

Supporting Statement A
Colorado River Total Value Survey
OMB Control Number 1024-NEW

Terms of Clearance: None.

General Instructions

A completed Supporting Statement A must accompany each request for approval of a collection of information. The Supporting Statement must be prepared in the format described below, and must contain the information specified below. If an item is not applicable, provide a brief explanation. When the question "Does this ICR contain surveys, censuses, or employ statistical methods?" is checked "Yes," then a Supporting Statement B must be completed. OMB reserves the right to require the submission of additional information with respect to any request for approval.

Justification

- 1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection.**

The National Park Service (NPS) is requesting approval to conduct a pilot and full field study concerning the total economic value of National Park System resources along the Colorado River Corridor (which includes the Glen Canyon Dam and Grand Canyon National Park). This collection will provide data for the economic analysis of the alternative management and operation protocols that will be one piece of information that the Secretary of the Interior will use to evaluate future dam operation plans associated with the current ongoing Glen Canyon Draft Environmental Impact Statement (DEIS).

The proposed collection is needed to update the information that was used by Department of the Interior, in the 1996 Record of Decision, to inform their decisions on Dam operations. This study intends to make use of the latest science by considering all relevant studies, especially those conducted since 1996.

After reviewing all available research, the National Research Council concluded that the results of the studies conducted since 1996 are of high quality, but considerably outdated. Others have emphasized the need for additional or updated research on the sources and magnitudes of values associated with operational goals (see Glen Canyon Dam studies: National Resource Council 1999 and Loomis et al. 2005). The most recent willingness to pay estimates in the Glen Canyon National Recreation Area, downstream of Glen Canyon Dam, and in Grand Canyon National Park are outdated and should be

revised. This collection takes into account all relevant case studies, however, it most closely parallels the work of Welsh *et al.* (1995) by using stated choice methods to measure the changes in total value associated with the impacts on riparian areas caused by changes in operations of Glen Canyon Dam.

The need for this collection is well established within the NPS, US Bureau of Reclamation and other agencies responsible for the management of the Colorado River System. Determination of the time requirements, and need for data collection are based on broad input and evidence from management issues and studies related to Glen Canyon Dam and the flows of the Colorado River through the Grand Canyon.

Legal Justification:

- The Grand Canyon Protection Act of 1992 (Pub. L.102-575 - Section 1804(c) - *The Secretary shall operate Glen Canyon Dam in accordance with the additional criteria and operating plans specified in section 1804 and exercise other authorities under existing law in such a manner as to protect, mitigate adverse impacts to, and improve the values for which Grand Canyon National Park and Glen Canyon National Recreation Area were established, including, but not limited to natural and cultural resources and visitor use.*
- Colorado River Storage Project Act Of 1956 - (43 U.S.C. -- 620-620o) *This Act authorizes and directs the Secretary to investigate, plan, construct and operate facilities to mitigate losses of, and improve conditions for, fish and wildlife and public recreational facilities.*
- The National Park Service Act of 1916, (38 Stat 535, 16 USC 1, et seq.) *requires that the National Park Service (NPS) preserve the national parks for the use and enjoyment of present and future generations. At the field level, this means resource preservation, public education, facility maintenance and operation, and physical developments that are necessary for public use, health, and safety.*
- National Environmental Policy Act, 1969, (42 U.S.C. 55) *requires visitor use data in impact assessment of development on users and resources as part of each park's general management plan.*

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. [Be specific. If this collection is a form or a questionnaire, every question needs to be justified.]

NPS has contracted with researchers at the University of Montana, Missoula, MT, to conduct this survey of information. Surveys will be administered to households selected from two sample frames: (1) National (All US households) and (2) the Glen Canyon Region (consisting of the WAPA Marketing area and all households served by utilities powered by the Glen Canyon Dam). This collection will use the follow protocols:

Phase 1: We propose to conduct a pilot study to test the survey questions, sampling methods, and to examine the significance of the attribute levels. The results from the pilot study will be used to inform the choice of attribute levels as well as refine the sampling plans for the final and non-response versions of the survey instruments.

Phase 2: The second phase will be used to administer the “final” survey instrument. This survey will be administered by mail, once the attributes have been evaluated and adjusted. The results will be presented to the National Park Service in a report on the survey including data collection, response rates, analysis, and non-response corrections if needed.

Phase 3: The final phase will consist of a short non-response telephone survey that will be used to help test for any non-response bias.

Justification of Survey Questions

Section 1 - The questions in this section will be used to check for respondent understanding and familiarity of the condition and management of the resources along the Colorado River Corridor.

Section 2 - The questions in this section constitute the core discrete choice experiment (DCE) valuation questions. Specifically the section

- Includes two stated choice conjoint questions. Each choice question presents one action scenario and the no-action scenario (or opt-out).
- Outlines the key differences between two policies and describes the resources impacted by these policies
- Identifies the respondent’s voting preference between **Proposed Plan A** and **Existing Management Plan**
- Outlines the key differences between two policies and describes the resources impacted by these policies
- Identifies the respondent’s voting preference between **Proposed Plan B** and **Existing Management Plan**

Section 3 - The questions in this section will be used to better understand the respondents’ voting preference for proposed management options.

