

## **The Supporting Statement for OMB 0596-NEW**

Homeowner Response to Wildfire Hazard Mitigation Incentives: What Works and  
What Doesn't

Revised January 24, 2007

### **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.**

- Public Law 108-148, Healthy Forest Restoration Act

This project assists the Forest Service in implementing the Healthy Forest Restoration Act (PL 108-148) by supporting development of Community Wildfire Protection Plans as required under this Act.

According to federal land managers, the cost of protecting private property in areas near public forests, known as the wildland-urban interface (WUI), is growing rapidly. These escalating costs are largely due to the efforts of federal land managers to protect private property in these interface areas even when fires pose little threat to public land. A late 2006 USDA Inspector General report estimated that the US Forest Service spent as much as \$1 billion protecting private property from wildland fire in 2003 and 2004. The Forest Service would like to find ways to help local communities share the responsibility for community fire protection. Recently enacted federal and state policies provide some incentives for local jurisdictions to manage some risks associated with wildland fire. This has led to an array of local-level policies designed primarily to encourage homeowners to create fire-safe landscapes.

Prior studies have examined reasons why homeowners in specific locales may not take action to protect their own property from wildland fire; however, we know very little about how homeowner compliance with fire-safe landscaping guidelines relates to the way local policies are structured. Education, incentives, and mandatory requirements comprise the categorical components of most local policies. Assessing the effectiveness of these policies will enable communities to make better choices about which policies will work for them. Since most local policies target WUI homeowners, effectiveness depends largely on the extent to which homeowners intend to support and comply with these new policies.

This project will employ survey research methods to answer several questions including:

- To what extent are WUI residents motivated to comply with voluntary versus involuntary policies?
- To what extent are incentives necessary to ensure compliance?
- What policy characteristics are associated with support and compliance?

Survey results will be used to develop a matrix of options intended to assist policy makers, resource managers, community officials, and residents in determining and initiating the most effective and efficient wildland fire

abatement programs for their jurisdictions.

**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.**

**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.)**

A self-administered mail survey questionnaire, describing homeowner perceptions and beliefs about the local wildfire hazard and policy responses to it, collects the information. Data collected includes:

- Knowledge and perceived benefits of local defensible space policies,
- Homeowner actions and motivations to comply with local policies,
- Perceived effectiveness and fairness of policies,
- Attitudes toward and opinions about current policies, alternative policies, and certain policy attributes (e.g. affects large and small property owners equally),
- Perceptions of the role of government, and
- Perceptions of the local wildfire risk.

As part of a test for response bias, a random sample of 200 nonrespondents from each site (total of 800 nonrespondents) will be sent an abbreviated self-administered questionnaire, cover letter, and postage-paid return envelope. The subset of questions will include several demographic and opinion variables.

**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.**

Information will be collected from people who own homes in high-risk WUI areas in four different locations: Village of Ruidoso, NM; Oakland Hills Wildfire Prevention Assessment District, Oakland, CA; Larimer County, CO; Grand Haven Township, MI. These sites were chosen based on the differences in their defensible space policy approaches and on their wildfire risk levels. The survey will be implemented by Dr. Christine Vogt, Associate Professor, Dept. of Community, Agriculture, Recreation and Resources Studies, Michigan State University, (517) 432-0318; Greg Winter, Research Director, Cornerstone Strategies, Inc. (360) 676-4600, will also participate in the information collection and data analysis.

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

This information will be used to prepare guidance materials to help local communities structure local defensible space policies and promotional materials. The guidance materials will be developed after analyzing the survey data for factors (perceptions, beliefs, knowledge, attitudes, and opinions) that are associated with homeowner support for and intentions to comply with certain types of defensible space policies. Guidance material developed from this information will emphasize those support and

compliance factors that are common across the diversity of communities surveyed. The information will also be used to produce manuscripts for publication in scientific journals. This information will also assist the Forest Service in its efforts to implement the Healthy Forest Restoration Act by supporting development of Community Wildfire Protection Plans as required under this Act. Providing community assistance also supports the 2001 "10-Year Comprehensive Strategy" for the management of wildland fire and its implementation plan of 2002.

- 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?**

Collection is via self-administered mail questionnaires.

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

This is a one-time collection. Information collected once from each respondent.

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

Publications in the form of guidance documents and published reports will be available to any interested party.

- 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.**

Data collection by self-administered mail questionnaires is an effective method of surveying similar respondents (WUI area homeowners) for studies of homeowner opinions about wildland fire issue. The option was considered of providing respondents the choice of returning the completed paper questionnaire or completing the survey at an internet web site.

