

SUPPORTING STATEMENT - PART A

Flood and Coastal Storm Damage Surveys – 0710-0017

Summary of Changes from Previously Approved Collection

- No significant changes to the surveys, only spelling out acronyms, listing the agency name consistently, and adding a reference to web-based survey capability
- Change in Information Collection title from “Flood Risk Management” to “Flood and Coastal Storm Damage Surveys”
- Reduction in the number of annual responses from 7,000 to 3,000, but hourly wage rates for both survey respondents and processors increased since 2015. Travel costs are significantly lower than the estimate provided in 2015 and was based on recent experience. These changes have resulted in a large net decrease in burden on the public, but a small net increase in cost to the Federal Government.

1. Need for the Information Collection

Information from the questionnaire items for the collection of planning data is needed: (1) to formulate and evaluate alternative water resources development plans in accordance with the Principles and Guidelines for Water Related Land Resources Implementation Studies, promulgated by the U.S. Water Resources Council, 1983, which specifically identifies personal interviews as a method of gathering primary flood damage data; (2) to determine the effectiveness and evaluate the impacts of Army Corps of Engineers projects (P.L. 74-738); and (3) in the case of flood damage mitigation, to obtain information on flood damages incurred, whether or not a project is being considered or exists (P.L. 74-738). The information to be gathered under this collection also supports the mandate from the Flood Control Act of 1936 (P.L. 74-734) that established the criterion for Federal action that “the benefits, to whomsoever they may accrue are in excess of the estimated costs.” The Engineer Regulation (ER) 1105-2-100, Planning Guidance Notebook (April, 2000) defines benefits for the project under consideration, with flood damages avoided comprising the primary category of benefits used in project justification. Secondary benefits include reductions in emergency costs, unrecoverable and non-transferrable income losses, clean-up and other costs associated with flooding.

2. Use of the Information

The Army Corps of Engineers provides flood risk management structural and nonstructural mitigation, planning and technical services to communities, residents, and business at risk of flooding. Flood damage surveys are administered by the Army Corps of Engineers and its contractors to determine the impacts and potential impacts of flooding and to determine how communities, residents, and businesses respond to flooding. The data are used for

estimating damage for factors such as depth of flooding, construction types, and different occupancies of use. The data are also used for estimating other costs of flooding, such as agricultural losses, cleanup costs, and flood preparedness costs. Damage estimation models are then calculated and used to estimate the cost of flooding and to evaluate the benefits of alternative flood mitigation plans, which are critical to determining the feasibility of flood risk management projects. Results of surveys will help communities to better determine and communicate their flood risks. The models are also used for programmatic evaluation of the Army Corps of Engineers' National Flood Risk Management Program.

The following describes the type of information to be collected by each survey instrument:

Uses of the Information by Individual Survey Instrument

Agricultural

This is a comprehensive agricultural damage survey that can be used for estimating project benefits by determining with and without conditions. The survey covers historic flood experience, cropping patterns, effect of flooding on crops yield, crops damage, and production budgets. There are also questions to determine the effect of flooding on farm property.

- Background Information: Basic information on farm operation and flood history.
- Crops Distribution and Production Practices: To determine what crops are generally planted in what acreage to be able to estimate seasonally adjusted flood loss.
- Crops Damage: to use previous crops loss experience to be better able to predict future flood loss.
- Farm Property Damage: to determine actual non-crops flood loss to be able to estimate dollar loss to buildings and farm infrastructure
- Fish Pond Damage: to use damage information to be able to estimate

Coastal Storm Damage

This survey asks about property characteristics to determine susceptibility to coastal flooding and erosion. The survey inquires about previous flood and erosion experience and how the respondent and the community have adjusted to these problems.

- Background Information: to gain basic information about the property and the respondent's flood history.
- Structure and Outside Property Information: to be able determine the value of the property subject to flooding and to be able to classify the property to use the appropriate damage function.

