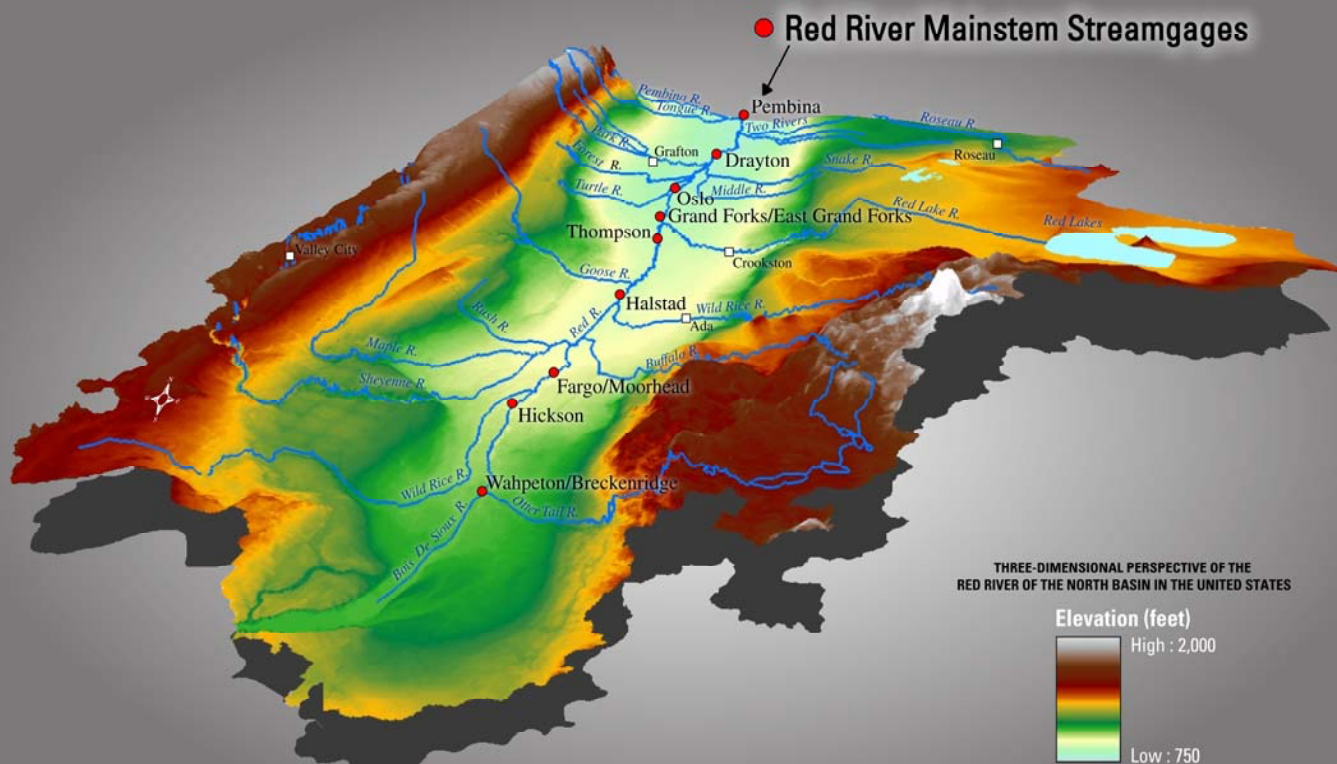




Changes in How the USGS Communicates Flood Information: The NDWSC Experience

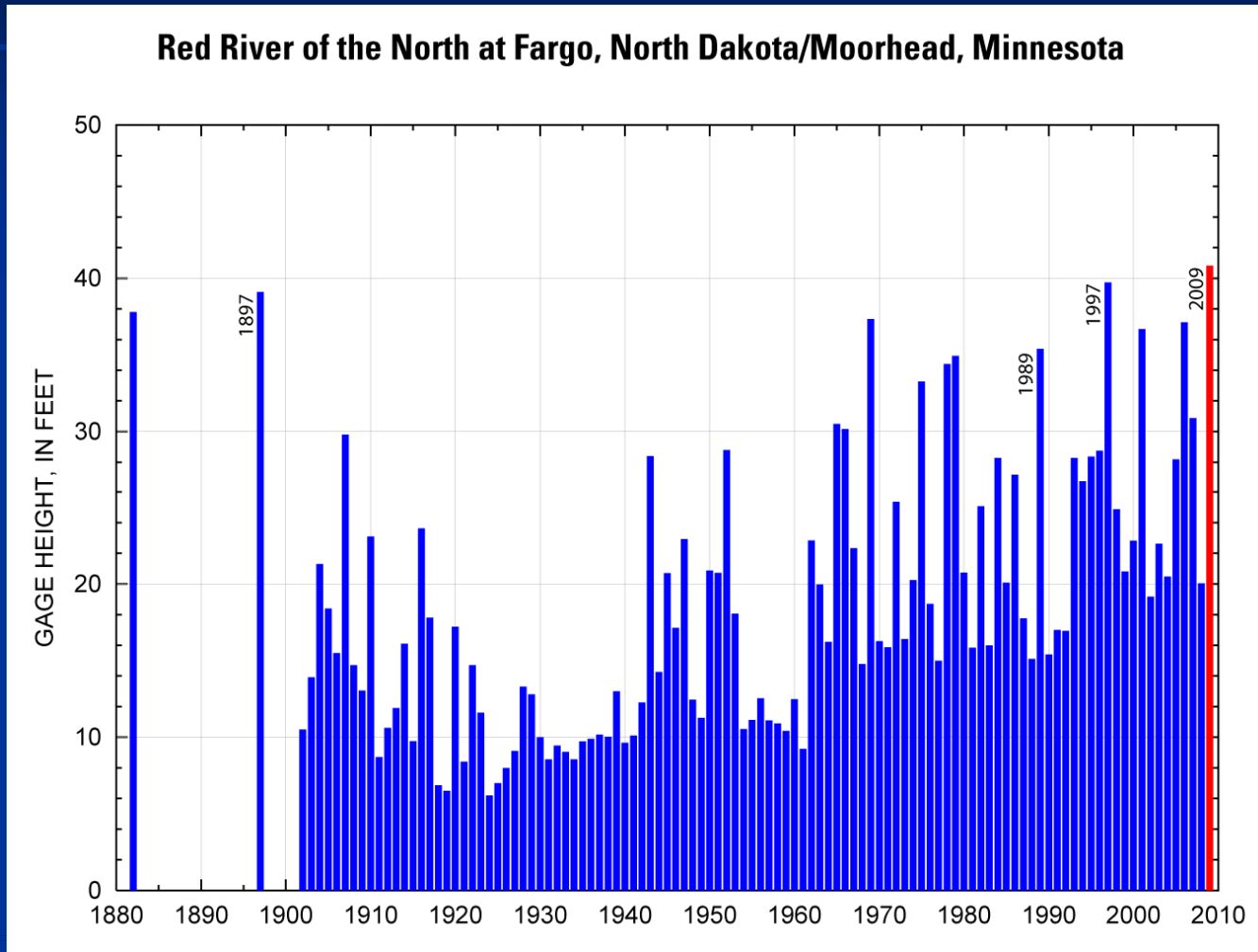
Red River of the North



U.S. Department of the Interior
U.S. Geological Survey



History of Flood Communications



History of Flood Communications

1989

- USACE calls NDWSC to request special measurement
- USGS responds in 2 days
- Important field observations relayed to office via pay phone

History of Flood Communications-- continued

1997

- NWS hosts daily “flood fighter” conference calls
- Demand for USGS streamflow measurements and special hydrologic field observations increases
- Streamflow measurements and field observations relayed to office via cell or pay phone usually within 2-3 hours

