

***NATIONAL WEATHER SERVICE INSTRUCTION 10-2203***

***January 24, 2006***

***Operations and Services***

***Readiness, NWSPD 10-22***

***CRITICAL WEATHER DAY***

---

**NOTICE:** This publication is available at: <http://www.nws.noaa.gov/directives/>.

**OPR:** W/OPS1 (A. Mongeon)

**Certified by:** W/OPS1 (M. Paese)

**Type of Issuance:** Initial

---

***SUMMARY OF REVISIONS:***

\_\_\_\_\_  
signed  
John McNulty, Jr.

\_\_\_\_\_  
1/10/2006  
Date

## Critical Weather Day

<u>Table Of Contents</u>	<u>Page</u>
1. Purpose .....	3
2. Definition.....	3
3. Levels .....	3
4. Procedures .....	3
5. Systems/Services Affected .....	6
6. Outlooks .....	7
Appendices	
A. Required CWD Notification.....	A-1
B. Examples.....	B-1

1. Purpose. The purpose of a Critical Weather Day (CWD) policy is to ensure the continued production and dissemination of National Weather Service (NWS) products necessary to protect life and property whenever there is an actual or potential occurrence of a CWD event. The declaration of a CWD will ensure that the computer, communications, and personnel resources of the NWS remain directed towards the production and dissemination of essential products.
2. Definition. A CWD event is defined as an event that is occurring or is expected to occur within the NWS' area of responsibility such that the NWS should eliminate or reduce unnecessary actions that might affect its ability to produce and disseminate essential products. The NWS' area of responsibility is defined as the United States and other geographic areas for which the NWS provides weather support (including U.S. territories, etc.), international areas under the responsibility of the National Centers for Environmental Prediction (NCEP) Center (as a World Meteorological Organization Regional Specialized Meteorological Center), and the Earth near-space environment. Examples of events which warrant the declaration of a CWD include, but are not limited to, the following:
  - a. A widespread severe thunderstorm or tornado outbreak;
  - b. A storm system causing widespread, major precipitation (e.g. heavy rain, heavy snow, freezing rain, or blizzard conditions);
  - c. A tropical storm system;
  - d. A significant non-weather event (e.g., wildfire, large-scale disaster, high-profile public gathering, etc.)
3. Levels. To lessen the impact of CWD's on service and system changes at affected offices, CWD's will be declared at the following levels:
  - a. National. A National CWD event affects the entire NWS. All non-emergency NWS service and system changes will be suspended for the duration of the CWD.
  - b. Regional. A Regional CWD event affects all of one or more NWS Regions/NCEP service-area Areas of Responsibility (AORs), but does not affect the entire NWS and all NCEP service-area AORs. Specific NWS service and system changes may be permitted on a case-by-case basis for the duration of the CWD.
  - c. Local. A Local CWD event affects one or more Weather Forecast Office(s) (WFOs), Weather Service Office(s) (WSOs), River Forecast Center(s) (RFCs), or Center Weather Service Unit(s) (CWSUs). Specific NWS service and system changes may be permitted on a case-by-case basis for the duration of the CWD.
4. Procedures. This section provides information regarding who may request/declare a CWD. The same procedures will be followed when updating, extending, or terminating a CWD declaration. While formal authority to request and declare a CWD is limited to those officials specifically cited below, any NOAA/NWS staff member who believes they have information

pertinent to the potential issuance of a CWD may recommend to their local or regional management team that a formal request be made.

In the procedures outlined below, members of the NWS HQ Management Team (i.e., the NWS/AA, NWS DAA, and NWS Homeland Security Activities Director (NWS HSAD)), the senior member(s) of the Regional HQ Management Team(s), NCEP Center Directors, Directors of Centers with National responsibility (e.g., Telecommunications Operations Center), and the NCEP Senior Duty Meteorologist are designated as “lead officials.” In the event of a disagreement among lead officials or management teams, the NWS HQ Management Team has the ultimate decision authority.

