**SUPPORTING STATEMENT**

**U.S. Department of Commerce**

**National Oceanic & Atmospheric Administration**

**NOAA Customer Surveys**

**OMB Control No. 0648-0342**

**A. Supplemental Questions for DOC/NOAA Customer Survey Clearance**

**1. Explain who will be conducting this survey. What program office will be conducting the survey? What services does this program provide? Who are the customers? How are these services provided to the customer?**

This survey will be conducted by the National Weather Service’s (NWS) Tropical Services Program using the online interface Survey Monkey. The Tropical Services Program provides programmatic leadership for the nation‘s tropical weather program, which includes operations at the National Hurricane Center (NHC), the Central Pacific Hurricane Center (CPHC), and NWS Weather Forecast Offices (WFOs). These offices are responsible for issuing watches, warnings, and other supporting products linked to the evolution, track and impacts of hazards caused by tropical cyclones using NWS dissemination services, including the web and approved social media platforms.

The NWS is charged by the The Weather Research and Forecasting Innovation Act of 2017 (Pub.L. 115–25) (in Section 405) to employ at least one warning coordination meteorologist (WCM) at each weather forecast office of the NWS. The job of the WCM is to serve as a liaison to local and regional users of NWS products and weather information, to ensure that NWS tropical products are meeting user needs and improving public response to weather events.

These products are used by a variety of users including broadcast media, emergency management/public safety officials, and software/web/app developers. Each of these users will utilize different information from different NWS products. Broadcast media may utilize products to prepare information for presentation to the public. Emergency management and public safety officials may utilize the information to make public safety decisions for their jurisdictions and for messaging preparedness actions for threats to the public. The developers of software, websites, and apps create and maintain tools for a variety of users to access information that they need.

**2. Explain how this survey was developed. With whom did you consult during the development of this survey on content? statistics? What suggestions did you get about improving the survey?**

This survey was developed as part of a NOAA Rotational Assignment Program project by Robert Garcia and Jessica Fieux under the leadership of the NWS Tropical Services Program Leader, Jessica Schauer. NWS Office of Dissemination social scientist Tyra Brown Harris served as the chief advisor on the format of the survey. The Tropical Service Program Team comprised of representatives from the different NWS regional headquarters and national centers also reviewed and offered feedback on the survey.

The team was consulted on the survey structure that would be most appropriate to gather feedback from users who both read and parse NWS tropical products and on improving questions and answer choices. Suggestions included, but were not limited to, changing the form of multiple choice questions into a ranking scheme so results can show the relative importance of the various facets of the different products compared to a simple “yes or no” or “useful or not useful”. The team also consulted with individuals within the agency who have experience working for NWS partners on the proper terminology to use in the survey to ensure it is best understood by respondents.

**3. Explain how the survey will be conducted. How will the customers be sampled (if fewer than all customers will be surveyed)? What percentage of customers asked to take the survey will respond? What actions are planned to increase the response rate?**

The survey will be conducted through a web-based link via Survey Monkey, which is an online service that can be accessed through a computer, tablet, or mobile device. No password will be required to access the survey. Partners will be provided with the web-based link via internal email partner lists provided by NHC, CPHC, NWS National Service Programs, and the network of NWS Warning Coordination Meteorologists (WCMs) who serve in hurricane-prone areas. If a respondent does not identify their self as a member of one of the professional affiliation options presented in the survey to identify the target audience, the survey will end for that respondent.

The estimated audience for the survey is approximately 1,750. This estimate includes those information technologists, media, and public safety/government partners on partner lists that are highly familiar with tropical products issued by the NWS. The NWS will instruct their WCMs taking part in partner conferences and other meetings to direct partners to the survey while responses are being solicited. In addition, the NWS will use social media and advertising on websites that host NWS tropical products to direct partners to the survey. The first question of the survey will determine if the respondent fits within the targeted professional affiliation; if they do not the survey will end. It is estimated that approximately 40% of those solicited will respond.

**4. Describe how the results of this survey will be analyzed and used. If the customer population is sampled, what statistical techniques will be used to generalize the results to the entire customer population? Is this survey intended to measure a GPRA performance measure? (If so, please include an excerpt from the appropriate document.)**

While the results will be segregated by the participants’ profession to gain a general understanding of how specific partner groups use and access NWS tropical products, we do not expect our results will generalize to the US population nor to the population of any specific partner group.

Skip logic will be applied in Survey Monkey such that those who do not self-identify as a member of one of the professional affiliation options presented will not be able to proceed with the survey. The survey also uses skip-logic to reduce the burden on the respondent by directing them only to questions about the products they identified as ones that they use.

Basic statistical analysis of the responses will provide information on partner’s usage of NWS tropical products, especially those produced by local Weather Forecast Offices (WFOs). The survey is meant to satisfy the second highest priority (out of 20) recommendation from the Hurricane Harvey Service Assessment:

*Finding 2: The HLS and other GFE-driven local tropical products were not widely used by the media and other core partners during Hurricane Harvey.*

*Recommendation 2: Local offices, Regional Headquarters, and the NWS Tropical Program should determine whether partners’ lack of use of local tropical products was peculiar to Hurricane Harvey or represents a broader condition affecting other coastal areas.*

There is conflicting, but mostly anecdotal, evidence on how/if partners are using the local tropical cyclone products. While the service assessment team found that they were not widely used during Harvey, there are other WFOs who say their partners rely on the threat and impact information provided in these products. Without a metric that can be applied across all tropical offices, we cannot sensibly proceed with any changes to these products. The manner in which they will be generated will be changing, with requirements due to the developers in 2022. Feedback is expected to be gathered for a year through this survey. The results will then be utilized to make an informed decision on specific changes that may be needed to ensure the products are effective and meeting partners’ needs.

This survey is not intended to inform or assess a GPRA measure.