Overcoming Barriers to Wildland Fire Defensible Space May 2012

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.

This study will be conducted by the USDA Forest Service's Pacific Southwest Research Station (PSW) with funding from a competitive research award from the Joint Fire Sciences Program. The Forest and Rangeland Renewable Resources Research Act of 1978 (PL 95-307) is the Department of Agriculture's primary authority to conduct research activities. Thus, PSW is authorized by this Act to conduct scientific studies of natural resource issues. It reads, in part, as follows:

EXCERPT:

"Forest and Rangeland Renewable Resources Research Act of 1978. (Public Law 95–307; Approved June 30, 1978; As Amended in 1980, 1988, 1990 and 1992 and 2003)

RESEARCH AUTHORIZATION

SEC. 3. [16 U.S.C. 1642] (a) The Secretary is authorized to conduct, support, and cooperate in investigations, experiments, tests, and other activities the Secretary deems necessary to obtain, analyze, develop, demonstrate, and disseminate scientific information about protecting, managing, and utilizing forest and rangeland renewable resources in rural, suburban, and urban areas."

There are no pertinent laws, statutes or regulations that mandate homeowner adoption of defensible space or firewise construction activities. Such activities, however, have been shown to reduce the costs and impacts associated with wildland fires. A better understanding of the barriers homeowners perceive in the adoption of these activities is needed. The goal is to identify ways that encourage adoption and thereby, help to reduce the impacts of wildland fire. The results of this study will assist efforts to decrease the cost to society from wildland fires and improve the efficiency of federal agencies in wildland fire management.

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.

The information will be used by local, county, state, and federal wildland fire managers in the development of educational information regarding defensible space and firewise construction. This study is being done in active partnership with the Colorado State Forest Service.

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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.)

The survey used in this project will focus on the following categories of questions:

- basic demographics (e.g., age, sex, and education),
- information regarding beliefs about defensible space,
- current and future defensible space behavior,
- current and future firewise construction behavior,
- perceived barriers to conducting defensible space and firewise construction activities, and
- perceived risks about wildfire.

This is a voluntary survey. No part of this information collection will be burdensome or intrusive, and the information collected will be held private to the extent permitted by law. To this end, once the data collection period ends the contact information for all potential respondents (name, address, email) will be deleted from our files. The resulting dataset, with direct identifiers removed, will be used in aggregate for statistical purposes only. Nonetheless, because the names and addresses of individuals will be accessible by designated staff for survey operation purposes during the data collection period, a Privacy Impact Assessment (PIA) and System or Record Notice (SORN) will be obtained for this collection. Thus, the agency will submit a SORN request and draft a PIA within 30 days of approval of this information collection.

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.

The survey will obtain data from residents living in the wildland-urban interface of Colorado. Counties in the wildland-urban interface will be selected based on discussions with local and state wildland managers. The target is adult residents of wildland-urban interface (WUI) areas served by the Colorado State Forest Service (CSFS) on a county by county basis. We are intending to generalize to selected counties served by them, not all of Colorado. (The primary differences are those areas adjacent to Denver metro or areas served by similar large municipalities whose services supplant those of the CSFS.) The CSFS has a number of districts, mostly conforming to county boundaries (we will seek and use their input in our sampling plans). That said, many wildland fire planners at the city, county and federal level will recognize the value of data that has been aggregated or analyzed at the county level, so we think the utility of our findings will be useful to agency staff beyond just CSFS. We propose to obtain available lists of residents

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county by county with the intent of generalizing to that level or aggregating multiple counties to the CSFS district boundaries.

Table 1. Summary of A.2.a and b – Description of information collection activities

Information Collected	Description	Information Provided to:	Prepared by	
Resident demographics, beliefs and opinions	Survey of WUI residents in Colorado on a county by county basis	USDAFS- R&D (PSW)	Individual respondents	

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

The survey is necessary to obtain information about perceived barriers to defensible space and firewise construction practices. The data from the survey will be used to develop educational material that will be used to encourage people living in the WUI to adopt defensible space practices. This educational material will be developed by the end user in accordance with each organization's budget, policies and best management practices.

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 survey will be administrated using a mixed-method design (i.e., the respondents will have multiple options for providing information). For example, respondents can opt to complete the survey online. If the respondent elects to not complete the survey online, they will be sent a paper version of the survey in the mail, with response made by return mail, using an enclosed postage paid envelope.

e. How frequently will the information be collected?