- a. For a National CWD:
  - i. A National CWD may be requested/declared only by the NWS AA, NWS DAA, or NWS HSAD. The CWD may be declared for good reason shown and at any time.
  - ii. The NWS AA, NWS DAA, or NWS HSAD will advise the NCEP SDM of the CWD declaration, and provide supporting information, including the reason for the CWD and the requested period, if permitted.
  - iii. The NCEP SDM will notify all NWS offices via an AWIPS administrative message that a National CWD has been declared, and provide supporting information if permitted. The NCEP SDM will also notify those persons identified in the Required CWD Notification List (Appendix A) of the CWD.
  - iv. The NCEP SDM will provide updates, as appropriate, to those identified in section 4.a.iii, above.
  
- b. For a Regional CWD:
  - i. A Regional CWD may be requested/declared only by a lead official. To provide a system of checks and balances, the declaring official should be at a higher organizational level than the requesting official.
  - ii. The requesting lead official will contact a member of the declaring lead official’s management team to discuss the need for a CWD. Both management teams should agree on the need for a CWD.
  - iii. For regionally originated CWDs, a member of the declaring lead official’s management team will:
    - (1) initiate and moderate a conference call among affected non-national NWS offices (e.g., the requesting management team, affected WFOs, WSOs, RFCs, CWSUs, etc.) to determine the geographic extent of the CWD and what service and system changes are planned during the time of the CWD event within the affected area,
    - (2) Determine which specific service and system changes will be allowed to proceed,
    - (3) Consider the potential greater good created by allowing specific changes to proceed and the use of backup services and systems to ensure the continued production and dissemination of essential products,
    - (4) Contact the NCEP SDM and provide specific information regarding the CWD, including, but not limited to, the proposed start/end date/time of the CWD, a list of affected NWS offices, and specific services and system changes that will be

- allowed to proceed.
- iv. Upon being contacted by the declaring lead official's management team, or for a nationally originated Regional CWD, the NCEP SDM will:
    - (1) Initiate and moderate a conference call among the requesting/declaring lead official's management teams (if appropriate) and affected national NWS offices (e.g., NCEP Centers and other Centers with National Responsibility) to further determine the geographic extent of the CWD and what service and system changes are planned during the time of the CWD event within the affected area,
    - (2) Determine which specific service and system changes will be allowed to proceed,
    - (3) Consider the potential greater good created by allowing specific changes to proceed and the use of backup services and systems to ensure the continued production and dissemination of essential products.
  - v. The NCEP SDM will notify all NWS offices via an AWIPS administrative message that a Regional CWD has been declared, and provide supporting information if permitted. The NCEP SDM will also notify those persons identified in the Required CWD Notification List (Appendix A) of the CWD.
  - vi. The NCEP SDM will provide updates, as appropriate, to those identified in section 4.b.v, above.
- .
- c. For a Local CWD.
    - i. A Local CWD may be requested by a lead official or a member of the local NWS office's management team (through their Regional Headquarters management team.)
    - ii. A Local CWD may be declared only by a lead official. To provide a system of checks and balances, the declaring official should be at a higher organizational level than the requesting official.
    - iii. The requesting lead official will contact a member of the declaring lead official's management team and provide supporting information pertinent to the proposed CWD.
    - iv. For locally originated CWDs, a member of the declaring lead official's management team will:
      - (1) initiate and moderate a conference call among affected non-national NWS offices (e.g., the requesting management team, affected WFOs, WSOs, RFCs, CWSUs, etc.) to determine the geographic extent of the CWD and what service and system changes are planned during the time of the CWD event within the affected area,
      - (2) Determine which specific service and system changes will be allowed to proceed,
      - (3) Consider the potential greater good created by allowing specific changes to proceed and the use of backup services and systems to ensure the continued production and dissemination of essential products,
      - (4) Contact the NCEP SDM and provide specific information regarding the CWD, including, but not limited to, the proposed start/end date/time of the CWD, a list of affected NWS offices, and specific services and system changes that will be allowed to proceed.

