TO: FAMILY SERVICE /FOS/ SUBSCRIBERS...NOAA WEATHER WIRE SERVICE /NWWS/ SUBSCRIBERS...EMERGENCY MANAGERS WEATHER INFORMATION NETWORK /EMWIN/ SUBSCRIBERS...OTHER NATIONAL WEATHER SERVICE /NWS/ CUSTOMERS AND PARTNERS...AND NWS EMPLOYEES

FROM: JAMES E. LEE
CHIEF...FIRE AND PUBLIC WEATHER SERVICES BRANCH

SUBJECT: COMBINED SEVERE THUNDERSTORM FLASH FLOOD WARNING TEST AUGUST 12 TO OCTOBER 1 2002

EFFECTIVE MONDAY AUGUST 12 2002 AT 6 A.M. MOUNTAIN DAYLIGHT TIME /MDT/... 5 A.M. MOUNTAIN STANDARD TIME /MST/ AND PACIFIC DAYLIGHT TIME /PDT/... 1200 COORDINATED UNIVERSAL TIME /UTC/...FOUR WEATHER FORECAST OFFICES /WFO/ IN THE SOUTHWESTERN U.S. WILL BEGIN TO ISSUE SEVERE THUNDERSTORM WARNING AND FLASH FLOOD WARNING INFORMATION IN A SINGLE PRODUCT AS A TEST. THESE WFOS WILL ISSUE COMBINED SEVERE THUNDERSTORM AND FLASH FLOOD WARNINGS WHEN THUNDERSTORMS THREATEN TO PRODUCE SERIOUS DAMAGE DUE TO STRONG WINDS... LARGE HAIL... AND FLASH FLOODING. WEATHER FORECAST OFFICES PARTICIPATING IN THE TEST INCLUDE TUCSON AND FLAGSTAFF AZ... LAS VEGAS NV... AND SAN DIEGO CA.

INFORMATION PERTAINING TO SEVERE THUNDERSTORM WARNINGS /SVR/ AND FLASH FLOOD WARNINGS /FFW/ IS NORMALLY ISSUED SEPARATELY AND FOLLOWED UP ON INDIVIDUALLY. HOWEVER... SUMMER THUNDERSTORMS IN THE DESERT SOUTHWEST CAN PRODUCE BOTH DAMAGING WIND AND HAIL ALONG WITH HEAVY DOWNPOURS RESULTING IN FLASH FLOODING. THIS TEST WILL HELP DETERMINE WHETHER STREAMLINED WARNING DISSEMINATION WILL RESULT IN INCREASED LEAD TIME AND LESS WARNING REDUNDANCY.

THE FOUR WFOS CAN STILL ISSUE WARNINGS SEPARATELY... BUT WILL ISSUE COMBINED SEVERE THUNDERSTORM AND FLASH FLOOD WARNINGS WHEN APPROPRIATE. WFOS WILL ISSUE COMBINED WARNINGS USING THE FLASH FLOOD WARNING HEADER /WMO HEADING WGUS5I KCCC... AWIPS IDENTIFIER FFWCCC... WHERE CCC IS THE IDENTIFIER OF THE WFO ISSUING THE INFORMATION/... SEE TABLE 1 FOR THE LIST OF COMBINED SEVERE THUNDERSTORM AND FLASH FLOOD WARNING PRODUCT IDENTIFIERS FOR THIS TEST. THE NAME OF THE COMBINED PRODUCT IN THE MASS MEDIA HEADER IS COMBINED SEVERE THUNDERSTORM AND FLASH FLOOD WARNING. ALL SUBSEQUENT WARNING UPDATES... INCLUDING CANCELLATION OF THE SEVERE THUNDERSTORM WARNING PORTION OF A COMBINED WARNING... WILL BE ISSUED IN A FLASH FLOOD STATEMENT /WMO HEADING WGUS8I KCCC... AWIPS ID FLSCCC/. 
<table>
<thead>
<tr>
<th>COMBINED WARNING</th>
<th>FOLLOW-UP STATEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>NWS OFFICE</td>
<td>WMO HEADING</td>
</tr>
<tr>
<td>TUCSON AZ</td>
<td>WGUS55 KTWC</td>
</tr>
<tr>
<td>FLAGSTAFF AZ</td>
<td>WGUS55 KFGZ</td>
</tr>
<tr>
<td>LAS VEGAS NV</td>
<td>WGUS55 KVEF</td>
</tr>
<tr>
<td>SAN DIEGO CA</td>
<td>WGUS56 KSGX</td>
</tr>
</tbody>
</table>

WFOS will mention severe thunderstorm information first in the product name... Headlines... and body of the warning until the severe thunderstorm portion is canceled.

Participating WFOS will conduct a follow up service evaluation. In addition to reviewing how issuing combined warnings impact office operations...they will contact and interview principle partners. This includes the media...emergency managers...and if possible the general public.

If you have any questions or comments... please contact

TOM AINSWORTH  
WESTERN REGION WARNING COORDINATION METEOROLOGIST  
PHONE: 801-524-4000  
EMAIL: TOM.AINSWORTH@NOAA.GOV

Examples of a combined severe thunderstorm and flash flood warning and follow up statement are shown below.

