



# **Don't Test the Waters Ottumwa**

**Jeff Zogg, Senior Hydrologist  
NWS Des Moines, Iowa**

*Iowa Hwy 92—Muchakinock Creek near Oskaloosa, IA  
(NWS Des Moines)*

# Agenda

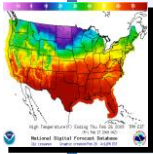
- National Weather Service in Iowa
- Flood impacts in Iowa
- Finding flood forecasts & warnings
- Flood safety tips



Ames, IA/Iowa State University  
(Associated Press)



# National Weather Service in Iowa





# NWS structure

U.S. Department of  
Commerce (DOC)



National Oceanic and  
Atmospheric Administration  
(NOAA)

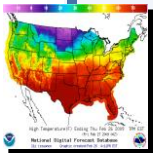


National Weather Service  
(NWS)



*NWS Des Moines office*

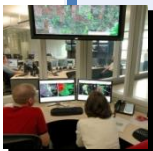
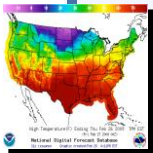
National Weather Service  
*Protecting Lives and Property*



# NWS mission

The National Weather Service provides weather, water, and climate forecasts and warnings for the United States, its territories, adjacent waters, and ocean areas **for the protection of life and property and the enhancement of the national economy.**