- v. Upon being contacted by the declaring lead official's management team, or for nationally originated Local CWDs the NCEP SDM will:
    - (1) Initiate and moderate a conference call among the requesting/declaring lead official's management teams (if appropriate) and affected national NWS offices (e.g., NCEP Centers and other Centers with National Responsibility) to further determine the geographic extent of the CWD and what service and system changes are planned during the time of the CWD event within the affected area,
    - (2) Determine which specific service and system changes will be allowed to proceed,
    - (3) Consider the potential greater good created by allowing specific changes to proceed and the use of backup services and systems to ensure the continued production and dissemination of essential products.
  - vi. The NCEP SDM will notify all NWS offices via an AWIPS administrative message that a Local CWD has been declared, and provide supporting information if permitted. The NCEP SDM will also notify those persons identified in the Required CWD Notification List (Appendix A) of the CWD.
  - vii. The NCEP SDM will provide updates, as appropriate, to those identified in section 4.c.vi, above.
- d. For all CWD levels, the NCEP SDM will, at a minimum, send an AWIPS administrative message and contact those persons identified on the Required CWD Notification List (Appendix A) whenever a CWD is declared, updated, extended, or terminated.
- i. The CWD status messages will include all relevant information, (e.g., the CWD start-time, duration, end-time, geographic extent/NWS offices affected, services/systems affected, etc.).
  - ii. All CWD status messages will be posted on the NCEP NCO/PMB Web site and added to the NCEP SDM administrative status message.
5. Systems/Services Affected.
- a. The declaring lead official and the NCEP SDM, in consultation with affected offices, will determine, as detailed in section 4 above, the geographic extent of the CWD and what service and system changes will be allowed to proceed,
  - b. Systems and services to be considered include, but are not limited to:
    - i. Operational implementations;
    - ii. Systems tests and changes involving computers, workstations, servers, networking and/or communications facilities if they have the potential for adversely affecting operations; and
    - iii. NWSTG tests and changes to their communications facilities.
  - c. The NWS AA, NWS/DAA, NWS HSAD (in consultation with the NWS/AA or DAA), NWS HQ Management Team, Regional Management Teams, and Management Teams of Other Centers with National responsibilities have the authority to permit changes,

tests, and scheduled outages to proceed, on a case-by-case basis, if a greater good is created by proceeding.

6. Outlooks.

- a. The NCEP SDM will issue a daily text product containing a three-day outlook addressing the potential need for a meteorologically based CWD.
- b. Anyone with knowledge of the potential need of a CWD will contact an appropriate NWS management team member as far in advance as possible. Ideally, the declaration and notification of a CWD will be made at least 24 hour prior to scheduled system changes.
- c. Due to operational constraints or other unanticipated actions, it may be necessary to declare a CWD with little or no advance notice. However, all parties should attempt to minimize such occasions.

**APPENDIX A - Required CWD Notification List**

1. NWS/AA and DAA **(24x7 National CWD, otherwise administrative hours only)**;
2. NWS HSAD **(24x7 National CWD, otherwise administrative hours only)**;
3. NWS Regional Directors/designees **(24x7 National CWD, otherwise administrative hours only)**;
4. NCEP Director or Chief Operations Officer or designate **(administrative hours only)**;
5. NCO Director or Deputy or designate **(administrative hours only)**;
6. **NWS AWIPS Regional Focal Points (administrative hours only)**;
7. NWS Major Programs Program Managers
  - a. AWIPS (Director, Systems Engineering Center – SEC) **(administrative hours only)**;
  - b. NEXRAD (Chief, Radar Operations Center – ROC) **(administrative hours only)**;
8. NCO SOS/Operator **(24x7)**;
9. NCO SPA or on call **(24x7)**;
10. NCO SISB Helpdesk or on call **(24x7)**;
11. NCO SISB Networking or on call **(24x7)**;
12. NCEP HPC/OPC/AWC/SPC/TPC **Lead Forecasters (24x7)**;
13. NWS Telecommunication Gateway (NWSTG) operator **(24x7)**;
14. NWS AWIPS NCF supervisor **(24x7)**;
15. NCEP NESDIS SAB **Lead Forecaster (24x7)**;
16. NESDIS SOCC Supervisor @ FOB4 **(24x7)**;
17. NESDIS SSD Helpdesk Supervisor **(24x7)**;
18. IBM CCS facilities @ Gaithersburg (Paul Gresham) **(24x7)**;
19. IBM's Chris Campolmi **(24x7)**;
20. NASA Security Office @ Fairmont WV **(24x7)**