Section 4 - Identify the respondent’s understanding and opinions about the future operation of Glen Canyon Dam.

Section 5 - The question in this section will be used to determine the respondents’ understanding of cultural, natural, and environmental resources.

Section 6 - Will be used to understand more about the respondents’ attitudes towards and use of the national parks system.

Section 7 - Will be used to obtain demographic characteristics (education level, income category, age, gender, race/ethnicity, urban/rural residence).

These questions are needed to provide managers with data that will be used to develop a plan that will ultimately determine options for experimental management actions that will meet the requirements of the Grand Canyon Protection Act and minimize impacts to resources.

- 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.**

No automated or electronic techniques will be used.

- 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 efforts. A thorough review of previous survey efforts in the park units as well as a comprehensive analysis of existing data gaps was conducted in order to narrowly define the scope of new information needed to satisfy the current management objectives. This review found that Welsh *et al.* (1995) was the most recent study addressing this topic. Therefore up-to-date information on total valuation of the Colorado River NPS resources is not available.

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

This information collection will only be sent to individual households and will not impact small businesses or other small entities.

- 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.**

Failure to conduct this study would force the NPS to rely on outdated information, potentially compromising the accuracy and reliability of future policies and recommendations. The results of this survey will be used to provide information that the Secretary of the Interior will use to evaluate plans associated with the ongoing Glen Canyon Environmental Impact Statement (EIS) process.

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

No special circumstances apply to this information collection.

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 in response to the PRA statement associated with the collection over the past three years] 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 recordkeeping, 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.

A Federal Register notice requesting comments was published on September 23, 2013 (78 FR 58344). The notice announced that we would submit this information request to OMB for approval. In that notice we solicited public comments for 60 days, ending November 23, 2013. We received three

requests to review the draft versions of the survey instruments. In response to the requests, we provided a summary of the study purpose and design and informed that additional materials would be available for review once the request is submitted to OMB.

On August 7-8, 2013, we conducted five interviews during the initial stages of development. Participants were selected through placement of an advertisement on the Craigslist website. Approximately 35 individuals responded to the ad and nine were invited to participate by scheduling an appointment. Of the nine contacted, five successfully scheduled and attended an interview session. All participants were asked to provide feedback concerning the structure of the survey questions. The following feedback was provided:

- 1) Surveys were of a comfortable length.
- 2) Information presented was understandable and provided enough information to complete the survey questions.
- 3) The key Conjoint question format was readily understandable.

In addition to our Federal Register notice, we also solicited feedback from three professionals with expertise in economic valuation, natural resource management and planning as well as survey design and methodology. The reviewers were asked to provide comments concerning the structure of the survey and to provide feedback about the validity of the questions and the clarity of instruction. We also asked if the estimated time to complete seemed adequate. We received several editorial and grammatical suggestions to provide clarity and to correct punctuation. Those edits were incorporated into the final versions of the surveys.

The following individuals provided feedback about the survey instruments:

1. John Loomis, Colorado State University
2. Lynne Koontz, National Park Service
3. Michael Welsh, Industrial Economics

Below is a sample of the responses we received:

Response #1 - The proposed use of the addressed base sampling is great as this is currently the most accepted way of obtaining a representative sample.

Response #2 - the strengths of this collection are:

- Addressed based sampling.
- Sequential sample updating of the bid design for the conjoint analysis.
- Reliance on using a previously tested survey (Welsh, et al. 1995).
- Sample size appears adequate.

- Inclusion of a conjoint survey so that valuation of can be made of any number of possible LTEMP EIS alternatives or NPS management scenarios for the next several years. Thus the conjoint will have a long shelf life for providing useful results.
- Non Response Survey is a good idea and should aid in assessment of non-response effects and perhaps adjusting the sample to the population through weighting of the sample (see general comment below).
- NEW Conjoint survey strengths - Fewer T & F questions.

Response #3 - The use of the word “imagine” makes this survey unnecessarily hypothetical. How about setting it up as decision makers want to know about how you would vote on two different policy proposals. The first one we ask you about is Existing Management compared to Proposed Plan A. The second one is Existing Management compared to Proposed Plan B.

Response 4 - Income is usually the MOST sensitive question so it usually goes last, certainly it should come after household employment status.

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

No incentives will be provided.

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

We will not provide any assurances of confidentiality. Names and mailing address will be maintained only for the purpose of follow-up contact with non-respondents. Respondent names or addresses will not appear in any of our reports or findings. All responses will be anonymous and the respondent’s names will never be associated with their responses. At the completion of the study all name and address files will be destroyed.

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

No questions of a sensitive or personal nature will be asked.

12. Provide estimates of the hour burden of the collection of information. The statement should:

- * **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**
- * **If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.**
- * **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included in Item 14.**

This collection will involve three phases (as described in Item 2 above). We assume that respondents will spend 30 minutes completing the mail survey; this includes the time to read all correspondences and instructions included within the survey package. The non-respondent phone survey will take 5 minutes to complete. We estimate the total burden of this collection to be 1,042 hours (Table 1).