National Weather Service  
*Protecting Lives and Property*

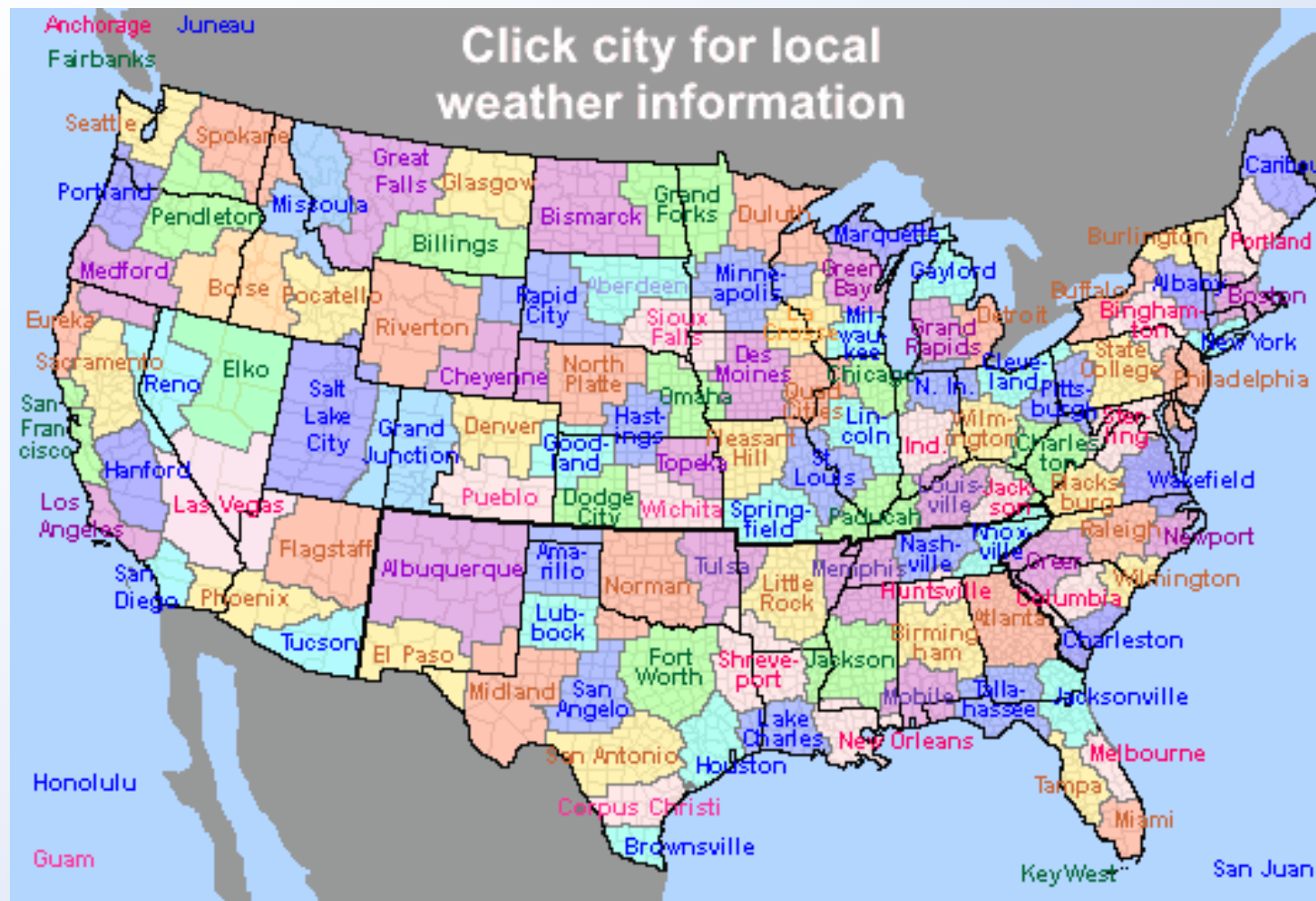


*NWS Des Moines*

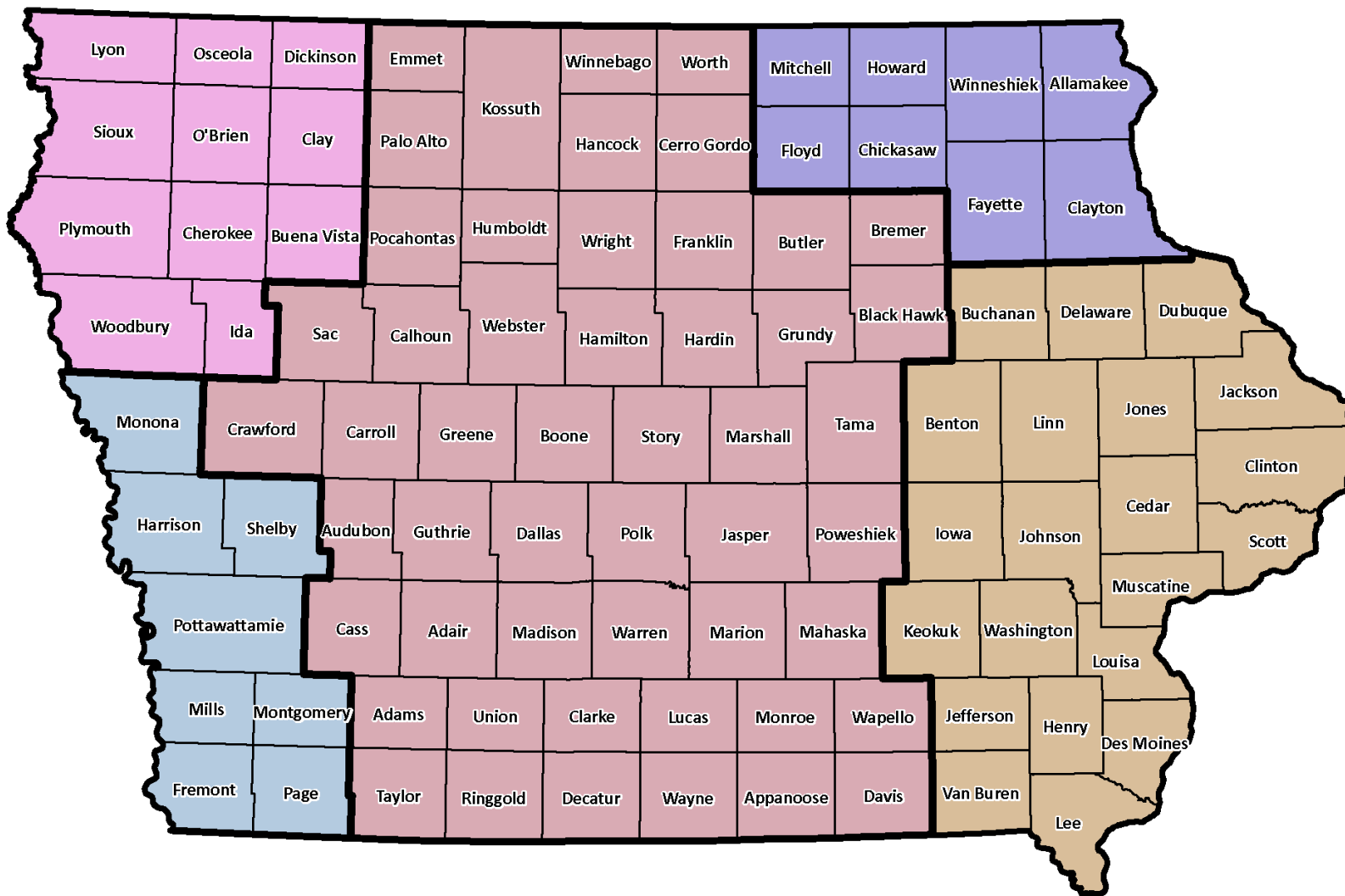


# National Weather Service

## Protecting Lives and Property

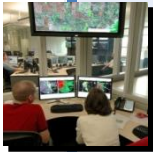
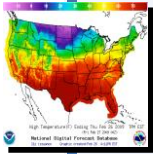


# Iowa Counties & Servicing NWS Offices



Des Moines, IA
  Omaha, NE
  Sioux Falls, SD
  La Crosse, WI
  Quad Cities, IA/IL

# Flood impacts in Iowa



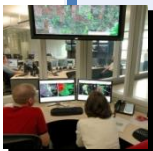
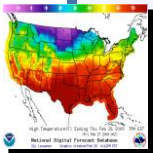


# Flood impacts in Iowa

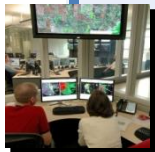
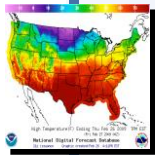
- Iowa—#2 for flood damage since 1950
- 90% of damage in natural disasters is caused by floods & mud/debris flows
  - *Annually, ~\$5 billion in damage in U.S. (#1)*
  - *Annually, ~90 deaths in U.S.*
- Cedar Rapids, Iowa—2008
  - *~\$3 billion in damage*



Colfax, IA—August 2010



# Finding flood forecasts & warnings



NOAA's National Weather Service - Mozilla Firefox
http://www.weather.gov/
NOAA's National Weather Service
weather.gov
National Oceanic and Atmospheric Administration's
National Weather Service
Site Map News Organization Search
Local forecast by "City, St"
Sign-up for Email Alerts
XML RSS Feeds
Warnings
Current
By State/County...
UV Alerts
Observations
Radar
Satellite
Snow Cover
Surface Weather...
Observed Precip
Forecasts
Local