Example 1: Initial issuance of a combined SVR/FFW

WGUS55 KTWC DDHHMM
FFWTWC
AZC019-132000-

BULLETIN - EAS ACTIVATION REQUESTED  
COMBINED SEVERE THUNDERSTORM AND FLASH FLOOD WARNING  
NATIONAL WEATHER SERVICE TUCSON AZ  
1135 AM MST TUE AUG 13 2002

The National Weather Service in Tucson has issued a

* COMBINED SEVERE THUNDERSTORM AND FLASH FLOOD WARNING FOR...  
CENTRAL PIMA COUNTY IN ARIZONA

* SEVERE THUNDERSTORM WARNING UNTIL 12 NOON MST  
FLASH FLOOD WARNING UNTIL 100 PM MST.

* AT 1135 AM MST... NATIONAL WEATHER SERVICE DOPPLER RADAR  
INDICATED A SEVERE THUNDERSTORM WITH VERY HEAVY RAIN OVER
CENTRAL PIMA COUNTY...OR ABOUT 10 MILES SOUTH OF ROBLES JUNCTION...MOVING NORTHWEST AT 10 MPH.

* THIS THUNDERSTORM WILL MOVE INTO REMOTE DESERT AREA 10 MILES WEST OF ROBLES JUNCTION BY 12 NOON.

DOPPLER RADAR SHOWED A VERY STRONG THUNDERSTORM WITH HEAVY RAIN AND WINDS IN EXCESS OF 60 MPH OVER HIGHWAY 286 ABOUT 10 MILES SOUTH OF ROBLES JUNCTION. BE PREPARED FOR DAMAGING WIND AND NEAR ZERO VISIBILITY DUE TO BLOWING DUST.

RAINFALL TOTALS IN EXCESS OF TWO INCHES ARE POSSIBLE IN THIS AREA. WASHES THAT MAY OVERFLOW WILL BE ALTAR WASH...FRESNAL WASH AND BOLA BLANCAS WASH. EXCESSIVE RUNOFF FROM THIS STORM WILL CAUSE FLASH FLOODING OF SMALL CREEKS AND STREAMS...COUNTRY ROADS...NORMALLY DRY WASHES AND ARROYOS...AS WELL AS FARMLAND ALONG THE BANKS OF CREEKS AND STREAMS.

NEVER ATTEMPT TO CROSS SWIFTLY FLOWING WATERS BY FOOT OR CROSS ROADWAYS COVERED BY WATER. VEHICLES CAUGHT IN RISING WATER SHOULD BE ABANDONED QUICKLY. MOVE TO HIGHER GROUND.

A COMBINED SEVERE THUNDERSTORM AND FLASH FLOOD WARNING MEANS THAT DAMAGING WIND... HAIL... AND FLOODING ARE IMMINENT OR OCCURRING.

LAT...LON 3196 11155 3182 11138 3193 11123 3207 11142

/END OF EXAMPLE 1/

EXAMPLE 2: FOLLOW UP STATEMENT FOR A COMBINED SVR/FFW CANCELING THE SEVERE THUNDERSTORM THREAT

WGUS85 KTWC DDHHMM
FLSTWC
AZC019-132000-

COMBINED SEVERE THUNDERSTORM AND FLASH FLOOD STATEMENT
NATIONAL WEATHER SERVICE TUCSON AZ
1200 NOON MST TUE AUG 13 2002

...THE SEVERE THUNDERSTORM WARNING FOR CENTRAL PIMA COUNTY NEAR ROBLES JUNCTION HAS EXPIRED...

...THE FLASH FLOOD WARNING FOR CENTRAL PIMA COUNTY NEAR THREE POINTS REMAINS IN EFFECT UNTIL 100 PM...

THE STORM WHICH PROMPTED THE COMBINED SEVERE THUNDERSTORM AND FLASH FLOOD WARNING IS NO LONGER PRODUCING DAMAGING WINDS. THIS THUNDERSTORM CONTINUES TO PRODUCE HEAVY RAINS. DOPPLER RADAR ESTIMATES 2 TO 3 INCHES OF RAIN HAS FALLEN IN AN AREA ABOUT 5 MILES SOUTH SOUTH WEST OF ROBLES JUNCTION. SHERIFFS DEPUTIES REPORT WATER FLOWING IN WASHES IN THE AREA. HIGHWAY 286 HAS BEEN CLOSED SOUTH OF ROBLES JUNCTION DUE TO WATER FLOWING ACROSS THE
ROAD AT LOW WATER CROSSINGS.

THIS THUNDERSTORM CONTINUES TO PRODUCE HEAVY RAIN AND WASHES ARE EXPECTED TO FLOW IN THE AREA UNTIL 100 PM. PERSONS IN THE AREA SHOULD AVOID LOW WATER CROSSINGS AND NOT TRAVEL UNTIL WELL AFTER THE STORM HAS ENDED.

/END OF EXAMPLE 2/

END

NNNN