

**National Weather Service (NWS) Experimental Service Description Document (SDD)**  
**April 2012**  
**NWS Use of Twitter as an Environmental Information Service**

**Part 1 - Mission Connection**

**a. Service Description:**

Twitter is a social networking and microblogging service that enables its users to send and read short messages known as tweets. It has over 75 million users sending over 50 million tweet per day (Computer World, 2/23/10). The NWS has begun to experiment with using Twitter as a means to collect public reports of significant weather and is now ready to experiment with the use of Twitter to disseminate environmental information to the public. Microblogging services (e.g. Twitter) provide a platform for the NWS to combine/contribute its authoritative voice with NWS partners in the social stream. NWS partners (local to national) have adopted microblogging as a means to disseminate timely information to their communities. Many times NWS partners microblog in response to weather/water impacts to their communities. Microblogging services offer another platform to distribute/contribute critical warning and impact information rapidly while also allowing NWS partners to contribute to what is being microblogged. This is known as information packaging in the social stream.

NWS will be using Twitter as a supplemental channel to experimentally disseminate environmental information and promote weather awareness activities including outreach and educational efforts. Environmental data will scale to the area served by a particular Twitter account (e.g. Weather Forecast Office level). A presence on Twitter will offer a powerful tool to help disseminate lifesaving information increase the public's understanding of weather, water, and climate; and increase the public's ability to take action.

Tweets may concern:

- The science and anticipated impacts of the forecast period
- Long-fused warnings, watches, advisories (*after product issuance*)
  - NOTE: automated county-level feeds of short-fused warnings may also be pursued in the future, but not from office-level Twitter feeds
- Non-weather emergency messages from emergency management officials
- Weather/Climate facts
- Outreach and educational information
- Post event information

**b. Purpose/Intended Use:**

The goal of NWS use of Twitter is to reach out to a diverse audience and talk about weather/water (the science and the impacts) in plain language. Social science research has shown that people generally need to have a message come from more than one source before they will react to it. NWS use of microblogging services adds another source to the already traditional methods in place.

**Note:** This service is being provided on an experimental basis to assess the utility to the public and the ability of NWS to support and manage the Twitter feeds. Upon review of performance results during the experimental period, this experimental service may be discontinued. It is NWS's goal to Twitter feeds for each local NWS office/national center.

**c. Audience:**

This experimental service will be expanded to all WFOs, River Forecast Centers (RFCs), and National Centers. The audience served by this service includes any member of the general public served by the area of coverage area of a participating office.

**Note:** Access to this experimental service requires a Twitter account (see <http://www.twitter.com/>). Use of Twitter to support this service does not imply an endorsement of Twitter.

Current participating offices are:

- ◆ NWS Kansas City/Pleasant Hill, MO (@NWSPleasantHill)
- ◆ NWS Norman, OK (@NWSNorman)
- ◆ NWS Lower Mississippi River Forecast Center (@NWSLMRFC)
- ◆ NWS Salt Lake City (@NWSsaltLakeCity)
- ◆ NWS Charleston (@NWSCharleston)
- ◆ NWS Western Region (@NWS\_Western\_US)
- ◆ NWS Honolulu (@NWSHonolulu)
- ◆ NWS National Hurricane Center (@NHC\_Atlantic, @NHC\_Pacific)

**d. Presentation Format:**

Information will be presented on Twitter as brief posts or tweets which are sent to all "followers" of a particular NWS Twitter account. A hyperlink may be provided within the post to more detailed information on an official NWS webpage, as required.

**e. Feedback Method:**

Comments will be compiled through December 31, 2012 and will be evaluated by NWS prior to a decision on operational implementation. Feedback can be submitted through an electronic survey posted on the website (<http://www.weather.gov/survey/nws-survey.php?code=Twitter>).

## **f. SDD Approval**

This Experimental Service Description Document has been approved by *Cindy Woods for David Caldwell, OCWWS Director*).

## **Part 2 – Technical**

### **a. Format and Science Basis:**

Standard feeds have been built from NWSChat to automate the dissemination to a particular Twitter account and the same mechanism/s can be used to feed other social media sites in the future. Updates will be generated mostly by RSS feed or API. Manual posts will also be presented by local offices.

### **b. Availability:**

Dissemination of environmental information via Twitter is considered a supplemental service. NWS posts will be made on a time-available basis.

Availability of this service is subject to constraints of Twitter service availability and to availability limitations of the users' internet connection.