Graphical
Aviation
Marine
Hurricanes
Severe Weather
Space Weather
Fire Weather
Text Bulletins
By State
By Message Type
National
Forecast Models
Numerical Models
Statistical Models...
MOS Prod
GFS-LAMP Prod
Climate
Past Weather
Predictions
Weather Safety
Weather Radio
Hazard Assmt...
StormReady /
TsunamiReady
Skywarn™
Education/Outreach
Information Center

### ...Historic Tornado Outbreak Across the South...

Expert analysis by NOAA Research and the National Weather Service indicate that there were a total of 312 tornadoes during the entire outbreak from 8 am EDT April 26 to 8 am April 28. There were an estimated 226 tornadoes during the 24 hour-period from 8 am April 27 to 8 am April 28 from this tornado. [Details...](#)

Warnings & Forecasts
Graphical Forecasts
National Maps
Radar
Water
Air Quality
Satellite
Climate

Warnings By State
Go
Click Below To Zoom In.
Tabs At A Glance

Created: 05/02/11 at 18:18 UTC

American Samoa • Guam • Puerto Rico/Virgin Islands

Flash Flood Warning
Civil Emergency Message
High Wind Warning
Flash Flood Watch
Flood Warning
Gale Warning
Freeze Warning

Winter Weather Advisory
Flood Advisory
Small Craft Advisory
Lake Wind Advisory
Wind Advisory
Frost Advisory
Flood Watch

Gale Watch
Freeze Watch
Coastal Flood Statement
Special Weather Statement
Hazardous Weather Outlook
Hydrologic Outlook
Short Term Forecast

High Res | Map FAQ | Map Comments | What is UTC?

