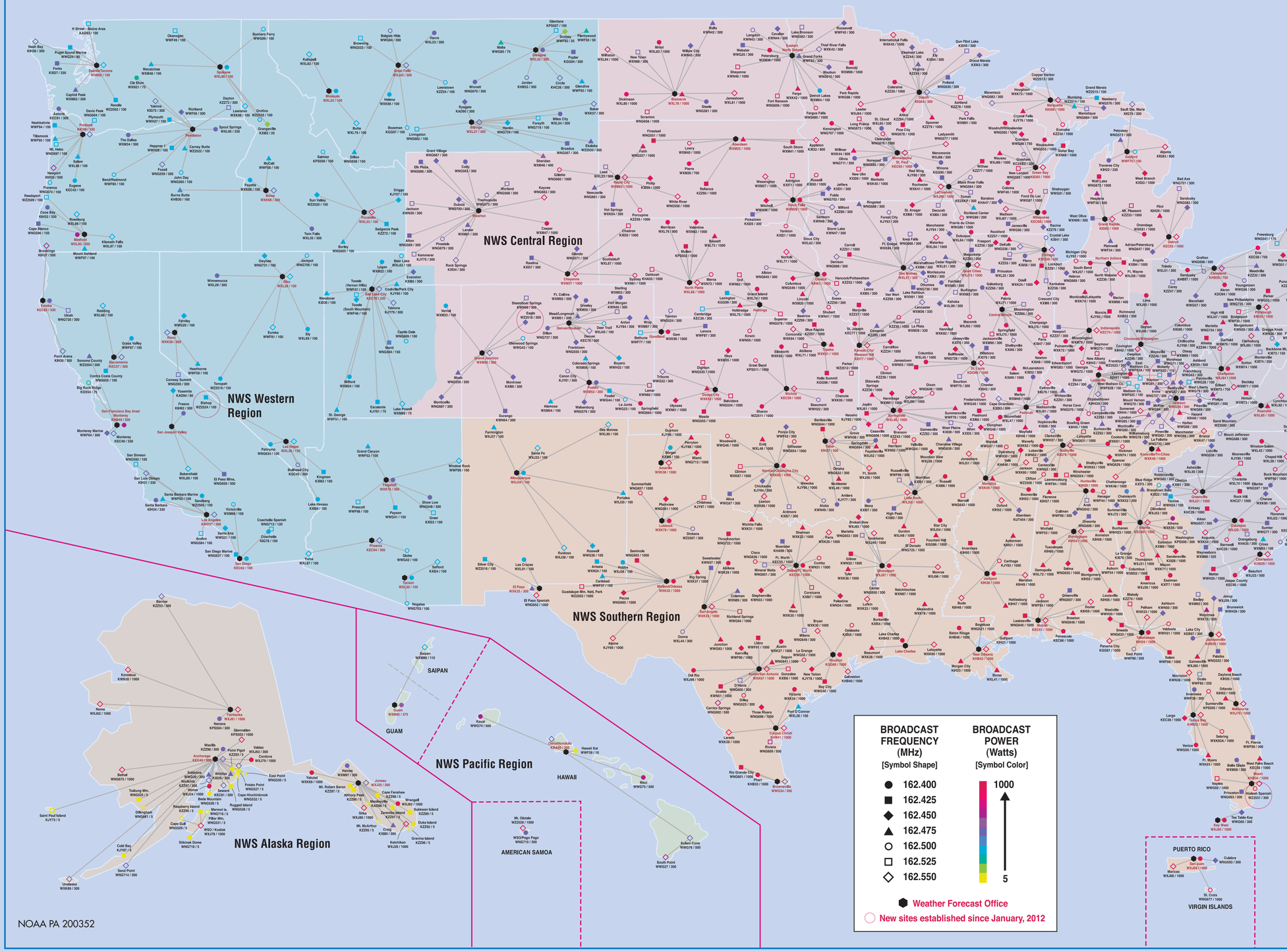
NOAA Weather Radio All Hazards (NWR)

"The Voice of NOAA's National Weather Service"

Supporting NOAA's Weather Ready Nation Initiative



The **National Oceanic and Atmospheric Administration (NOAA) Weather Radio All Hazards (NWR)** is a network of radio stations broadcasting NOAA's National Weather Service (NWS) warnings, watches, forecasts and other emergency information from nearby NWS offices 24 hours a day.