History of Flood Communications-- continued

1997

- All data relayed to Federal, State, and local agencies from “Jerry Lewis” phone bank
 - Consumed S.W. specialist and Data Chief
- Press received information via phone conversations
- No time for press releases



History of Flood Communications-- continued

2009

- Based on past data sharing experiences, NWS asks USGS to join “flood fighters” chat room to convey and share discharge measurements and other hydrologic information
- Press received information via phone conversations
- No time for press releases from WSC, but great help from Office of Communications

Modes of Flood Communications

- **Government Officials**

- Press releases, Agency web pages, RSS feeds, email
- TV, Radio, and Newspaper

- **General Public**

- Internet blog, open comments on internet, and YouTube videos

National Weather Service Chat

ND Winter 2009



National Weather Service

Mike DeWeese

*“We need to communicate more effectively
with the USGS this Spring.”*

USGS

Tony Koebele

“Go away. Leave me alone.”

NWS Emergency Communication Requirements

- Real-Time Information
- Easy access to data
- Feedback

Why doesn't the NWS use the Email and the USGS Website?

Email



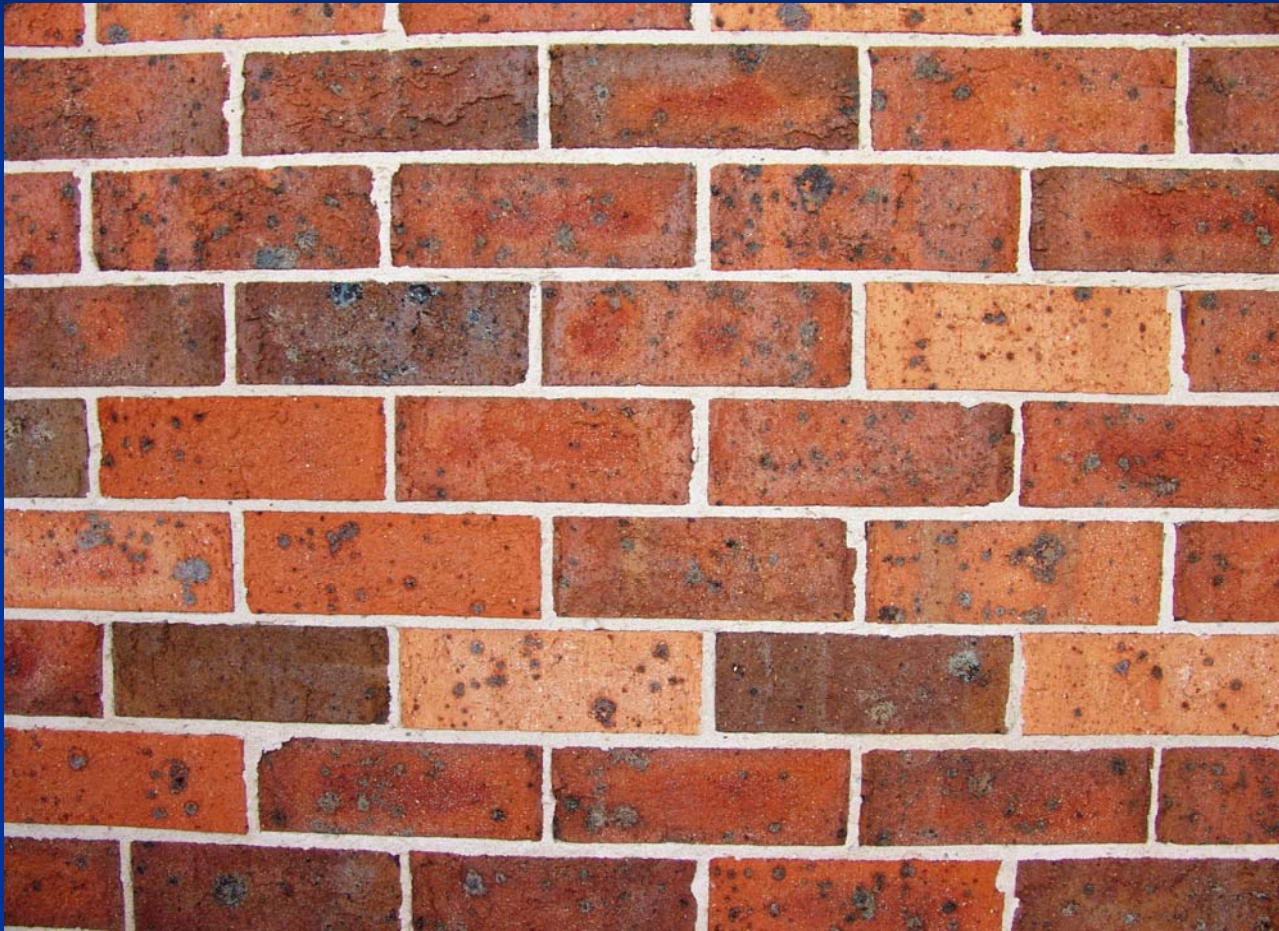
Measurement via Web Real-time?



