence harvest activities during certain times of the year. This type of strategic planning requires a baseline characterization of the spatial and temporal nature of subsistence harvest activities in PWS.

Given the existing injury to subsistence harvest and its associated resources following the spill, competition with sport hunters / fishers, and the potential displacement from favored harvest areas by increased recreation; there is considerable potential to produce a cumulative negative effect on the subsistence lifestyle of PWS communities as well as to recovering or recovered species. As the CNF and partner agencies aim to manage recreation in the Sound, careful consideration of impacts to subsistence users should mitigate potential impacts to this important user group and the EVOS injured resources they depend upon.

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.

Residents from the four communities of PWS who are subsistence eligible (Chenega, Cordova, Tatitlek, and Whittier) will be consulted through individual household interviews conducted by current community institutions (e.g., tribal or community councils). Respondents will describe harvest practices and any recent changes in such activities due to other users or changes in resource availability.

a. What information will be collected - reported or recorded? (If there are pieces of information that are especially burdensome in the collection, a specific explanation should be provided.)

Data collected will include the specific resources harvested; the generalized location of harvest for each resource and the number of years of use of that/those location(s); duration of days invested in harvest of each resource; and the season of harvest. Additionally, respondents are asked if the efficacy of harvest has been negatively impacted by the other human activities (e.g., recreation) or general changes in resource availability. There are no aspects of this collection anticipated to be extraordinarily burdensome on the respondents.

b. From whom will the information be collected? If there are different respondent categories (e.g., loan applicant versus a bank versus an appraiser), each should be described along with the type of collection activity that applies.

Respondents are individuals or heads of households, of which 20 percent are Tribal members.

Residents from the four communities of PWS who are subsistence eligible (Chenega Bay, Cordova, Tatitlek, and Whittier) will be evaluated. These household style interviews around the subsistence harvest patterns have proven to be successful at evaluating summary harvest of resources in the years prior to and following the 1989 Exxon Valdez Oil Spill (e.g., Lee et al. 1986 and Fall et al. 1996). The sample population is ~ 1107 households: Cordova (958), Whittier (86), Tatitlek (38), and Chenega bay (22) according to 2000 Census records. Approximately 20% of those individuals are from three different Alaska Native communities, commonly referred to as Chenega, Tatitlek, and Eyak (whose residents are dispersed throughout the community of Cordova). All respondents will be approached with the same interview procedures.

c. What will this information be used for - provide ALL uses?

The results of this study (funded by EVOS criminal restitution dollars) will provide information on recovery and restoration activities undertaken by both the EVOS trustees and local resource managers relative to current and projected levels of human use. The study provides an excellent opportunity to assess the recovery of the subsistence human service injured and redistributed by the EVOS, as well as how CNF managers can further enhance recovery. Residents from the four communities of PWS who are subsistence eligible (Chenega, Cordova, Tatitlek, and Whittier) will be consulted through individual household interviews conducted by current community institutions (e.g., tribal or community councils). Respondents will describe harvest practices and any recent changes in such activities due to other users or changes in resource availability.

The data collected will be analyzed by researchers from the US Forest Service and University of Arizona and compared to information on recreation activities to identify the location and timing of potential interactions between subsistence harvesters and recreation users. Managers will use the resulting analysis to define baseline harvest patterns for Prince William Sound, giving decision makers insight into the recovery of this important human service that was redistributed in the Sound in the aftermath of EVOS. This information will allow managers to mitigate potential conflicts. Further, results will assist in the identification of potential changing resource harvest dynamics during a time of increasing human use in Prince William Sound.

The results of the proposed information collection will be integrated with the results of three other EVOS-funded studies currently being lead by the CNF that characterize: 1) human use hot spots; 2) recreation user experience; and 3) sensitive cultural and biological resources in the Sound. What follows is a short discussion of each of these three sister projects.

Study 1: Human Use Hot Spots GIS Database and Spatial Analysis

Hot Spots are important areas in PWS where human use is concentrated. In many cases, these locations are physiographic bottlenecks restricting access to desirable upland opportunities for recreation or subsistence activities. They also exist in areas of concentrated seasonal resources such as the mouths of salmon streams, or exceptional wildlife viewing opportunities. It is critical for the sustainable management of tourism, subsistence, and resources in PWS that the location, timing, and nature of these areas be well understood by PWS area managers (including where, when, how much and how often commercial activities occur on forestlands in the Sound). Several existing data sources characterizing human use in PWS are currently available to the CNF but these have not been compiled into a single comprehensive database. Such a database is critical in order to ensure our management actions continue to enhance the experience of all PWS users and provide for the restoration of the vital recreation/tourism and subsistence services while providing for protection and restoration of EVOS injured resources.