Over the 3-year life of this approval, the survey will be administered once for each participating household.

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

The information will be shared with the cooperating university (Colorado State University), Colorado State Forest Service, and wildland fire managers at the local and county levels.

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

N/A. This would be the first time this data will be collected.

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

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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.

Respondents will have the option of submitting their responses electronically. Once a respondent completes the survey, he or she will not be contacted again. The survey will be hosted on a commercially available, user-friendly web site that will allow a respondent who does not complete the survey at one session to save their answers and return to complete it later. This is convenient for the respondent and promotes higher response rates.

Hosting the survey online will be less costly and less burdensome to the survey administrators than alternative methods, such as mailings and phone interviews, because it reduces material costs (paper, stamps, stationery), as well as labor costs (data entry and conversion). This is possible because the survey is received through the internet, and the data are automatically digitally recorded and ready for analysis upon submission.

This collection will have an associated Privacy Impact Assessment (PIA) and System or Record Notice (SORN).

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.

Although previous research has examined the human dimensions of wildland fires, no scientific study has focused on the perceived barriers to adopting defensible space and firewise construction activities. Thus, there is no data that can be used or modified to accomplish the goals of this study. Understanding the barriers to defensible space will facilitate the design of programs designed to alleviate these impediments.

The survey was influenced by other prior investigations carried out by the principal investigators and other scientists working on previous, related studies. Results from these surveys have assisted the development of this survey, and provided suggested directions for an efficient and effective instrument for understanding barriers.

The primary scope and goals of this collection are not coincident with any other pending or on-going information collection requests surveys we are aware of. A study on the San Bernardino National Forest in 2006, as we understand it, was not focused on community firewise education programs of any agency, as ours is. ICR 0596-0186 is a small scale survey focused on individual risk, trust, threat and personal responsibility using primarily psychological theory and surveys as a follow up to focus groups. Our work uses some of their earlier findings, notably about trust and risk issues. Others in the USFS are implementing studies which employ different methodology (quasi-experimental econometric modeling techniques). Some of this work has been done in quite different settings (e.g., Europe or Australia) or with a different objective (managers' perceptions or

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meeting participants' stated concerns). Other researchers have contacted us about their intent to seek OMB approval but we have not seen their submissions. One was focused on economic indicators with linkages to climate change. Again, we find this to be quite different from what we seek to accomplish with his survey approval. Overall, we don't find that these studies are duplicative, but rather will complement each other to provide a more robust picture of residential wildland fire preparedness in the context of an agency's wildland fire education program.

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

No small business or other small entities as defined in 5 U.S.C. 601 (3) (4) (5) are targeted by this survey.

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 findings of this survey will be highly useful in improving the effectiveness, efficiency, and management of defensible space programs. If the collection is not conducted, Agencies will continue to operate their programs under assumptions about their effectiveness that may not be true or scientifically valid.

- 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

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 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.

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.

The notice of information collection for this survey was published in the Federal Register in Vol. 75, No. 185 on Friday, September 24, 2010. No comments were received in the specified period (to November 23, 2010).

In addition to contacts with scientists at other USFS Research Stations, we reached out to others working in this general area (wildland fire social science), notably at Texas A&M University, Ohio State University, Oregon State University, Washington State University, and Long Beach State University who might be collecting or analyzing data obtained elsewhere outside scope of the PRA approval process. We do not believe we are duplicating any of their efforts in this request.

The following individuals have commented on the need for the project and data collection methodology. These individuals were selected because of their knowledge of human dimensions of wildland fire research and their expertise in survey methodology.

Dr. Alan Bright Colorado State University Human Dimensions of Natural Resources Department Fort Collins, CO 80523-1480

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Dr. Jessica Clement Co-Director Colorado Forest Restoration Institute Colorado State University Fort Collins, CO 80523-1472 970-491-2104 iclement@warnercnr.colostate.edu

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Principal Investigators Response to the Reviews

We appreciate the reviewers' time in preparing the reviews. All comments were positive; therefore, no specific changes or responses were done.

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

The survey and its accompanying study are not designed to provide payments or gifts to respondents. Responses are to be given in a strictly voluntary, uncompensated manner.