Warnings	Forecasts	Climate	Information Center	Administrative
Current	Local	Past Weather	Tsunamis	Headquarters
State/County	Graphical	Predictions	Publications	For NWS
RSS/XML	Aviation	Heating/Cooling Days	Proper Sting for	Employees
UV Alerts	Marine	Monthly Temps	Weather Instruments	Mission Statement
	River/Stream	Records	Damage/Fatality/Injury	Strategic Plan
<b>Observations</b>	Hurricanes	Long Range Forecasts	Statistics	Headline Archive
Radar	Severe Weather	Astronomical Data	Admin maps/charts	International
Satellite	Fire Weather		Brochures	Legislative Affairs
Snow Cover	Sun/Moon	<b>Education/Outreach</b>	Digital Forecast Info	National Centers

**FEMA**

Spanish

Are you a disaster survivor?

**Apply for Assistance**

- Full Site, Mobile Site
- Call (800) 621-3362
- TTY (800) 462-7585

3 Step Guide for Assistance

State Disaster Pages, Recovery Tips

Disaster Recovery Centers

**DisasterAssistance.gov**  
ACCESS TO DISASTER HELP AND RESOURCES

FEMA Blog | Facebook | Twitter | YouTube

SHARE



NWS Des Moines, IA - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.crh.noaa.gov/dmx/

NWS Des Moines, IA

weather.gov

National Weather Service Weather Forecast Office  
Des Moines, IA

Home Site Map News Organization Search for:  NWS All NOAA Go

Local forecast by "City, St" or Zip Code

City, St  Go

XML RSS Feeds

Current Hazards  
Watches/Warnings  
Outlooks  
Submit Report

Current Conditions  
Observations  
Radar  
Satellite  
Snow Cover  
Snowfall Analysis  
Precip Analysis

Forecasts  
Forecast Discussion  
Local Area  
Activity Planner  
Aviation Weather  
Fire Weather  
Severe Weather  
Winter Weather  
Hurricane Center

Hydrology  
Rivers & Lakes

Climate  
Local  
National  
Drought  
More...

Weather Safety  
Preparedness  
Weather Radio  
StormReady  
SkyWarn

Additional Info  
Items of Interest  
Education Resources  
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Top News Archives  
Our Office

Contact Us  
Contact Info

Top News of the Day

National April 2011 Tornado Information

Watches & Warnings Observations Forecast Graphics Rivers & Lakes Climate Fire Weather

Click on the map below for the latest forecast.



Read watches, warnings & advisories

Zoom Out

Flood Warning

Hazardous Weather Outlook

Last map update: Mon, May 2, 2011 at 1:22:15 pm CDT

Latest Conditions in Des Moines, IA Choose Your Front Page City

May 2  
12:54 pm  56°F (13°C)  
A Few Clouds

Select A City:

Weather Story Radar Satellite Weather Map

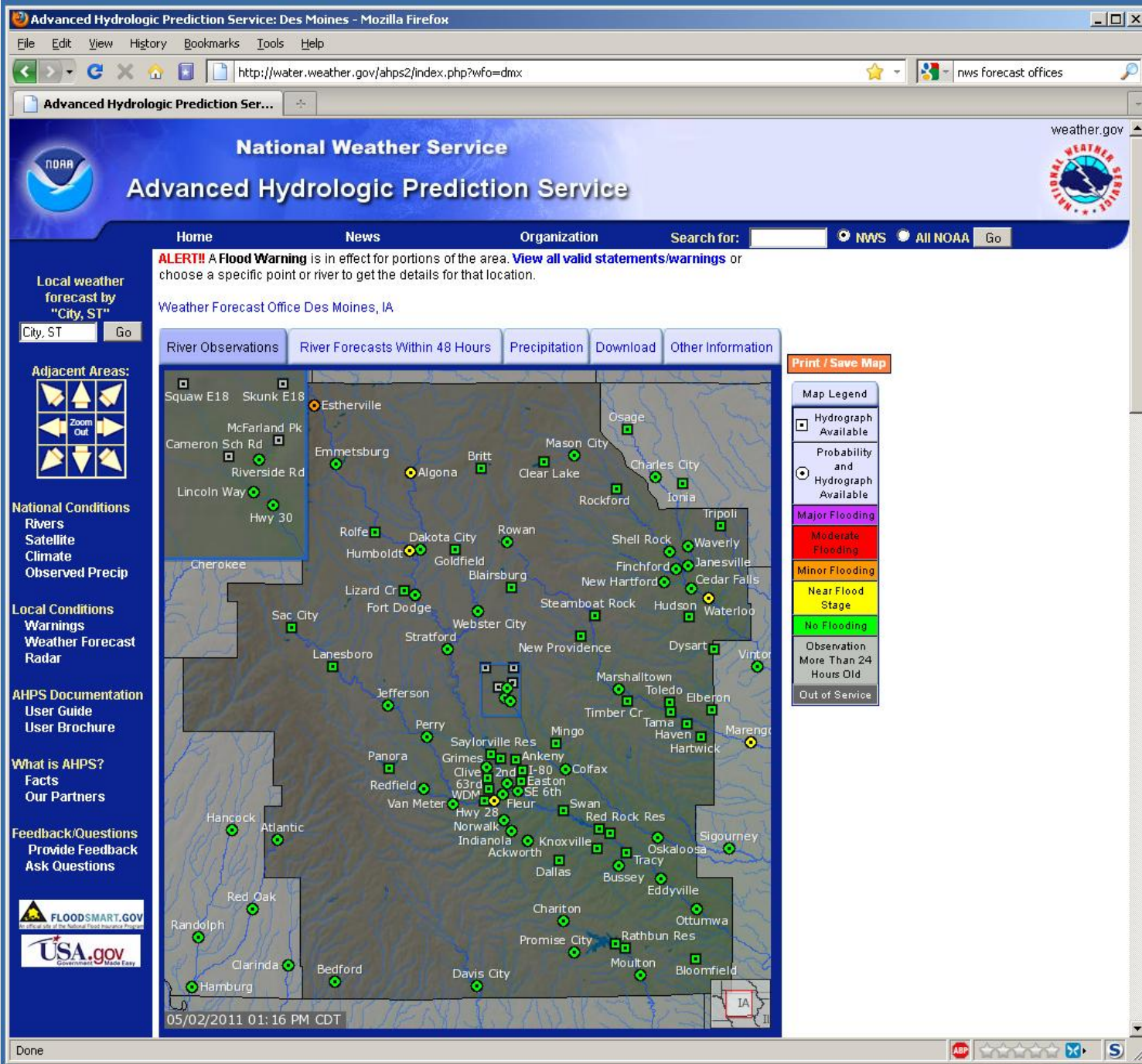
On this day in Iowa weather history...

1908: The last several days of April and first few days of May saw unseasonably cold weather across Iowa, with light snow falling over much of the state on April 26-27 and several rounds of frost and freezing temperatures following through May 3rd. Temperatures bottomed out on the 2nd dropping below freezing at nearly every station in the state. Washta reported a morning low of 13 F which remains the coldest reading on record in Iowa in the month of May. Other low temperatures included 17 F at Atlantic, 18 F at Harlan, and 19 F at Bedford and Little Sioux. Damage to fruit crops

http://water.weather.gov/ahps2/index.php?wfo=dmx











7-Day Forecast for Latitude 41.03°N and Longitude 92.44°W - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://forecast.weather.gov/MapClick.php?CityName=Ottumwa&state=IA&site=DMX&textField1=41.0199&tex
nws forecast offices

7-Day Forecast for Latitude 41.03°N...

