SCRIPT FOR PORTLAND, OREGON: FOCUS ON STORM SURGE ONLY

WELCOME

Thank participants for coming and let them know we will be asking them some questions related to extra-tropical storms and storm surge, along with some new National Weather Service forecast tools related to these storms.

We will note:

- These are informal discussion groups

- We are eager to hear their insights and feedback

- Their identities will be confidential and no report will mention a respondent by name

QUESTION 1: Let's begin by talking generally about your community and storm surge. We want to better understand your community's storm surge vulnerability and past experience with extra-tropical storm surge.

- What communities or areas are at greatest risk for storm surge?

- Have there been any surge events or threats in recent years? If so, how did those located in the surge zones respond?

QUESTION 2: Let's now talk about how you currently communicate about storm surge and with whom you interact.

- What is your role during a storm and with whom do you interact? To what extent do you think the people you interact with understand storm surge and their vulnerability to storm surge?

- What language do you currently use to communicate what storm surge is and what threats a storm surge can pose? Probe how this information is received by public/decision-makers (and/or the public); what works? Probe if they do anything different for special vulnerable populations (e.g., with disabilities)?

- What graphical products do you use? Probe what products have they used to help themselves understand storm surge; what product do they use to communicate storm surge to decision-makers/public? Ask if they are aware of NWS resources and if they use them?

- What barriers do you face in communicating about storm surge? Probe for successes/challenges in communicating with special populations within community?

- What do you need to better communicate about storm surge and its threats?

QUESTION 3: The National Weather Service is considering issuing a separate storm surge warning/watch for situations where there is a potential for life-threatening surge. The warning (watch) would be generally issued within 36 hours (48 hours) of the arrival of conditions that would

hinder evacuation or other preparedness actions. This warning would either add to or replace current NWS coastal flood watch/warning products.

- Do you think a separate storm surge watch/warning will be useful to you? How will you use it? Probe for how the warning will complement/complicate what they already do. Probe for preference on keeping or replacing coastal flood watch/warnings.

- Do you think people will need to be educated about it? If so, do you have any ideas about how this can best be done? What would help get the message across?

QUESTION 4: The National Weather Service has created a new "Potential for Storm Surge Flooding" map that it used for the first time in 2014 for Hurricane Arthur, which made landfall in North Carolina [show sample map for Florida]. The map is GIS-based, so on smart phones and the Web, it is interactive and allows viewers to pan across any areas that are highlighted on the map and also to zoom in and out.

- Would a map like this be useful to you? How would you use it?

- Do you have specific suggestions for improving the map?

- What kinds of formats do you need this map in? Probe for to put on website, to be able to view in a tablet or smart phone, to include in a briefing, to share via social media, etc.

QUESTION 5: What other storm surge needs do you have?

- What else could the National Weather Service do to assist you in both outreach and actual storm surge event response?

- In general do you have any suggestions for ways to teach people in your community about storm surge? Can you think of any visuals, teaching methods, etc. that might be useful? Probe for considerations and needs for special vulnerable populations.

SCRIPT FOR HOUSTON, TEXAS: FOCUS ON ARRIVAL OF TROPICAL STORM FORCE WINDS ONLY

WELCOME

Thank participants for coming and let them know we will be asking them some questions related to hurricanes and the arrival of tropical storm force winds, along with some prototypes of a new graphic developed by the National Hurricane Center (NHC) to depict this information.

We will note:

- These are informal discussion groups

- We are eager to hear their insights and feedback

- Their identities will be confidential and no report will mention a respondent by name

QUESTION 1: Let's begin by talking generally about your community and hurricanes. We want to better understand how you prepare your community.

- How do you currently determine the arrival of tropical storm force winds?

- What do you need/use the information for?

- How have you used the information for recent storms?

- Are you aware of and/or have you used the NHC wind speed probability products?

- Do you perceive that the arrival of tropical storm force winds arrive earlier/later than what NHC forecasts (i.e., how good are NHC forecasts)?

QUESTION 2: Let's now talk about how you currently communicate this information to those with whom you interact in preparation for a hurricane.

- Do you generate any graphics to display the winds?

- How do you communicate this information to the public?

- How do you communicate uncertainty in timing information?

QUESTION 3: The NHC is developing a new map to depict the arrival of tropical storm force winds. Let's take a look at a few prototypes the NHC has developed.

Show Map 1:

- This forecast product would be available a maximum of 5 days before the first tropical storm force winds. When would you begin communicating this information on your [broadcasts, MEDIA ONLY] websites, and social media platform?

- How useful is this map? How would you interpret it?
- How should the expected times be shown -- expressed as hours or as time intervals (morning, afternoon, etc.)?
- Do you have any suggestions for how to improve the map? [Probe for title, labeling, lines, colors]
- What would you title this map?
- Is there any other information you'd want to see on this map?

Show Map 2:

- What do you think about this map?
- Do you prefer this map or the previous one? Why?

Show Maps 3 and 4 Depicting Different Thresholds for Uncertainty:

- What confidence level would you prefer?

FOR MEDIA ONLY:

- In what format would you like to receive this map (Probe: dynamic, GIS-based, TV ready, data only)

QUESTION 4: How would use this map with other products?

- How would you use this map together with other information available on the probability of winds occurring?
- How would you use this map with other information available to you on storm surge?