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

A Privacy Impact Assessment (PIA) and System or Record Notice (SORN) will accompany this request. In cover letters and questionnaires respondents will be assured of the voluntary and private nature of their responses. The data obtained will be separated from the respondent identifiers (such as name), and there will be no way to directly identify any individual's personal identity from the research dataset. Indirect identifiers such as county of residence or distance from wildland boundary will be aggregated in the analysis and not displayed in a way that allows for individual attribution. This is in keeping with agency policy that assures data can be held in a way that is consistent with their privacy and still allows sharing of datasets and findings as appropriate.

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

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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 will be asked some socio-demographic questions that are not generally considered to be sensitive, such as educational attainment and income. These variables are commonly collected in research and here they are asked in broad categories or without a specific request to assure accuracy. We will accept answers as given as factual. The survey does not ask for specifics regarding educational attainment, such as where one went to college, which should serve to mitigate possible intrusiveness. Finally, responding to the survey and to particular questions is completely voluntary. The respondent will always have the option to simply not answer any question.

- 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 2. Summary for section A.12, part 1 - Estimate of hour burden

		Responses			Non-response				Total		
Survey	vey Sample Size Freq	Freq	Resp. Count	Freq x Count	Min./ Resp.	Burden Hours	Nonresp Count	Freq. x Count	Min./ Nonr.	Burden Hours	Burden Hours
0596-											
new Survey -											
First											
Mailing	4,500	1	1,800	1,800	30	900	2,700	2,700	2	90	990
0596-											
new											
Survey -											
Second											
Mailing	2,700	1	675	675	30	338	2,025	2,025	2	68	405
Follow-up	2,025	1	1,134	1,134	30	567	891	891	2	30	597

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Enumerat ion											
Pre- Survey Letter and Publicity Materials	4,500	1	3,618	3,618	5	302	882	882	2	29	331
Total	4,500		3,609			2,106	882			217	2,323

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- 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

Survey respondents are not required to maintain records; therefore, the annual record keeping burden is zero.

 Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories.

Table 3. Summary for section A.12, part 3 - Estimated cost to respondents

rable 3. Sammary for Seedon 7.112, pare 3 Estimated cost to respondents							
(a)	(b)	(c)*	(d) Estimated				
Description of the	Estimated Total Annual	Estimated					
Collection Activity	Burden on Respondents	Average Income	Cost to				
_	(Hours from table 2)	per Hour	Respondents				
Survey (paper or web-based)	2,323	\$22.78	\$52,918				
Totals	2,323		\$52,918				

^{*} The Estimated Average Income Per Hour was obtained from the Bureau of Labor Statistics December 2010 estimate of average hourly earnings for all employees on private nonfarm payrolls, seasonally adjusted (Summary Table B, http://www.bls.gov/news.release/pdf/empsit.pdf)

Based on data in Table 2: so note this is not an "annualized cost" to society but the estimated maximum **total cost** over the 3 year life of the collection approval. On a per respondent basis, who only responds once in the 3 years, it is "annualized" because the estimate is based on all respondents in the sample.

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.

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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

Estimates are for the PI (under a joint venture agreement with Colorado State University via Joint Fire Sciences Program funding). Estimates include associated material and travel costs to collect and analyze data and disseminate results for only the federal employee portion (USDA Forest Service's PSW Research Station). Over the three years of the collection, it is estimated that the information collection will require 50 hours to collect and manage the dataset, and 250 hours to analyze, publish and disseminate results from this information collection. The total of 300 hours is entered below in equal annual increments:

Table 4. Summary for section A.14 - Estimate of annual cost to the Federal government

_9010					
ACTION ITEM	PERSONNEL	GS LEVE L	HOURLY RATE ¹	HOURS	TOTAL COSTS ²
Labor, travel and materials for PSW	FS-R&D staff	13	\$65	100	\$6,500
Totals				100	\$6,500

- 1. Cost per hour includes salary, supervision, and overhead.
- 2. Total costs include both salary and other costs for travel, supplies, etc.

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

N/A. This is a new information collection.

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

Data collected will be coded into an SPSS file for statistical analysis. Reports and papers will be written to analyze the data from an academic perspective, consistent with the mission of the R&D division and the joint venture agreement with the selected university. Specific analysis and reports will be provided to the State partner to assist their wildland fire education and outreach efforts, and some reports will be made available through the Joint Fire Sciences Program offices.

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.

No exception is requested.

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

No exceptions are claimed.