## **APPENDIX B – Examples**

### 1. National CWD – All NWS offices

- a. The NWS Homeland Security Activities Director becomes aware of an upcoming event that may warrant the declaration of a National CWD.
- b. The NWS Homeland Security Activities Director contacts the NWS HQ management team and requests the declaration of a National CWD. The NWS HQ management team agrees that a National CWD is warranted.
- c. The NWS Homeland Security Activities Director contacts the NCEP SDM and informs him/her that a National CWD is being declared.
- d. The NCEP SDM administratively informs all levels of the NWS management structure of the details of the National CWD.

### 2. Regional CWD – Two or more Regions, all NWS offices within the affected Regions

- a. A Category 2 hurricane is forecast to make landfall near the Louisiana – Mississippi border in 24 hours, then move up west of the Appalachian Mountains affecting all NWS offices in both the Southern Region (SR) and Eastern Region (ER) of the NWS. The SR management team believes this situation warrants the declaration of a Regional CWD for both the SR and ER.
- b. The SR management team contacts the ER management team and the NWS HQ Management Team (a higher organizational level management team) to discuss the situation. All teams agree a Regional CWD is warranted. Note: In the event of a disagreement among the Regional management teams, the NWS HQ management team has the ultimate decision authority.
- c. The SR and ER management teams contact all offices within their respective Regions to determine what service and system changes are planned during the time of the proposed CWD. They also determine what specific service and system changes will be allowed based upon the greater good and available backups.
- d. The SR management team contacts the NCEP SDM and asks the NCEP SDM to initiate and moderate a conference call among the NWS HQ, SR, and ER management teams, and potential affected National Center management teams.
- e. The NWS HQ, SR, ER, and other affected National Center management teams discuss further which service and system changes are scheduled, and which, if any, can be allowed to proceed.
- f. The NCEP SDM administratively informs all levels of the NWS management structure of the details of the Regional CWD.

### 3. Regional CWD – Two or more Regions, not all NWS offices within the affected Regions

- a. A major tornado outbreak is expected across the upper tier of the United States and will probably affect some NWS offices in both Central Region (CR) and Eastern Region (ER) in the next 24 hours. The CR management team believes this situation warrants the declaration of a Regional CWD for both the CR and ER.
- b. The CR management team contacts the ER management team and the NWS HQ

management team (a higher organizational level management team) to discuss the situation. All teams agree a Regional CWD is warranted. Note: In the event of a disagreement among the Regional management teams, the NWS HQ management team has the ultimate decision authority.

c. The CR and ER management teams contact potential affected offices within their respective Regions to determine what service and system changes are planned during the time of the proposed CWD. They also determine what specific service and system changes will be allowed based upon the greater good and available backups.

d. The CR management team contacts the NCEP SDM and asks the NCEP SDM to initiate and moderate a conference call among the NWS HQ, CR, and ER management teams, and potential affected National Center management teams.

e. The NWS HQ, CR, ER, and other affected National Center management teams discuss further which service and system changes are scheduled, and which, if any, can be allowed to proceed.

f. The NCEP SDM administratively informs all levels of the NWS management structure of the details of the Regional CWD.

#### 4. Regional CWD – Single Region, all NWS offices within the affected Region

a. A major winter storm is forecast to develop and move in from the Gulf of Alaska and affect all Alaska Region (AR) NWS offices within the next 36 hours. The AR management team believes this warrants the declaration of a Regional CWD for the AR.

b. The AR management team contacts the NWS HQ management team (a higher organizational level management team) to discuss the situation. Both teams agree a Regional CWD is warranted. Note: In the event of a disagreement among management teams, the NWS HQ management team has the ultimate decision authority.

c. The AR management team contacts all AR offices to determine what service and system changes are planned during the time of the proposed CWD. They also determine what specific service and system changes will be allowed based upon the greater good and available backups.

d. The AR management team contacts the NCEP SDM and asks the NCEP SDM to initiate and moderate a conference call among the NWS HQ, AR, and potential affected National Center management teams.

e. The NWS HQ, AR, other affected National Center management teams discuss further which service and system changes are scheduled, and which, if any, can be allowed to proceed.

f. The NCEP SDM administratively informs all levels of the NWS management structure of the details of the Regional CWD.