Known as the "Voice of NOAA's National Weather Service," NWR is provided as a public service by NOAA. As of October, 2012, the NWR network included 1017 stations covering an estimated 97% of the U.S. population. The NWR network provides coverage in all 50 states, Puerto Rico, the U.S. Virgin Islands, American Samoa, Guam, and the Northern Mariana Islands, including adjacent waterways and coastal waters.

As an "all hazards" radio network, NWR is a single source for comprehensive weather and emergency information. NWR broadcasts emergency warning and post-event information for severe weather events and non-weather emergency events. Warnings are broadcast for both natural (such as tsunamis and volcanoes) and man-made (such as Amber Alerts, toxic, chemical, and biological releases, and terrorist attacks) events as necessary. NWR is the primary actuator of the Federal Communications Commission's (FCC) Emergency Alert System (EAS). NWR is the only federally operated system broadcasting weather and emergency warnings to the public. Reception of NWR broadcasts depends on reliable signal reception. Typically a reliable signal can be received up to 40 miles from a station, assuming level terrain. However, NWS stations in mountainous and urban areas may experience reduced signal reception due to signal blockage.

NOAA developed Specific Area Message Encoding (SAME) for NWR. SAME is a digital code that is sent with many warnings, watches, and emergency events. The SAME includes the type of event, the applicable geographic area for the event, and how long the event is valid. Specifically, Warnings are broadcast when life-threatening events are in progress or are imminent, Watches are broadcast when conditions are favorable for certain events to occur, and Emergency event messages can provide follow up information to an event, or alerts for events that could potentially become life threatening. SAME events are transmitted to television/radio broadcasters and cable operators to selectively activate the EAS to warn listeners.

NWR receivers can be purchased at many retail stores, boat and marine equipment stores, through mail order catalogues, and on Internet web sites that sell electronic merchandise. They are also included in many consumer electronic products such as auto, truck, tractor, motorcycle, and marine radios; scanners and CB radios; clock radios, FRS transceivers, radar detectors, and television sets. NWR receivers equipped with SAME can be programmed by the user to alarm for weather and other emergency events in the specific areas desired by that user. SAME geographic/county code numbers for all parts of the country are available by telephone or on the Internet (see contacts table). Broadcasts are available on seven unique frequencies assigned to NWR (see legend, bottom of poster).

For those looking for the best performing NWR receivers, NWS recommends devices that have been certified to Public Alert ™ standards. The Public Alert ™ performance standards were developed in a cooperative effort by NOAA, Environment Canada, and the electronics industry, and were established as an international standard. These standards are managed by the Consumer Electronics Association (CEA). Receivers certified as meeting these standards carry the Public Alert ™ trademark. Public Alert ™ receivers include SAME, can be programmed for the type(s) of events you desire, have audio and visual alarms, and can operate in a muted mode until activated by an emergency message. They also have battery back-up and can activate external alarm devices (strobe lights, sirens, bed shakers, etc.) for people with disabilities.

Some of the events that can activate Public Alert™ alarms are listed below:

911 Telephone Outage	Flood	Shelter In Place
Avalanche	Hazardous Materials	Special Marine
Blizzard	High Wind	Tornado
Child Abduction	Hurricane	Tropical Storm
Civil Emergency	Radiological Hazard	Tsunami
Fire	Severe Thunderstorm	Winter Storm

Additional information on Public Alert™ can be found on the CEA website at http://www.ce.org.

Contacts for the NOAA Weather Radio All Hazards Program

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SAME Geographic/County Code Directory
Phone — 888-NWR-SAME (888-697-7263)
Internet — http://www.weather.gov/nwr/indexnw.htm

NWR Internet Website — http://www.weather.gov/nwr/

NOAA PA 200352 Poster URL — http://www.weather.gov/nwr/resources/poster.pdf

To report transmitter problems, email nwroutage@noaa.gov, or call 1-888-886-1227.

NOAA PA 200352

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