Study 2: The Prince William Sound User Experience Study

The project will produce a contemporary analysis of user experience to compliment the Forest Service's \$170,000 investment in its baseline Prince William Sound human use study completed in August of 2007. The study will directly evaluate the recovery of the recreation/tourism service negatively impacted by the EVOS and currently listed as "recovering" by the EVOS Trustee Council. This study will further our understanding of human use patterns and the potential for displacement resulting from competition between user groups and lingering oil, as well as create a comprehensive dataset depicting the spatial extent and intensity of human use which can be compared to the distribution of subsistence harvest activities and EVOS injured species and habitats in PWS. Additionally, the project will evaluate existing management standards for wild areas (e.g. Recreational Opportunity Spectrum) to determine if users are experiencing the qualities/ attributes for which PWS managers have planned

Study 3: Sensitive Areas (Biological/Cultural - including results of a 5th EVOS funded study of Black Oystercatcher nest site distribution in PWS)

This project will produce GIS layers for distribution of wildlife species, fish, and habitats as well as culturally sensitive areas affected by the oil spill (those still described as injured or recovering by EVOS trustee council). Compilation of available data sources will be through collaboration with partner agencies including USFWS, NOAA, Alaska Natural Heritage Program, NFMS, ADF&G, etc. A focus on distribution data for wildlife and fish species affected by EVOS as well as other sensitive wildlife species and habitats (e.g. seabird colonies, estuaries, marine mammal haul-outs, and concentration areas, sea ducks, etc.) will be mapped. Where species and habitat is appropriately EVOS focused this would include data layers from the Biological Hotspots Analysis completed in 2003 by the World Wildlife Fund. We will also compile and verify GIS layers currently housed by the CNF for important cultural heritage sites identified in PWS in the years since the oil spill. Our aim with this project is to create a comprehensive GIS layer with consistency throughout PWS and between parent data sources.

Together these projects are foundational studies/analyses for the Prince William Sound Framework. The "Framework" is a multi-year effort in which we aim to engage with PWS communities, stakeholders, and our land management partners in the region to promote resource protection through sustainable tourism management. As a key component of this larger Framework effort, the Subsistence Harvest Patterns in Prince William Sound study will add critical depth to the few existing Prince William Sound human use studies by describing the spatial and temporal nature of subsistence harvest activities within the Sound, as well as how those activities might be effected by other human activities in the region.

The spatial and temporal distribution of harvest will be summarized by season (spring 4/1 – 6/14; summer 6/15 – 8/31; fall 9/1 – 12/31; winter 1/1 – 3/31) and compared to predicted distributions of recreation use by private individuals which have been made through simulation modeling in PWS using Recreation Behavior Simulator or RBSim. This software program and its associated analysis procedures were developed by researchers from the University of Arizona. It can be fully integrated with ArcGIS to produce spatial characterizations of human use. RBSim has been used by many land management agencies to model the distribution of human use across diverse landscapes (Gimblett et al. 2001, Gimblett 2002). RBSim follows the principals of Individual-based Modeling as described by Huston et al. (1988) where the behaviors of individuals are used to program the actions of agents simulating human activity. RBSim conducts such simulations on a landscape represented by a GIS and simulation results can in turn be modeled into GIS coverages predicting or evaluating the intensity of human use. A contemporary PWS Human Use study also relies upon this technology to characterize current levels and patterns of human use across the Sound (Gimblett and Itami 2006). An earlier study applied this same technique to simulate black bear sport harvest in the Sound (Gimblett et al. 2005). The PWS user experience (collection #: 0956-0211) currently underway by the CNF and University Arizona will also produce predictions of human use patterns using RBSim from data collected in 2007 and 2008.

Additionally, data describing the distribution and seasonality of harvest will be compared to areas of concentrated use for other human activities in PWS that are being mapped in the Human Use Hotspots project currently underway by the CNF. This analysis will allow us to explore the potential for conflict between subsistence and other human uses (e.g., commercial recreation).