QUESTION 5: What other storm surge needs do you have?

- What else could the National Weather Service do to assist you in both outreach and actual storm surge event response?

- In general do you have any suggestions for ways to teach people in your community about storm surge? Can you think of any visuals, teaching methods, etc. that might be useful? Probe for considerations and needs for special vulnerable populations.

COMBINED SCRIPT

Extra-Tropical Storm Surge and Arrival of Tropical Storm Force Winds Social Science Research

Draft Focus Group Script for Emergency Managers and Broadcast Meteorologists in Florida, South Carolina, Virginia, and New York

WELCOME

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We will note:

- These are informal discussion groups

- We are eager to hear their insights and feedback

- Their identities will be confidential and no report will mention a respondent by name

QUESTION 1: Let's begin by talking generally about your community and storm surge. We want to better understand your community's storm surge vulnerability and past experience with extra-tropical storm surge.

- What communities or areas are at greatest risk for storm surge?

- Have there been any surge events or threats in recent years? If so, how did those located in the surge zones respond?

QUESTION 2: Let's now talk about how you currently communicate about storm surge and with whom you interact.

- What is your role during a storm and with whom do you interact? To what extent do you think the people you interact with understand storm surge and their vulnerability to storm surge?

- What language do you currently use to communicate what storm surge is and what threats a storm surge can pose? Probe how this information is received by public/decision-makers (and/or the public); what works? Probe if they do anything different for special vulnerable populations (e.g., with disabilities)?

- What graphical products do you use? Probe what products have they used to help themselves understand storm surge; what product do they use to communicate storm surge to decision-makers/public? Ask if they are aware of NWS resources and if they use them?

- What barriers do you face in communicating about storm surge? Probe for successes/challenges in communicating with special populations within community?

- What do you need to better communicate about storm surge and its threats?

QUESTION 3: The National Weather Service is considering issuing a separate storm surge warning/watch for situations where there is a potential for life-threatening surge. The warning (watch) would be generally issued within 36 hours (48 hours) of the arrival of conditions that would hinder evacuation or other preparedness actions. This warning would either add to or replace current NWS coastal flood watch/warning products.

- Do you think a separate storm surge watch/warning will be useful to you? How will you use it? Probe for how the warning will complement/complicate what they already do. Probe for preference on keeping or replacing coastal flood watch/warnings.

- Do you think people will need to be educated about it? If so, do you have any ideas about how this can best be done? What would help get the message across?

QUESTION 4: The National Weather Service has created a new "Potential for Storm Surge Flooding" map that it used for the first time in 2014 for Hurricane Arthur, which made landfall in North Carolina [show sample map for Florida]. The map is GIS-based, so on smart phones and the Web, it is interactive and allows viewers to pan across any areas that are highlighted on the map and also to zoom in and out.

- Would a map like this be useful to you? How would you use it?

- Do you have specific suggestions for improving the map?

- What kinds of formats do you need this map in? Probe for to put on website, to be able to view in a tablet or smart phone, to include in a briefing, to share via social media, etc.

BREAK

QUESTION 5: Let's turn now to another forecast product that the NWS is developing. This has to do with the arrival of tropical storm force winds.

- How do you currently determine the arrival of tropical storm force winds?

- What do you need/use the information for?

- How have you used the information for recent storms?

- Are you aware of and/or have you used the NHC wind speed probability products?

- Do you perceive that the arrival of tropical storm force winds arrive earlier/later than what NHC forecasts (i.e., how good are NHC forecasts)?

- Do you generate any graphics to display the winds?

- How do you communicate this information to the public?

- How do you communicate uncertainty in timing information?

QUESTION 7: The NHC is developing a new map to depict the arrival of tropical storm force winds. Let's take a look at a few prototypes the NHC has developed.

Show Map 1:

- This forecast product would be available a maximum of 5 days before the first tropical storm force winds. When would you begin communicating this information on your [broadcasts, MEDIA ONLY] websites, and social media platform?

- How useful is this map? How would you interpret it?
- How should the expected times be shown -- expressed as hours or as time intervals (morning, afternoon, etc.)?
- Do you have any suggestions for how to improve the map? [Probe for title, labeling, lines, colors]
- What would you title this map?
- Is there any other information you'd want to see on this map?

Show Map 2:

- What do you think about this map?
- Do you prefer this map or the previous one? Why?

Show Maps 3 and 4 Depicting Different Thresholds for Uncertainty:

- What confidence level would you prefer?

FOR MEDIA ONLY:

- In what format would you like to receive this map (Probe: dynamic, GIS-based, TV ready, data only)

QUESTION 8: How would use this map with other products?

- How would you use this map together with other information available on the probability of winds occurring?
- How would you use this map with other information available to you on storm surge?

QUESTION 9: What other storm surge needs do you have?

- What else could the National Weather Service do to assist you in both outreach and actual storm surge event response?

- In general do you have any suggestions for ways to teach people in your community about storm surge? Can you think of any visuals, teaching methods, etc. that might be useful? Probe for considerations and needs for special vulnerable populations.

Paperwork Reduction Act Statement

Statement on confidentiality:
For discussion groups: Eastern Research Group and NWS will not release your name or information that could identify you as part of this discussion or in our subsequent reports.