Application Element 1-2: Other Locations to Receive Weather Alerts

**Purpose:** To have students consider other methods to obtain weather watches, warnings, and advisories from the National Weather Service, besides the NOAA Weather Radio. The StormReady Supporter application requires that you have two other methods beyond the NOAA Weather Radio. Students will also learn the difference between a watch and warning, and the different types of watches and warnings that can be issued by the National Weather Service. In addition, this activity will allow students to engage in the 21st Century Skills of Communication, Collaboration, and Critical Thinking.

## **Instructions for Teacher:**

1. Distribute "Worksheet 1-2: Weather Watches and Warnings" handout and discuss as a class the importance of understanding the difference between various types of watches and warnings. There are also examples of different types of weather maps with watches and warnings plotted on them.

In addition, there are questions that have students consider different weather situations, look at weather maps, and station models in order to determine which or if a watch or warning should be issued. This does not impact the StormReady in a Box project, but may be of interest to the students and may be a great supplement/application of your weather/meteorology unit. The answer key for the questions is below.

## **Answer Key for Questions**

- 1. C
- 2. Most of the southwestern corner of South Dakota should be circled, encompassing nearly all of the temperatures 80 degrees and higher. The reason should be that nighttime temps are 80 degrees and higher. (See heat advisory definition)
- 3. A
- 4. D
- 5. B
- 6. A
- 7. C
- 8. A
- 9. D
- 10. B
- 11. Coffeeville, MS
- 12. Duluth, MN
- 2. Following the worksheet have students brainstorm other ways for decision makers in the school to hear weather alerts besides the NOAA Weather Radio. Consider suggesting the list of methods provided in the StormReady Supporter application. The students as a whole should come to a consensus on what methods work best, considering that the building could lose internet connectivity, power, cable, or something else impacting the school's ability to be aware of changing conditions in a weather emergency. Remember, having two methods to utilize is the minimum. The more methods to get watches and warnings, the better!



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**After the Activity:** Ensure that administration and decision makers have access to methods suggested by students before writing in StormReady Supporter application.

**Additional Information and Resources:** To learn more about severe weather watches and warnings, go to <a href="https://spc.noaa.gov">https://spc.noaa.gov</a> and click on "What is a Watch?"

To learn more about how local Weather Forecast Offices issue severe thunderstorm and tornado warnings, this behind-the-scenes video from NWS Paducah, KY explains to the warning-making process: <a href="https://www.youtube.com/watch?v=bWcU\_IPnXgY">https://www.youtube.com/watch?v=bWcU\_IPnXgY</a>.

To see an example of just how many severe thunderstorm and tornado warnings are issued annually around the country, the following video shows a time-lapse of every severe thunderstorm and tornado warning issued across the country in 2012: https://www.youtube.com/watch?v=JOiI2s19pSM.