Access to data via Web



Feedback via Web



NWS Chat Instant Messaging



NWS Chat Good News

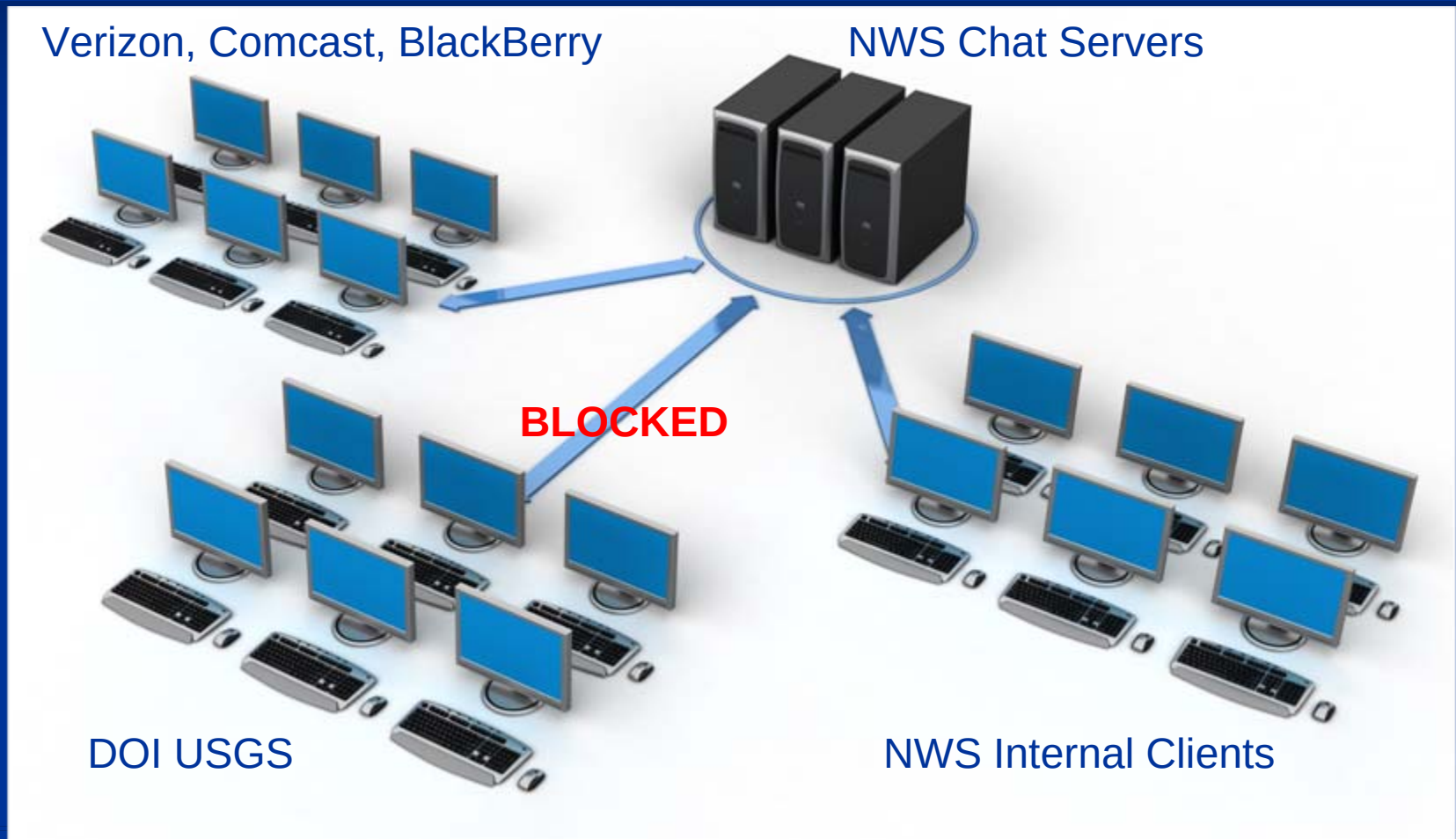
- No cost to USGS
- Maintained by NWS
- Individual logins
- Strong passwords
- Message logs backed up and archived