Proponents were concerned that offering such a choice may introduce some level of response bias; therefore, they chose not to use an online alternative for this study.

Proponents request that OMB include this option in the approval of this information collection request.

- 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.**

There is no known duplication of effort. Previous and ongoing studies of WUI area homeowners have examined perceptions and attitudes toward public land management policies, and individual risk mitigation practices, but not the support for and compliance with very specific local-level defensible space policies. It is particularly hard to find data that does this in a standardized way in multiple communities so that researchers can identify the most common local policy acceptance and compliance factors.

A recent interagency research-needs assessment study by the Federal Interagency National Wildfire Coordinating Group calls for social science research related to WUI private property owner responsibilities for wildland fire management, including specific research questions that this information collection addresses, e.g.

- How do we enforce or hold private landowners responsible for maintaining their property so it does not become a fire hazard?
- How can we most effectively motivate landowners to mitigate their own vulnerability to fire and the threats they pose to their neighbors?

This project also builds on information gained from relevant past studies to develop certain individual survey measures, which should be duplicated, on occasion, for purposes of validation.

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

There will be no impact on small businesses or other small entities. Information is collected from homeowners via a voluntary self-administered questionnaire that is mailed to respondents' home address.

**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.**

Since this study is designed to provide information on private property owners' support for, and compliance with, local community policies to encourage private wildfire risk mitigation measures, its implementation is very important. Not collecting this data will weaken efforts to work collaboratively between the USDA Forest Service (and other federal agencies) and local communities to share responsibility for wildfire protection in WUI areas.

Without this study, efforts will be weakened, as ensuing collaborative efforts will not be based on current and relevant information about the characteristics of local policies that make them successful.

**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 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.**

Federal Register publication was Monday, May 7, 2007, PP.25736-25737, Vol. 72, No.87. Three comments were received in response to the notice:

- B. Sachau, 15 Elm Street, Florham Park, NJ 07932

The comment states that local governments should be forced to change their zoning laws so that homes adjacent to federal land have a minimum of five acres of open space surrounding them as protection against fire. The commenter states further that the Forest Service needs more fire protection resources to protect the land it manages. Referring to the information collection, the commenter does not believe the survey will help solve these issues. This commenter comments frequently on a wide range of Federal Register entries. Local zoning ordinances do not fall within Forest Service jurisdiction.

- Robert Taylor, Weaverville, CA.

Mr. Taylor's comment concerns his opinion that the US Forest Service has not managed its lands for optimal fire management. The comment is not related to the information collection itself or to the subject and purpose of the information collection, which concerns local homeowner perspectives on local government wildfire protection and prevention actions.

- Susan Price, General Plan Project Director for Trinity County, California.

Ms. Price comments that Trinity County is in the process of completing an update to its general plan, a component of which has to do with wildfire safety. Ms. Price requested, “A copy of any information and/or comments you receive” regarding this project. She explains further that such information would assist her during the general plan process. We contacted Ms. Price to confirm that the information she requested includes the findings from the survey, which is the subject of the proposed information collection (not a compilation of comments that result from the 60-day Federal Register notice). We have added Ms. Price to a mailing list so that she will receive a summary of findings from the proposed information collection.

**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.**

We consulted with local wildfire program managers in each of the four information collection locations:

- *Grand Haven Township, MI*: Fire Chief, Rich Sczepanek; and Michigan State University Extension Specialist and Emergency Management Coordinator, Mark Hansen
- *Oakland Wildfire Protection Assessment District, Oakland, CA*: (District Public Outreach Coordinator, Kristine Shaff; Assistant Fire Marshall, Leroy Griffith)
- *Village of Riudoso, NM*: Village Forester, Rick Delaco
- *Larimer County, CO*: Emergency Services Specialist, Tony Simons

These individuals were consulted during site visits to help the research team become familiar with each site, their local wildfire programs, views on public support for and compliance with the local programs, and availability of contact information from which we could build a survey sample frame (list of the targeted universe of survey respondents).

We also consulted with Van Johnson, Environmental Statistician with the National Agricultural Statistics Service. Mr. Johnson offered helpful comments that resulted in minor changes to question wording in two of the survey questions. Mr. Johnson also inquired about anticipated response rates and potential duplication with another survey and he was satisfied with our responses to those issues.

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

Respondents will receive no payments or gifts.