- d. How will the information be collected (e.g., forms, non-forms, electronically, face-to-face, over the phone, over the Internet)? Does the respondent have multiple options for providing the information? If so, what are they?**

The information will be collected through oral interviews the results of which are recorded on paper documents by interviewers during the course of household interviews. The remoteness of these communities makes this approach the most effective for reaching all households.

- e. How frequently will the information be collected?**

The information will be collected one time for each household that agrees to participate.

- f. Will the information be shared with any other organizations inside or outside USDA or the government?**

The data collected will be analyzed through a partnership with the University of Arizona. Summary results will be shared (in report form) with the target communities as well as local PWS land managers including Native Village Councils and Corporations and state and federal agencies with oversight in the region.

g. If this is an ongoing collection, how have the collection requirements changed over time?

This is a new information collection.

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.

The remoteness of these communities makes electronic means of collecting information an infeasible approach for effectively reaching all households.

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 Item 2 above.

Though some characterization has been completed for recreational use in the Sound (e.g. Murphy et al. 2004 and Gimblett and Itami 2006), almost nothing contemporary is known in regard to the spatial and temporal nature of subsistence harvest activities in PWS. Various subsistence harvest studies have been conducted researchers from Alaska Departments of Fish and Game's Division of Subsistence in since the early 1980s (e.g., Fall et al. 1996). The results of these surveys are used to update a community Profile database maintained by the Division (Scott et al. 2001). Unfortunately, the variables recorded in such surveys do not allow for spatially explicit analysis of harvest effort characterized in this database. The database tracks numbers of individuals (e.g., marine mammals) or pounds of resources (e.g., salmon) harvested but does not describe the daily effort of harvest nor location of harvest at any level of resolution greater than PWS. Furthermore, systematic evaluation of interaction with other human use or abandonment of traditional areas cannot be evaluated from these data.

One study completed in the early 1980s following the resettlement of the village of Chenega Bay (the original village site being destroyed in Alaska's 1964 Good Friday Earthquake) evaluated a change in distribution of harvest and did report some mapped results of harvest areas. The data focused only on households from Chenega and results are considered out of date at this time based on reported changes in harvest location because of the oil spill (pers. com. James Fall Director of ADF&G Division of Subsistence). Consultation with PWS native communities and regional

subsistence around the issue of evaluating the distribution of harvest efforts have confirmed this is indeed information that is currently lacking for two native communities of Chenega Bay (Chenega Corporation 2008) and Tatitlek (Tatitlek IRA Council 2003).

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

This information collection does have the potential to impact small entities in the form of local PWS Alaska Native tribe members. The methods used to minimize burden include a consultation with local tribal councils representing households from Chenega, Tatitlek, and Eyak in order to ensure that our proposed approach is appropriate for their communities. Furthermore, the actual data collection will be conducted by local entities recommended by village IRA Councils from these three villages.

Additionally, the following ethical principles have been established as the appropriate way to engage subsistence communities in south-central Alaska and will guide the proposed research: "1) review and approval of the research plans by community governments prior to fieldwork; 2) informed consent by household members selected for interviewing (participation in the research was voluntary), 3) confidentiality of individual and household-level responses, 4) review of study findings by the participating communities and 5) providing study findings and reports to each study community." (Fall et al. 1999). These principles are consistent with those developed by the EVOS Trustee Council in regard to "Protocols for including Indigenous Knowledge in the Exxon Valdez Oil Spill Restoration Process."

- The proposed information collection affects Alaska Native Tribes:

of respondents = ~ 220 households

% small entity = ~ 20% of the target population

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.

Given the existing injury to subsistence harvest and its associated resources following the Exxon Valdez Oil spill, increasing competition with sport hunters / fishers, and the potential displacement from favored harvest areas by increased overall recreation, there is considerable potential to produce a cumulative negative effect on the subsistence lifestyle of PWS communities as well as to recovering or recovered species. In order for the CNF to meet their obligations under ANILCA, we must manage recreation in the Sound with careful consideration for impacts to subsistence users. This evaluation and ultimately the mitigation of potential impacts, requires a baseline characterization of the spatial and temporal nature of subsistence harvest activities in PWS.

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;**

NA

- **Requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**

NA

- **Requiring respondents to submit more than an original and two copies of any document;**

NA

- **Requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;**

NA

- **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;**

NA

- **Requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**

NA

- **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**

N/A

- **Requiring respondents to submit proprietary trade secret, 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. The collection of information is conducted in a manner consistent with the guidelines in 5 CFR 1320.6.