- **Costs and Damages:** to be able to relate actual damages and other flood-related costs to levels of inundation, waves, and erosion for calculating damage and cost relationships based on structure characteristics.
- **Warning and Response:** to be able to design more effective warning notices and be able to estimate future damages prevented by increased lead time and better preparedness activities. This survey can be used to determine the benefits, private costs, and the effectiveness of different flood warning methods and response activities are and how flood warning response might vary by demographic characteristics of the population. Respondents are asked about their behavior when there is an emergency evacuation, whether they evacuated, what influenced their behavior, and the nature of warning and preparedness measures that were in place during the emergency.

Nonresidential

This survey is used to learn about the responding business's recent flood experience and how the business has responded to the threat of flooding. Questions are included to determine the value of all contents, outside property, and the depreciated replacement value of the building. Respondents are asked to estimate the structure, content, and vehicle damage as well as emergency and cleanup costs for hypothetical flood levels.

- **Background Information:** to gain basic information about the business and the business's flood history.
- **Individual Building Information:** to be able determine the value of the property subject to flooding and to be able to classify the property to use the appropriate damage function.
- **Physical Damage and Other Costs:** to be able to relate actual damages and other flood-related costs to levels of inundation for calculating damage and cost relationships based on structure characteristics.
- **Damage Susceptibility:** to be able to estimate damages when recent flooding has not occurred based on the respondents' knowledge of location of damageable property and susceptibility to damage if inundated. This survey facilitates the inventory of major components of business property. It includes questions about hypothetical damages at various flood levels to each of the inventoried components. The survey also inquires about the extent of other costs of flooding at hypothetical levels of inundation.
- **Flood Warning and Response:** to be able to design more effective warning notices and be able to estimate future damages prevented by increased lead time and better preparedness activities.
- The survey also covers nonphysical flood costs, such as emergency expenses and income losses.

Public Damage and Costs

This is a short survey that asks about the extent of public damages and other public costs of flooding from a single event. Total public financial costs and hours of volunteer time for emergency operations and cleanup are included.

Residential

This is a thorough survey for estimating physical damage and other costs of flooding to residential property. Detailed household descriptions are used to estimate the depreciated replacement value of the structure. Structural damage and damages prevented are determined for various parts of the household structure. This survey is designed for post-flood evaluation and estimation of depth-damage functions.

- **Background Information:** to gain basic information about the property and the respondent's flood history.
- **Cost and Damages:** to be able to relate actual damages and other flood-related costs to levels of inundation for calculating damage and cost relationships based on structure characteristics.
- **Structure, Contents, and External Property Information:** to be able to determine the value of the property subject to flooding and to be able to classify the property to use the appropriate damage function.
- **Warning and Response:** to be able to design more effective warning notices and be able to estimate future damages prevented by increased lead time and better preparedness activities.

Roadway Damage

These questions are used to determine the flood damages that occurred to public roads and other costs to communities, and to be able to estimate future damages and costs for similar magnitude events.

Information Collection Methods

On-Site and In-person intercept surveys:

Survey instruments are provided to respondents while on site to complete and return. This may include oral administration, paper forms, or the use of electronic technology and kiosks. The survey administrator is prepared to answer any questions the respondent may have about how to fill out the instrument but does not interfere or influence how the respondents answer the questions. Regardless of collection method, respondents will be

provided with PRA information including the Agency Disclosure Notice as well as OMB Control Number and expiration date.

Mail and e-mail surveys:

Using existing lists of respondents' addresses, a multi-contact approach based on Dillman's "Tailored Design Method" will be employed. Under the Dillman method, the first contact will be a cover letter explaining that a survey is coming to them and its importance. The second contact will be the survey instrument along with a postage-paid addressed envelope to return the survey. The third contact will be a reminder postcard sent 10 days after the survey was sent. Finally, the respondents will receive a letter thanking them for the willingness to participate in the survey and reminding them to return it if they have not already done so. Respondents will be given multiple ways to contact someone with questions regarding the survey (including phone, web, or email). If the survey has been lost, the respondent can request that another be sent to them. Electronic mail is sometimes used instead of postal mail to communicate with customers. Although this is a cost-effective mode to survey a large group of people, it does not usually generate the best response rate. Telephone calls to non-respondents can be used to increase response rates.