#### 5. Local CWD – Single Region, not all NWS offices within the affected Region

a. A major earthquake has struck California, affecting several NWS offices in that state. The NWS' Oxnard (Los Angeles) WFO (LOX) management team believes this warrants the declaration of a Local CWD for the affected NWS offices.

b. The LOX management team contacts the Western Region (WR) management team to discuss the situation. The WR management team agrees that a Local CWD is warranted.

c. The WR management team contacts the NWS HQ Management Team (a higher

organizational level management team) to discuss the situation. Both teams agree a Local CWD is warranted. Note: In the event of a disagreement among the management teams, the NWS HQ management team has the ultimate decision authority.

d. The WR management team contacts potential affected offices within their Region to determine what service and system changes are planned during the time of the proposed CWD. They also determine what specific service and system changes will be allowed based upon the greater good and available backups.

e. The WR management team contacts the NCEP SDM and asks the NCEP SDM to initiate and moderate a conference call among the NWS HQ, WR, and potential affected National Center management teams.

f. The NWS HQ, WR, and other affected National Center management teams discuss further which service and system changes are scheduled, and which, if any, can be allowed to proceed.

g. The NCEP SDM administratively informs all levels of the NWS management structure of the details of the Regional CWD.

6. Local CWD – NCEP Storm Prediction Center (SPC), Single Region, not all NWS offices within the affected Region

a. The SPC places several Central Region (CR) WFOs in a High Risk area for severe weather.

b. The SDM believes this warrants a declaration of a Local CWD for the affected WFOs and appropriate NCEP centers (SPC, NCO).

c. The NCEP SDM contacts NWS HQ and Central Region (CR) management teams to inform them of the impending declaration. The CR management team contact potential affected offices within their Region to determine what service and system changes are planned during the time of the proposed CWD and they also determine which offices will be included in the proposed CWD. They also determine what specific service and system changes will be allowed based upon the greater good and available backups.

d. The NCEP SDM initiates and moderates a conference call between the NWS HQ and CR management teams to receive feedback as to which NWS offices will be included within the CWD. Also, the management teams discuss further which service and system changes are scheduled, and which, if any, can be allowed to proceed.

e. The NCEP SDM administratively informs all levels of the NWS management structure of the details of the Regional CWD.

7. Local CWD – Single Region, single facility within the affected Region.

a. A tsunami is expected to strike American Samoa within the next 12 hours, affecting the NWS' Pago Pago (PPG) Weather Service Office (WSO.) The management team of the PPG WSO believes this warrants the declaration of a Local CWD for the PPG WSO.

b. The PPG management team contacts the Pacific Region (PR) management team to discuss the situation. The PR management team agrees that a Local CWD is warranted.

c. The PR management team contacts the NWS HQ Management Team (a higher organizational level management team) to discuss the situation. Both teams agree a Local CWD is warranted. Note: In the event of a disagreement among the management teams, the NWS HQ

management team has the ultimate decision authority.

d. The PR management team contacts the PPG WFO to determine what service and system changes are planned during the time of the proposed CWD. They also determine what specific service and system changes will be allowed based upon the greater good and available backups.

e. The PR management team contacts the NCEP SDM and asks the NCEP SDM to initiate and moderate a conference call among the NWS HQ, PR, and potential affected National Center management teams.

f. The NWS HQ, PR, and other affected National Center management teams discuss further which service and system changes are scheduled, and which, if any, can be allowed to proceed.

g. The NCEP SDM administratively informs all levels of the NWS management structure of the details of the Local CWD.