8. If applicable, provide a copy and identify 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 and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

The 60-day comment period notice for this proposed information collection was published in the Federal Register on July 17, 2008 (Volume 73, Number 138, p 41027). No comments were received in response to this notice.

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 record keeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

Midge Clouse

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Midge provided input on the availability of data pertaining to the distribution of subsistence harvest data associated with the village of Chenega Bay. She also reviewed the proposed general approach of conducting household interviews in this community, as well as potential options for contracting with either the village IRA council or the village corporation to conduct the interviews.

External Reviewers - The following five (5) external reviewers were consulted throughout project development:

James A. Fall

Statewide Research Coordinator
Alaska Department of Fish and Game Division of Subsistence
333 Raspberry Road Anchorage AK 99518
(907) 267-2353
jim.fall@alaska.gov

Jim provided substantial background on subsistence harvest in the four target communities. This included information on the individual resources harvested, timing of activities, and concerns of subsistence harvesters in the region relative to competition with other activities. In addition, he provided methodological suggestions

regarding the execution of data collection efforts and recommended that local community members (contracted by community institutions) conduct the interviews. He also provided expectations of likely response rates for PWS communities based on his earlier work.

Dr. Randy Gimblett

School of Renewable Natural Resources
Biological Sciences East Building Rm. 325
Tucson, Arizona, USA 85721
(520) 621-6360
gimblett@ag.arizona.edu

Randy provided insights on recording subsistence harvest data in such a manner that allows comparison of the data to other spatial datasets without asking respondents to divulge very specific harvest locations. His recommendations resulted in the grid-cell based approach to data summary using the associated map document. He also provided technical insight regarding the level of detail required within the data elements to make summaries of intensity and distribution of harvest. Randy collaborated in the development of the proposed spatial analytical techniques for quantifying overlap between subsistence harvest and recreation activity as well as data summary analysis.

Tim Joyce

Cordova City Mayor
Po Box 1210, Cordova, Alaska 99574
(907) 424-6280

Tim provided methodological recommendations on conducting a systematic sampling of residents of his community using a method adopted by the State of Alaska to complete population census of small Alaskan towns (State of Alaska, 2007). He also reviewed the proponents' general approach to household interviews, providing feedback on the appropriateness of proposed survey questions and behavior of subsistence users from his community. He provided insight regarding the community's potential reaction to the survey.

Kate McLaughlin

CRRC Tribal Environmental Planner
PO Box 8043
Chenega Bay, Alaska 99574
(907) 573-5092

Kate provided an interview content review, including an evaluation of specific questions and appropriateness of data recording methods. Her insights as an environmental scientist for the Chugach Regional Resources Commission (assisting the Chenega tribe) and as a longtime resident of Chenega Bay were invaluable in

terms of precise descriptions of resources harvested within PWS. Similarly, she also provided insights relative to improving categorical descriptions of changes in resource use relative to the behavior of subsistence users within her community.

Bill Simeone

Subsistence Resource Specialist III
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Bill provided information on the types of resources most commonly harvested by PWS subsistence eligible communities. He also helped proponents review existing subsistence harvest data and studies from the PWS region, and provided information relative to the behavior of subsistence harvesters in PWS. As an individual who has conducted household interviews in each of these communities, he provided insights into the level of response rates proponents can expect within the different communities, and strategies for maximizing that rate. He also provided contact information within these communities at the outset of this effort. Bill reviewed the proposed data recording techniques, tools, and specific interview questions relative to appropriateness for the sample population.

Internal Reviewers - The following three (3) Federal employees were consulted during project development:

Van Johnson

Statistician
US Department of Agriculture, National Agricultural Statistics Service
Methods Branch
(202)-720-6482
Van_johnson@nass.usda.gov

Mr. Johnson, a statistician with the National Agricultural Statistics Service in Washington DC, reviewed the methodology relative to scope of inference. He provided insight on appropriate summary analysis techniques following data collection.

Milo Burcham

Subsistence Wildlife Biologist
Chugach National Forest
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Milo provided information on resources commonly harvested in the PWS region, as well as the variety of regulations governing their harvest including a number of complexities associated with differentiating the between federally managed subsistence, state managed subsistence, and sport harvest. He provided insight relative to the availability of existing data describing subsistence harvest and feedback on the data elements that would best capture the information proponents are attempting to collect. He reviewed the proposed interview questions for clarity, precision, and appropriateness for PWS harvesters. Milo reviewed data recording procedures and tools, and assisted with collecting responses to pretest household interviews. He provided feedback on the proposed process and on the effectiveness of conducting actual interviews and recording data.