Web-based survey:

Using an existing list of respondents' addresses and/or e-mail addresses, we will also provide a web link for respondents to complete the survey questions at their convenience online. The responses could be directly entered into a database for expedited analysis.

3. Use of Information Technology

Survey data collection will primarily be through in-person interviews. Survey administrators will be encouraged to use laptop computers or tablets to minimize data recording and for better quality control and assurance. Mail surveys will also be used to maximize response, and survey administrators will be encouraged to have respondents complete their surveys on government-secure servers. Since respondents would likely be suffering from the hardship of flood-related damages, it is considered most appropriate to conduct the survey through in-person interviews, where the interviewer can empathize and elaborate on each question. Electronic, web-based surveys will be employed as well, but less than 75% of the total number of submissions. We continue to explore and improve on the use of information technology to capture this sorely-needed data.

4. Non-duplication

The information obtained through this collection is unique and is not already available for use or adaptation from another cleared source. No other Federal agency systematically collects information for the purpose computing damage relationships.

5. Burden on Small Businesses

This information collection does not impose a significant economic impact on a substantial number of small businesses or entities as historically fewer than 2% of respondents involved small businesses with flood-prone inventory. Additionally, the information being collected in these surveys has, for the most part, already been gathered by respondents for insurance, disaster relief, disaster loan, and tax purposes.

6. Less Frequent Collection

The flood characteristics vary considerably by type of flood and by floodplain. If collections were not taken frequently and without data gathered directly from flood victims, potential flood victims and flood-prone communities, the Army Corps of Engineers would not be able to objectively determine the feasibility of its flood risk management projects. In addition, Corps planners would not know how people became aware of impending floods or how they responded to warnings and visual evidence of flooding.

7. Paperwork Reduction Act Guidelines

This collection of information does not require collection to be conducted in a manner inconsistent with the guidelines delineated in 5 CFR 1320.5(d)(2).

8. Consultation and Public Comments

Part A: PUBLIC NOTICE

A 60-Day Federal Register Notice (FRN) for the collection was published on Tuesday, June 30, 2020. The 60-Day FRN citation is 85 FR 39171.

No comments were received during the 60-Day Comment Period.

A 30-Day Federal Register Notice for the collection published on Friday, February 26, 2021. The 30-Day FRN citation is 86 FR 11737.

Part B: CONSULTATION

No additional consultation apart from soliciting public comments through the Federal Register was conducted for this submission.

9. Gifts or Payment

No payments or gifts are being offered to respondents as an incentive to participate in the collection.

10. Confidentiality

A Privacy Act Statement is not required for this collection because we are not requesting individuals to furnish personal information for a system of records.

A System of Record Notice (SORN) is not required for this collection because records are not retrievable by PII.

A Privacy Impact Assessment (PIA) is not required for this collection because PII is not being collected electronically.

As prescribed in Record Series 1200A-Corps of Engineers Planning, Record #1105-2-100b:

Hard copies of the survey responses will be retained and stored in a locked, secure file cabinet until they are no longer needed for conducting business for but not longer than 6 years, then destroyed. All surveys will be destroyed after the 6 year-retention period.

11. Sensitive Questions

No questions considered sensitive are being asked in this collection.