NWS Chat Bad News

- Not compatible with Lotus Instant Messaging
- NWS Chat Client Pidgin - Banned by DOI
- NWS Chat Blocked by Firewalls



NWS Chat Availability



We may experience Spring flooding



Is a text message more dangerous than a flood?



Emergency Waiver Process

- Make business case
- Wait for approval
- Request firewall change
- Install, configure, and troubleshoot

Emergency Waiver Request

- Day 1 submitted Emergency Waiver request to Alan Wiser, Chief, IT Security Operations Team

Mr Owl, how many days does it take to get an emergency waiver?



Emergency Waiver Request

- Day 15 Alan Wiser submitted his 3rd request to DOI for waiver
- Day 15 NWS Client Pidgin approved for use on USGS network

Next Firewall Waiver

- Firewall Wavier was handled quickly
- Unable to receive return traffic from NWS Chat Server
- We began troubleshooting

While we were troubleshooting



...and troubleshooting



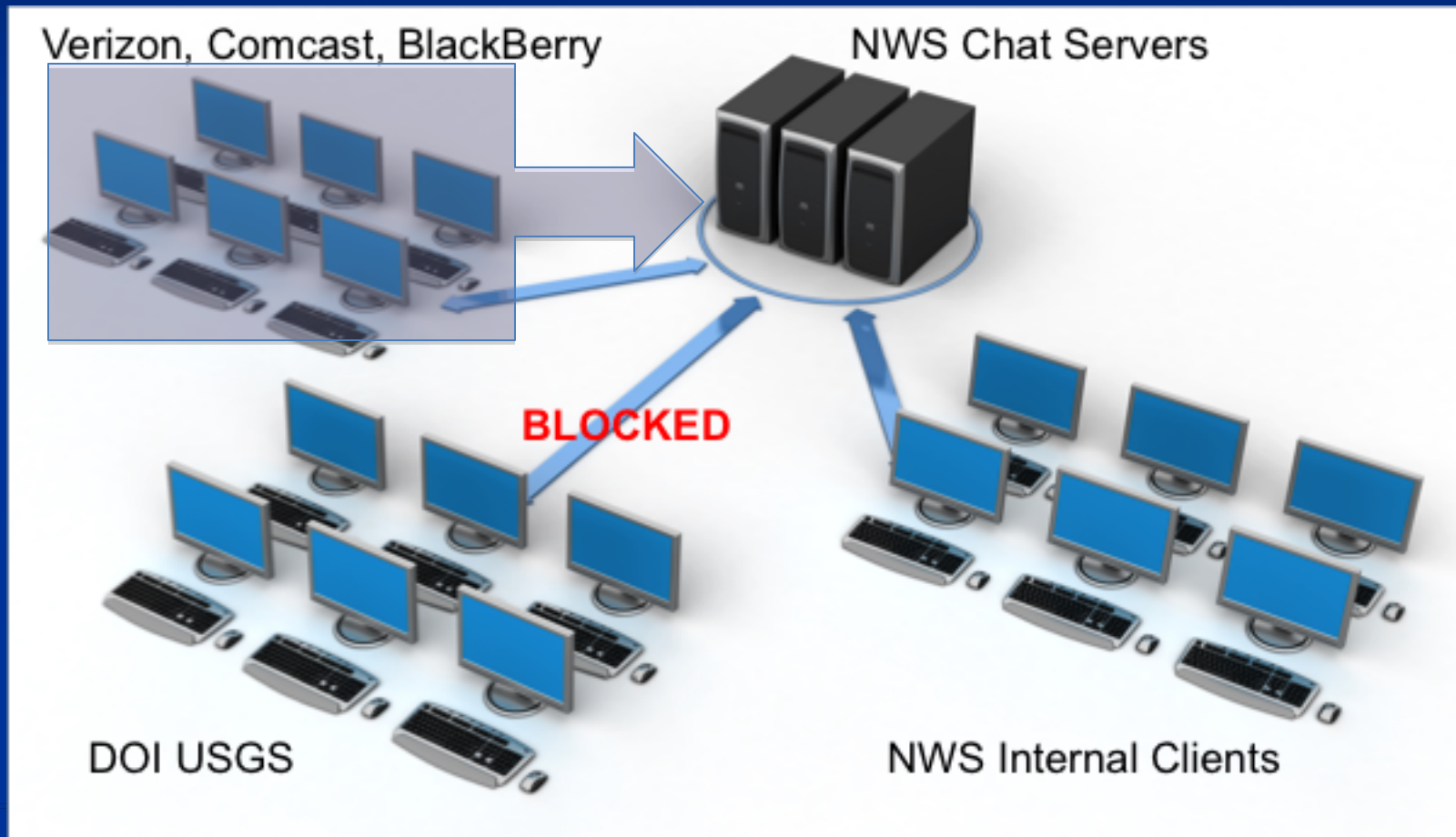
...and troubleshooting



Day 21

- We placed DOI network troubleshooting on hold
- Utilized Verizon Wireless Cards to access NWS Chat

Verizon Wireless Access



Archived Chat Log

April 15, 2009

17:48 <usgs-lorraine.d.leblanc> 05059000 Sheyenne near Kindred, Today at 1124, GH=21.13, Q=6020

17:48 <ncrfc-andrea.holz> Kindred has 6020 and Gol Bridge has 5580? that doesn't make sense to me

17:51 <ncrfc-andrea.holz> Lorraine: maybe you could verify what mike deweese wrote down for Gol Bridge (Cass county 9)

17:51 <usgs-lorraine.d.leblanc> 05083580 M Br Forest River trib near Adams, Today at 0940, Q=321