Paul Clark

Tribal Relations Coordinator
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Paul reviewed the proposed interview approach and the content of individual questions. He provided feedback on the appropriateness of questions with regard to the Alaska Native culture. He provided comments on the proposed tools for data collection. Proponents adopted his recommendation to provide respondents an opportunity to share general sentiments on subsistence management at the end of the interview.

Pre-testing:

Five (5) members of PWS subsistence communities (Cordova, Tatitlek, and Whittier) participated in a pretest of the interview questions and data summary tools. The intent of the pretest was to elucidate possible confusion relative to question clarity, appropriateness of categorical responses, general comments regarding the proposed interview approach, and the appropriateness of the associated map document used to elicit responses. The individuals' comments are in Appendix II.

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

No payment or gift provided to respondents.

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

No specific assurance of confidentiality of information will be made. The data synthesis methods (e.g., combining response data by resource, season, and area of effort) will result in data contributions that cannot be attributed to individual

households. This analytical approach assures that researchers comply with standards and practices established by the EVOS Trustee Council regarding to “Protocols for including Indigenous Knowledge in the Exxon Valdez Oil Spill Restoration Process.” This approach has an established precedent via other successful subsistence studies of PWS communities (e.g., Fall et al. 1999).

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.

Respondents not asked questions of a sensitive nature.

12. Provide estimates of the hour burden of the collection of information. Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated.

- **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. If this request for approval covers more than one form, provide separate hour burden estimates for each form.**

- a) Description of the collection activity
- b) Corresponding form number (if applicable)
- c) Number of respondents
- d) Number of responses annually per respondent,
- e) Total annual responses (columns c x d)
- f) Estimated hours per response
- g) Total annual burden hours (columns e x f)

Table 1 – Estimated Burden on Respondents

(a) Description of the Collection Activity	(b) Form Number	(c) Number of Respondents	(d) Number of responses annually per Respondent	(e) Total annual responses (c x d)	(f) Estimate of Burden Hours per response	(g) Total Annual Burden Hours (e x f)
Non-response	N/A	155	1	155	.05 hour	7.75 hours ≈ 8 hours
Response	N/A	375	1	375	.5 hour	187.5 hours ≈ 188 hours
Totals	---	530	---	530	---	196 hours

Cordova: Estimated 306 respondents based on an attempt to sample 40 percent of the community’s 958 households and an expectation of an ~80 percent response rate from target households found by Fall et al, 1999.

Chenega: Estimated 15 respondents based on approaching 100 percent of households and an expectation of a ~70 percent response rate found by Fall et al., 1999.

Tatilek: Estimated 27 respondents based on approaching 100 percent of households and an expectation of a ~70 percent response rate found by Fall et al., 1999.

Whittier: Estimated 26 respondents based on approaching 100 percent of households and an expectation of a ~30 percent response rate (personal communication with Whittier Watershed Council).

- **Record keeping burden should be addressed separately and should include columns for:**
 - a) **Description of record keeping activity:** None
 - b) **Number of record keepers:** None
 - c) **Annual hours per record keeper:** None
 - d) **Total annual record keeping hours (columns b x c):** Zero
- **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories.**

Table 2 - Total Estimated Annualized Cost to Respondents

(a) Description of the Collection Activity	(b) Estimated Total Annual Burden on Respondents (Hours)	(c)* Estimated Average Income per Hour	(d) Estimated Cost to Respondents
PWS Subsistence Harvest (response)	8 hours	\$ 22.00	\$ 176
PWS Subsistence Harvest (non-response)	188 hours	\$ 22.00	\$4,136
Totals	196 hours	---	\$4,312

No specific information regarding the hourly rate of workers within the four communities exists. As such, proponents used the average hourly rate of \$22 for workers in Alaska for "All Occupations," as reported by the Bureau of Labor Statistics at http://www.bls.gov/oes/current/oes_ak.htm#b00-0000

- 13. Provide estimates of 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 shown in items 12 and 14). The cost estimates should be split into two components: (a) a total capital and start-up cost component annualized over its expected useful life, and (b) a total operation and maintenance and purchase of services component.**

There are no capital operation and maintenance costs.