Your National Weather Service forecast

Ottumwa IA

Enter Your "City, ST" or zip code
Go
BOOKMARK

NWS Des Moines, IA
Point Forecast: Ottumwa IA [Similar City Names]
41.03°N 92.44°W
Forecast Valid: 9am CDT May 3, 2011-6pm CDT May 9, 2011
Mobile Weather Information | En Español
Last Update: 8:25 am CDT May 3, 2011

Forecast at a Glance

Today	Tonight	Wednesday	Wednesday Night	Thursday	Thursday Night	Friday	Friday Night	Saturday
Mostly Sunny Hi 54 °F Lo 34 °F	Mostly Clear Lo 34 °F	Sunny Hi 67 °F	40% Chance Showers Lo 46 °F	50% Chance Showers Hi 65 °F	Partly Cloudy Lo 43 °F	Sunny Hi 70 °F	50% Chance Tstms Lo 52 °F	Partly Sunny Hi 69 °F

Detailed 7-day Forecast
Current Conditions [Move Down]

Hazardous weather condition(s):
view Yesterday's Weather

Hazardous Weather Outlook

Today: Mostly sunny, with a high near 54. North northwest wind between 10 and 13 mph.

Tonight: Mostly clear, with a low around 34. North northwest wind between 6 and 9 mph becoming calm.

Wednesday: Sunny, with a high near 67. Calm wind becoming south southeast between 8 and 11 mph.

Wednesday Night: A slight chance of showers, then a chance of showers and thunderstorms after 1am. Mostly cloudy, with a low around 46. South wind between 10 and 13 mph. Chance of precipitation is 40%. New rainfall amounts of less than a tenth of an inch, except higher amounts possible in thunderstorms.

Thursday: A chance of showers. Partly sunny, with a high near 65. South southwest wind 10 to 15 mph becoming west northwest. Winds could gust as high as 21 mph. Chance of precipitation is 50%. New rainfall amounts between a tenth and quarter of an inch possible.

Thursday Night: Partly cloudy, with a low around 43.

Friday: Sunny, with a high near 70.

Current Conditions

Ottumwa Industrial Airport
Lat: 41.11 Lon: -92.45 Elev: 842
Last Update on May 3, 7:53 am CDT

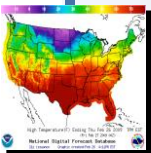
'Fair'
36 °F (2 °C)

Humidity:	73 %
Wind Speed:	NW 9 MPH
Barometer:	30.29" (1026.2 mb)
Dewpoint:	28 °F (-2 °C)
Wind Chill:	29 °F (-2 °C)
Visibility:	10.00 mi.
More Local Wx:	3 Day History:

Radars and Satellite Images

Detailed Point Forecast [Move Up]

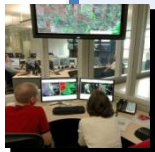
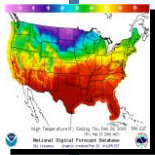
Click Map for Forecast
Disclaimer







# Flood safety tips

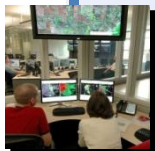
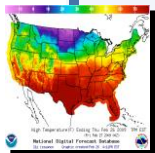


# Flood safety tips

- **Know the threat**
  - *Flood vs. flash flood*
  - *What, where & when*
- **Listen for more information**
  - *NOAA Weather Radio, television & radio stations*
- **Be prepared**
  - *To evacuate quickly*
  - *To move to higher ground quickly*



*Mud Creek fatality—Des Moines, IA  
(KCCI-TV8)*



# Flood safety tips

- **Stay away from floodwaters**
  - *6" of moving water*
  - *Includes children!*
- **Turn around don't drown!**
  - *2 ft of moving water*
- **Be especially cautious at night**





An aerial photograph showing a multi-lane highway (I-35) running vertically through the center of the frame. To the right of the highway, a large area of land is flooded, with water reaching the edges of fields and some trees. In the foreground, there is a complex interchange with several curved ramps. To the right of the interchange, there are several large, rectangular industrial or commercial buildings. The background shows more green fields and a hazy horizon under a clear sky.

**Thank you**

<http://www.weather.gov/desmoines>

<http://www.floodsafety.noaa.gov/>