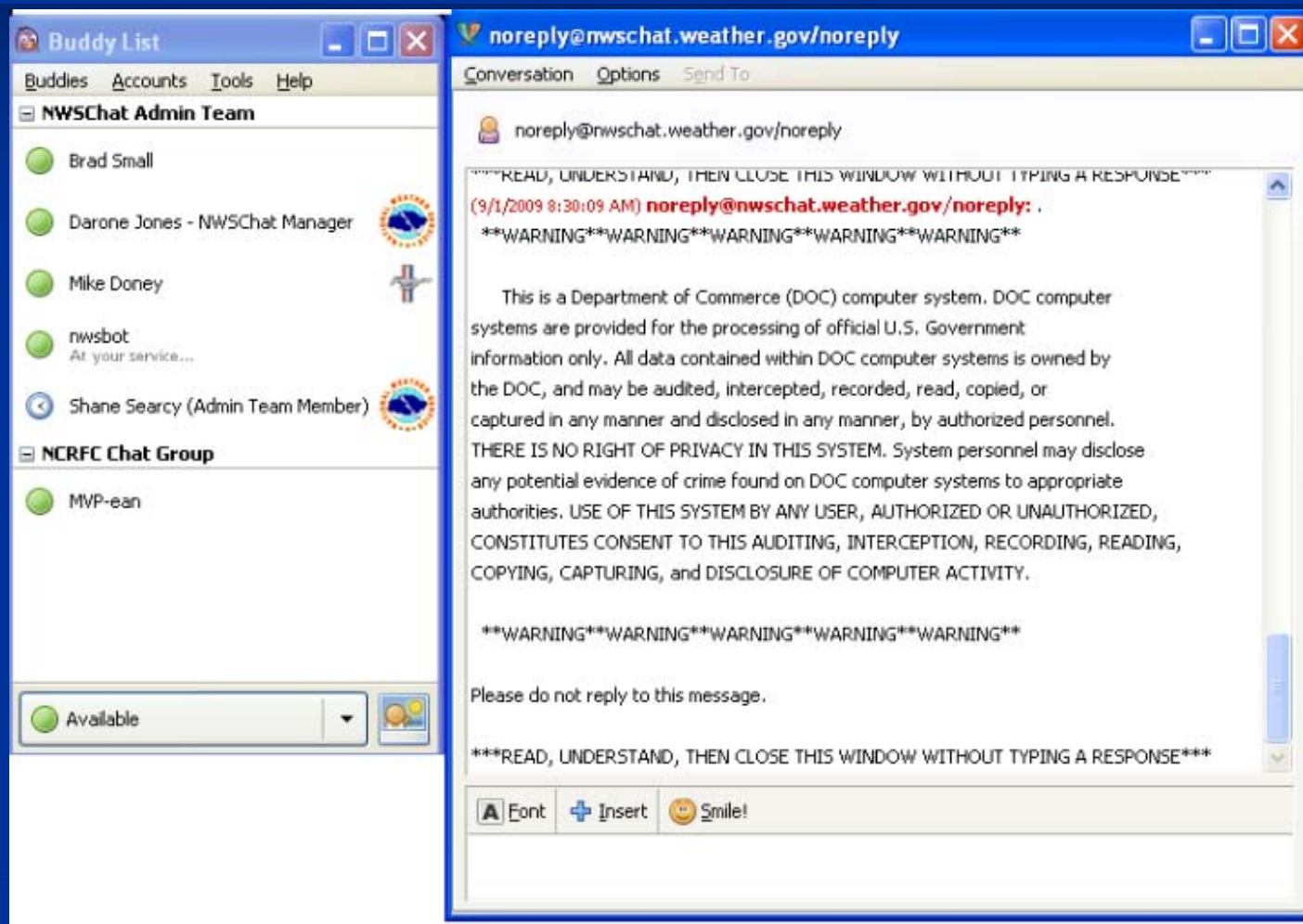
17:53 <usgs-lorraine.d.leblanc> Yes, Andrea I have 5580 at 1005 for Gol Bridge (SE Cass 9)

17:53 <nws-mark.ewens> Andrea - Mark W emailed a scan of the VC article from the Fargo Forum, just an FYI.

17:54 <usgs-lorraine.d.leblanc> Sheyenne River nr Harvey, Today at 1033, GH=9.91, Q=1140

17:57 <ncrfc-andrea.holz> thanks lorraine

NWS Chat Windows



Finally

September 1, 2009, waiver for NDWSC in place

USGS waiver pending.

More Information

Mike.DeWeese@noaa.gov

<https://nwschat.weather.gov/emPidgin.php>

<http://www.pidgin.im/>