- 14. Provide estimates of annualized cost to the Federal government. Provide a description of the method used to estimate cost and any other expense that would not have been incurred without this collection of information.**

The response to this question covers the actual costs the agency will incur as a result of implementing the information collection. The estimate should cover the entire life cycle of the collection and include costs, if applicable, for:

- Employee labor and materials for developing, printing, storing forms**
- Employee labor and materials for developing computer systems, screens, or reports to support the collection**
- Employee travel costs**
- Cost of contractor services or other reimbursements to individuals or organizations assisting in the collection of information**
- Employee labor and materials for collecting the information**
- Employee labor and materials for analyzing, evaluating, summarizing, and/or reporting on the collected information**

Table 3 - Planned costs for federal employees involved in project coordination.

ACTION ITEM	PERSONNEL	GS LEVEL	HOURLY RATE*	HOURS	Total
USFS project oversight	Wildlife Biologist	11-1	28.75	300	\$ 8,625
USFS oversight for contract implementation of data collection	Wildlife biologist	9-5	27.01	300	8,103
Travel	---	---	---	---	5,000
Miscellaneous Supplies ^{1/}	---	---	---	--	1,000
Contractors ^{2/}	---	---	---	---	26,000
Interviewers ^{3/}	---	---	---	---	21,000
Total	---	---	---	---	\$ 69,728
Averaged to be \$24,909 per year over 3 years					

^{1/} The above to USFS employees with total salary cost of \$16,728, will also likely accrue and additional ~ \$5,000.00 in travel costs during project oversight, training of interviewers, and coordination of analysis. An additional \$1,000 in miscellaneous supplies and expenditures are anticipated bringing the USFS total expenditure to: \$22,728

$$\$8,625 + 8,103 + 5,000 + 1,000 = \$22,728$$

^{2/} We have contracted with the University of Arizona to complete interview material production, conduct data summary, analysis, and reporting for a total of \$26,000. These funds support a principal research associate to complete materials production and data summary (at ~ 20\$/hour) for ~ 6 weeks over 1 year for a total cost of ~ \$4800. They also support data analysis by one analyst (~ 55\$/hour) for a total of 6 weeks over 1 year for ~ \$13,200 as well as technological and database support by one specialist (\$50/hour) for a total of 3 weeks over 1 year for a cost of ~ \$6000. Production costs for interview materials are estimated to be about \$1000 and U of A budgeted for an additional ~ \$1000 for equipment, supplies and production of the final product.

$$\$4,800 + 13,200 + 6,000 + 1,000 + 1,000 = \$26,000$$

^{3/} We intend to contract an additional four separate entities within the communities of Chenega Bay, Cordova, Tatitlek, and Whittier. Though precise costs are not currently available, we anticipate having to pay ~ \$20.00/hour for each interview contracted. We estimate contracting a total of 400 hours of contractor effort assuming training time, organizing and arranging interview efforts, the execution of actual interviews, and follow questions during data summary for a total of \$14,000 direct costs. We also anticipate a 50 percent cost overhead from contracted entities resulting in additional \$7000 in administrative costs for a total of: \$21,000.

$$\$14,000 + 7,000 = \$21,000$$

Total contracted assistance for this work is expected to be approximately \$47,000 and when combined with an additional \$22,728 in USFS direct expenditures **for a project cost of \$69,728**. Total project cost of \$69,278 spread over 3 years provides an estimated annual cost of \$23,242.66 ~ **\$23,243**.

$$\$22,728 + 26,000 + 21,000 = \$69,728 \div 3 \text{ years} = \mathbf{\$23,243 \text{ annual cost to Govt.}}$$

* Taken from: <http://www.opm.gov/oca/08tables/index.asp>, Cost to Government calculated at hourly wage multiplied by 1.3

15. Explain the reasons for any program changes or adjustments reported in items 13 or 14 of OMB form 83-I.

This is a new information collection.

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

The complete results of this study will be published as an Exxon Valdez Oil Spill Trustee Council technical report. Additional portions of the results will likely be published in conference proceedings dealing with subsistence and/or recreation management.

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.

NA

18. Explain each exception to the certification statement identified in item 19, "Certification Requirement for Paperwork Reduction Act."

The package contains no exceptions to the certification requirement for the Paperwork Reduction Act.