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

Respondents are not provided with any assurance of confidentiality. They are notified in the cover letter and on the cover page of the questionnaire that their participation in the survey is voluntary. While demographic information is collected from participants, names and addresses are not recorded on the questionnaire and are destroyed upon receipt of completed questionnaires.

**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.**

The survey does not contain sensitive questions.

**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)**

Surveys will be mailed to 4,000 households (1,000 at each of the four sites) in a sample universe of 41,000 (Grand Haven, MI universe: is 4,000; Ruidoso, NM: 7,000; Oakland Wildfire Prevention District: 22,000; and Larimer County, CO: 8,000. See table below for response and burden estimates. It is estimated that 2,000 completed surveys will be returned to proponents.

(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)
One-time, self-administered mail questionnaire	N/A	2,000	1	2,000	.25	500
Non-responses to initial questionnaire	N/A	2,000	1	2,000	.0333	66.67 ≈ 67
Non-response questionnaire	N/A	800	1	800	.25	200



(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)
Totals	---	4,800	---	4,800	---	767

- **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.**

(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
One-time, self-administered mail questionnaire (or optional online, internet questionnaire)	500	\$17.42*	\$ 8,710
Non-responses to initial questionnaire	67	\$17.42	\$ 1,167
Non-response questionnaire	200	\$17.42	\$ 3,484
Totals	767	---	\$13,361

\*Source for Estimated Average Income per Hour:  
<http://www.bls.gov/news.release/pdf/realer.pdf>

- 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:**

- **Cost of contractor services assisting in the collection of information**

- o Literature review, site visits and consultation with site key informants, sampling design, questionnaire design, data processing, data analysis, and reporting
  - Principal Investigator salary for Dr. Christine Vogt, Michigan State University: 10% of 9-month salary (\$78,534) = \$8,726
  - Principal Investigator consulting fee, Greg Winter, Cornerstone Strategies, Inc., 72 hours @ \$75/hour = \$5,400
  - Research Associate (Ph.D. student at Michigan State University), under supervision of Dr. Vogt, to manage the mail processing, data entry and coding research assistant stipend = \$16,405
  - Clerical Assistance for help with mailing and data entry, 160 hours @ \$7.50 per hour = \$1,200

**o Contractor materials cost:**

- Costs for Dillman mail technique (initial mailing, reminder postcard, replacement mailing to nonrespondents) such as postage, return postage, printing for 4,800 sample (combined for all four sites) at an average cost of \$2.50 per sample element = \$12,000
- Costs for general office supplies, communications, and nonresponse bias follow-up survey to subsample of nonrespondents = \$1,500

**o Contractor travel costs**

- 4 site visits by two principal investigators with per trip costs including \$400 airfare per person, \$300 lodging per person, and \$150 local transportation = \$850/trip x 4 trips x 2 people = \$6,800

**• Employee travel costs**

- 4 site visits with per trip costs including \$400 airfare per trip, \$300 lodging per trip, and \$150 local transportation = \$850/trip x 4 trips x = \$3,400

**• Employee labor and materials for analyzing, evaluating, summarizing, and/or reporting on the collected information**

- GS 13/Step 1 @ \$41.70 per hour (\$32.08 x 1.3) for 300 hours = \$12,511

\* Taken from: [http://www.opm.gov/oca/07tables/pdf/g\\_s\\_h.pdf](http://www.opm.gov/oca/07tables/pdf/g_s_h.pdf), Cost to Government calculated as base salary multiplied by 130 percent

Contractor services assisting the information collection	Contractor materials cost	Contractor travel cost	Employee labor cost for supervising, analyzing, summarizing, and reporting	Employee travel cost	<b>Total cost</b>
\$31,731	\$13,500	\$6,800	\$12,511	\$3,400	<b>\$67,942</b>

**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.**

Tabulation: Information from the questionnaires will be entered into computer files by the researchers. Data will be backed up on CD and offsite. Researchers will conduct statistical analysis using SPSS (Statistical Package for the Social Sciences) software.

Statistical analyses may include:

- Descriptive statistics: percentages for the nominal and ordinal variables; frequencies, central tendency (mean, median), dispersion for scale level variables,
- Group comparisons including differences of means; difference of proportions,
- Measures of association such as chi-square tests for nominal level variables, and
- Multivariate analysis including regression analysis.

Publication: The survey results will be published in peer-reviewed journal articles.

**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 expiration date of OMB approval will be displayed

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

There are no exceptions to the certification statement identified in item 19, "Certification Requirement for the Paperwork Reduction Act.