12. Respondent Burden and its Labor Costs

Part A: ESTIMATION OF RESPONDENT BURDEN

1) Collection Instrument(s)

[Agricultural Flood Damage Survey]

- a) Number of Respondents: 200
- b) Number of Responses Per Respondent: 1
- c) Number of Total Annual Responses: 200
- d) Response Time: 30 minutes
- e) Respondent Burden Hours: 100 hours

[Coastal Storm Damage Survey]

- a) Number of Respondents: 300
- b) Number of Responses Per Respondent: 1
- c) Number of Total Annual Responses: 300
- d) Response Time: 20 minutes
- e) Respondent Burden Hours: 100 hours

[Nonresidential Flood Damage Survey]

- a) Number of Respondents: 500
- b) Number of Responses Per Respondent: 1
- c) Number of Total Annual Responses: 500
- d) Response Time: 30 minutes
- e) Respondent Burden Hours: 250 hours

[Public Damages and Other Costs Survey]

- a) Number of Respondents: 150
- b) Number of Responses Per Respondent: 1
- c) Number of Total Annual Responses: 150
- d) Response Time: 30 minutes
- e) Respondent Burden Hours: 75 hours

[Residential Flood Damage Survey]

- a) Number of Respondents: 1,800
- b) Number of Responses Per Respondent: 1
- c) Number of Total Annual Responses: 1,800
- d) Response Time: 20 minutes
- e) Respondent Burden Hours: 600 hours

[Roadway Damage Survey]

- a) Number of Respondents: 50
- b) Number of Responses Per Respondent: 1
- c) Number of Total Annual Responses: 50
- d) Response Time: 30 minutes
- e) Respondent Burden Hours: 25 hours

2) Total Submission Burden

- a) Total Number of Respondents: 3,000
- b) Total Number of Annual Responses: 3,000
- c) Total Respondent Burden Hours: 1,150 hours

Part B: LABOR COST OF RESPONDENT BURDEN

1) Collection Instrument(s)

[Agricultural Flood Damage Survey]

- a) Number of Total Annual Responses: 200
- b) Response Time: 30 minutes
- c) Respondent Hourly Wage: \$34.21/hour
- d) Labor Burden per Response: \$17.11
- e) Total Labor Burden: \$3,421

Based on BLS median wage for Farmers, Ranchers and Other Agricultural Managers = \$34.21/hour

[Coastal Storm Damage Survey]

- a) Number of Total Annual Responses: 300
- b) Response Time: 20 minutes
- c) Respondent Hourly Wage: \$23.40
- d) Labor Burden per Response: \$7.80
- e) Total Labor Burden: \$2,340

Based on BLS median wage for All Full Time Workers = \$23.40/hour

[Nonresidential Flood Damage Survey]

- a) Number of Total Annual Responses: 500
- b) Response Time: 30 minutes
- c) Respondent Hourly Wage: \$27.02
- d) Labor Burden per Response: \$13.51
- e) Total Labor Burden: \$6,755

Based on BLS median wage for Store and other Business Managers = \$27.02/hour

[Public Damages and Other Costs Survey]

- a) Number of Total Annual Responses: 150
- b) Response Time: 30 minutes
- c) Respondent Hourly Wage: \$23.30/hour
- d) Labor Burden per Response: \$11.65
- e) Total Labor Burden: \$1,747.50

Based on median wage for Public Sector (State and Local) Employees = \$23.30/hour

[Residential Flood Damage Survey]

- a) Number of Total Annual Responses: 1,800
- b) Response Time: 20 minutes
- c) Respondent Hourly Wage: \$23.40
- d) Labor Burden per Response: \$7.80
- e) Total Labor Burden: \$14,040

Based on BLS median wage for All Full Time Workers = \$23.40/hour

[Roadway Damage Survey]

- a) Number of Total Annual Responses: 50
- b) Response Time: 30 minutes
- c) Respondent Hourly Wage: \$23.30/hour
- d) Labor Burden per Response: \$11.65
- e) Total Labor Burden: \$582.50

Based on median wage for Public Sector (State and Local) Employees = \$23.30/hour

2) Overall Labor Burden

- a) Total Number of Annual Responses: 3,000
- b) Total Labor Burden: \$28,886

The Respondent hourly wage was determined by using the Department of Labor Wage Website which varies by occupation of recipient of the survey. For the Coastal and Residential survey, the median wage for all U.S. workers was applied. (<http://www.dol.gov/dol/topic/wages/index.htm>)

13. Respondent Costs Other than Burden Hour Costs

There are no annualized costs to respondents other than the labor burden costs addressed in Section 12 of this document to complete this collection.