Phase 1

Pilot Survey: We will mail a total of 200 surveys (100 national surveys and 100 regional surveys) to a random sample of adults (18 years and older) in households within the national and regional sampling areas. The information from this effort will be used to conduct preliminary analysis on the data to determine if the attribute levels will be adjusted up or down to create greater differences between the plans in the final survey. We expect that 35% (n=70) of those who receive the survey will return the completed survey.

Phase 2

Final Survey: The final sampling plan for the full field study will be refined based upon the results and findings of the pilot study. We will mail a total of 4,626 surveys (3,470 national surveys and 1,156 regional surveys) to a random sample of adults (18 years and older) in households within the national and regional sampling areas. All respondents will receive similar instructions and answer a series of similar questions (e.g., general socio-demographics, visitation patterns, recreational preferences, and values, etc.). We expect to receive a 30% (n=1,041) response rate for the national survey and a 40% (462) for the regional survey. The increased response to the regional survey is based on our

experience with similar regional surveys that demonstrate a personal connection and awareness of the issues in the survey.

Phase 3

Non-respondent survey: Based upon the results of the pilot study, the sampling plan and the questions in nonresponse survey may be refined to include attitudinal questions that could be used as predictors of the choice questions.

After the third (and final) mailing, we will contact a random sample of the non-respondents (n=45) by phone for a short non-response survey (approximately 5 minutes). The goal is to achieve a 35% (n=11) response rate for this final segment of the collection.

Table 1: Estimation of respondent burden

BURDEN FOR PILOT STUDY (only)	Sample	Number of Contacts	Number of Completed Surveys	Estimated Completion Time (minutes)	Total Annual Burden (Hours)
<i>Pilot Survey</i>	National	100	35	30	18
	Regional	100	35	30	18
<i>Non-respondent Pilot Survey</i>		45	11	5	<1
	Total	245	81		37

We estimate the total annual dollar value burden of this collection to be \$1,153 (Table 2). We multiplied the estimated burden hours by \$31.16 (for individuals or households). This wage figure includes a benefits multiplier and is based on the National Compensation Survey: Occupational Wages in the United States published by the Bureau of Labor Statistics Occupation and Wages, (BLS news release USDL-13-2349 for Employer Costs for Employee Compensation—September 2013 at - <http://www.bls.gov/news.release/ecec.nr0.htm>), dated December 11, 2013).

Table 2. Estimated Dollar Value of Burden Hours

Activity	Number of Responses	Total Burden Hours	Dollar Value of Burden Hours (Including Benefits)	Total Dollar Value of Burden Hours
<i>Pilot Survey</i>	70	36	\$31.16	\$1,122
Non-response survey	11	1	\$31.16	\$31
TOTAL	81	37		0

13. Provide an estimate of the total annual [non-hour] 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 estimate 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. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information [including filing fees paid]. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.**
- * **If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.**
- * **Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.**

There are no non-hour burden costs resulting from the collection of this information.

14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from Items 12, 13, and 14 in a single table.

There are no Federal employee costs associated with this collection. All employee costs are contracted through the University of Montana. The estimates below include the operational expenses that include contracting support, travel, and printing costs associated with this collection totaling \$308,684.

Table 3. Operational Expenses

Operational Expenses	Estimated Cost
Contract Support	
• Principal Investigator	\$119,066
• Statistician	17,446
• Economist	38,154
Travel	1,044
Subcontracts	24,000
Survey Support (Sample procurement, survey printing, postage, mailing, etc.)	63,000
Indirect Costs (University of Montana)	45,974
	TOTAL
	308,684

15. Reasons for change in burden

This is a new collection.

16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.

After data collection is complete, University of Montana researchers will prepare a final report presenting the results from the survey and the WTP estimates. Section B.2 describes the analytical techniques that will be used to summarize the results and estimate the WTP values.

Phase 1: Pilot Survey	Mail initial contact letter 1 st survey mailing, Reminder postcard, 2 nd survey mailing Conduct analysis of pilot study results Submit copy of Pilot Study results to OMB
Phase 2: Final Survey	Mail initial contact letter 1 st survey mailing, Reminder postcard, 2 nd survey mailing, 3 rd survey mailing Main data collection complete
Phase 3: Non-response survey	Begin non-response follow-up survey Non-response phone survey complete
Analysis	Begin Data Analysis Complete Data Analysis
Reports	Draft report Final Report delivery to NPS

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.

We will display the OMB control number and expiration date on the information collection instruments.

18. Explain each exception to the certification statement.

There are no exceptions to the certification statement.

References Cited

Loomis, J. et al. (2005). Final Report of the Protocol Evaluation Panel on the Recreation Monitoring Program of the Grand Canyon Monitoring and Research Center.

National Research Council. (1999). Downstream: Adaptive Management of Glen Canyon Dam and the Colorado River Ecosystem. National Academy Press, Washington, D.C.

Welsh, M. P., R. C. Bishop, M. L. Phillips, and R. M. Baumgartner. (1995). "GCES Non-Use Value Study." Prepared for Glen Canyon Environmental Studies Non-Use Value Committee.