14. Cost to the Federal Government

Part A: LABOR COST TO THE FEDERAL GOVERNMENT

1) Collection Instrument(s)

[Agricultural Flood Damage Survey]

- a) Number of Total Annual Responses: 200
- b) Processing Time per Response: 1 hour
- c) Hourly Wage of Worker(s) Processing Responses: \$41.80/hour
- d) Cost to Process Each Response: \$41.80
- e) Total Cost to Process Responses: \$8,360

[Coastal Storm Damage Survey]

- a) Number of Total Annual Responses: 300
- b) Processing Time per Response: 1 hour
- c) Hourly Wage of Worker(s) Processing Responses: \$41.80/hour
- d) Cost to Process Each Response: \$41.80
- e) Total Cost to Process Responses: \$12,540

[Nonresidential Flood Damage Survey]

- a) Number of Total Annual Responses: 500
- b) Processing Time per Response: 1 hour
- c) Hourly Wage of Worker(s) Processing Responses: \$41.80/hour
- d) Cost to Process Each Response: \$41.80
- e) Total Cost to Process Responses: \$20,900

[Public Damages and Other Costs Survey]

- a) Number of Total Annual Responses: 150
- b) Processing Time per Response: 1 hour
- c) Hourly Wage of Worker(s) Processing Responses: \$41.80/hour
- d) Cost to Process Each Response: \$41.80
- e) Total Cost to Process Responses: \$6,270

[Residential Flood Damage Survey]

- a) Number of Total Annual Responses: 1,800
- b) Processing Time per Response: 1 hour
- c) Hourly Wage of Worker(s) Processing Responses: \$41.80/hour
- d) Cost to Process Each Response: \$41.80
- e) Total Cost to Process Responses: \$75,240

[Roadway Damage Survey]

- a) Number of Total Annual Responses: 50
- b) Processing Time per Response: 1 hour
- c) Hourly Wage of Worker(s) Processing Responses: \$41.80/hour
- d) Cost to Process Each Response: \$41.80

- e) Total Cost to Process Responses: \$2,090

- 2) Overall Labor Burden to the Federal Government
 - a) Total Number of Annual Responses: 3,000
 - b) Total Labor Burden: \$125,400.

Based on GS12 Step 5 Economist U.S. Federal Salary 2020 = \$86,952 = \$41.80/hour

Part B: OPERATIONAL AND MAINTENANCE COSTS

- 1) Cost Categories
 - a) Equipment: \$1,000
 - b) Printing: \$1,000
 - c) Postage: \$3,500
 - d) Software Purchases: \$1,000
 - e) Licensing Costs: \$1,000
 - f) Other: \$2,500

- 2) Total Operational and Maintenance Cost: \$10,000

Part C: TOTAL COST TO THE FEDERAL GOVERNMENT

- 1) Total Labor Cost to the Federal Government: \$125,400

- 2) Total Operational and Maintenance Costs: \$10,000

- 3) Total Cost to the Federal Government: \$ 135,400

15. Reasons for Change in Burden

There has been a reduction in the total number of survey recipients expected in the next three years and a slight increase in the hourly wage for those completing the survey and those processing it. In addition, the travel costs were much lower than those calculated in the 2015 submittal.

16. Publication of Results

The results of this information collection will not be published.

17. Non-Display of OMB Expiration Date

We are not seeking approval to omit the display of the expiration date of the OMB approval on the collection instrument.

18. Exceptions to "Certification for Paperwork Reduction Submissions"

We are not requesting any exemptions to the provisions stated in 5 CFR 1320.9.