

## Handling a Crisis When Communications are Devastated: The Great Easter 1913 Flood

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<http://nationalcalamityeaster1913flood.blogspot.com/>

Greater Cincinnati Crisis Communication Workshop, Thursday, 28 May 2015

## Crisis communications

- *How* you communicate (infrastructure)
- *When* you communicate (timeliness)
- *What* you communicate (message)
- *Who* takes charge (leadership)
- Lessons and cautions

## Case study: The Great Easter 1913 Flood

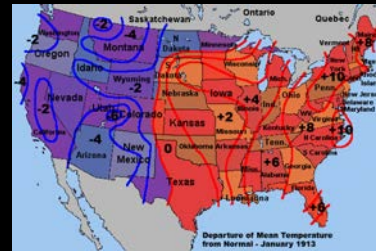
### I. THE DISASTER

A meteorological 1-2 punch:

1. Good Friday, March 21 decimated communications
2. Easter Sunday, March 23 + week "an epidemic of disasters"

## Winter 1912 - 1913

- Unseasonably warm and wet winter, (January record floods), saturated soils

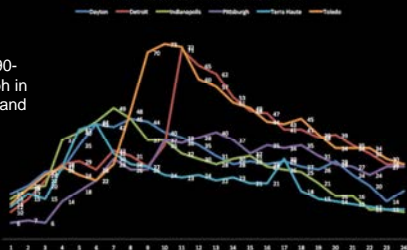


<http://brisray.com/flood/flood1.htm>

## Good Friday, 1913

March 21, 1913  
Weather Bureau Hourly Sustained Winds

Gusts 90-100 mph in Toledo and Buffalo!



The Weather Bureau Offices in Detroit reported: "A gale of unprecedented severity swept over southern Michigan. Buildings were razed, roofs blown off, chimneys toppled over, signs blown down, trees broken and uprooted, overhead wires prostrated, and several lives lost as a result of the storm's fury." Monthly Weather Summary, March 1913

Sarah Jamison, NWS

## Effects of hurricane-force winds and sleet



NO DATA, NO WARNINGS!!

Bell Telephone News

Easter Sunday, March 23, 6 PM:



"Wedge" tornado (RFD dust makes it look wider than it is tall – also widespread reports of reddish dust left over everything)

Easter  
tornado  
through  
downtown  
Omaha,  
killing 109 –  
*still*  
Nebraska's  
deadliest



It didn't deal death alone...  
Council Bluffs, Iowa



Omaha and  
Council  
Bluffs  
tornadoes  
(both EF-4)  
were two of  
a major  
tornado  
family  
Easter night



Not four hours later,  
in pitch darkness around 9:45 PM,  
in Terre Haute, Indiana...

...another Easter (EF-4) tornado  
killed 21+



<http://nationalcalamityeaster1913flood.blogspot.com/2015/05/terror-in-terre-haute.html>

<http://mrcc.isws.illinois.edu/1913Flood/communities/terrehaute.shtml>

Also Easter Sunday 3/23,  
torrential rains  
began to fall...and fall...

Dayton, W 4<sup>th</sup> St between Ludlow  
and Wilkinson – water rising...



Lamp posts are ~13 ft high

Dayton Metro

Dayton, watching homes drown



Dayton Metro

Dayton, watching one's livelihood  
wash away (Barney & Smith)



MCD

Hamilton, OH



[http://www.skeeterkitefly.com/Hamilton\\_HighSt.htm](http://www.skeeterkitefly.com/Hamilton_HighSt.htm)

Cincinnati, OH



### Central and southern Ohio: Columbus, Middletown, Marietta, Mount Vernon



### Northern Ohio: Tiffin - 19 fatalities



<http://www.tiffinohio.com/flood/index.htm>

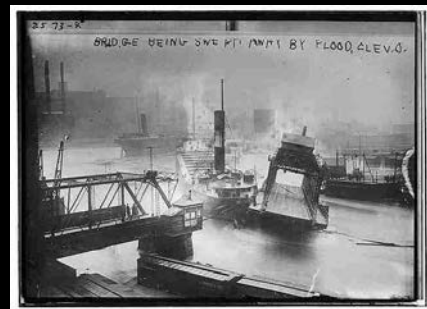
### Fremont (3-4 dead)



Water rushing thru downtown Fremont; Sandusky River; State and Front Streets

<http://archive.thenews-messenger.com/article/20130316/NEWS01/303160033> Public largely has forgotten Ohio's Flood-1913

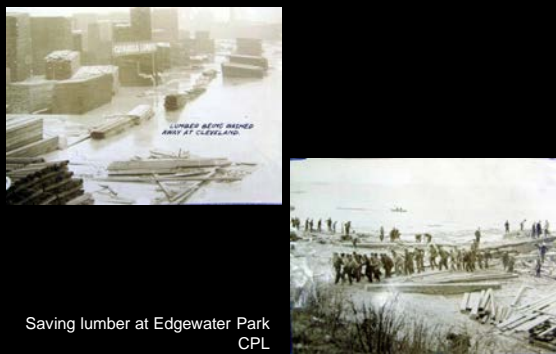
### Cleveland



March 26, 1913

CPL

### Cleveland



Saving lumber at Edgewater Park  
CPL

### Cleveland

Report of the Special Committee of the Council Appointed to Investigate and Report on the Improvement of the Lower Cuyahoga River, July 1913 CPL



## Akron, OH – Dynamiting 7 locks summarily ended Ohio's canal era

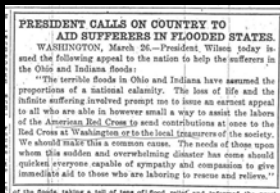


## Entire state of Ohio devastated

- Gov. James Cox: "The property loss may be safely estimated to be greater than \$300,000,000" (documented ~\$200 million)
- Cox: "the disaster in Ohio ... was greater than that of the San Francisco earthquake"
- Ohio death toll ~600 (Red Cross 10/1913)
- 20,200 houses destroyed; another 35,500 houses damaged; 16,000 families assisted
- 1.25 million Ohioans afflicted (out of 4.75 million state population)

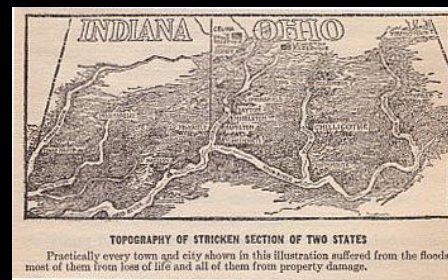
Not "just" Ohio...

'Our National Calamity'...



CPD 3/27 p4

## 1913 also Indiana's worst flood



## Indianapolis, Indiana



IHS

## Beardstown, Illinois...



## Maysville, Kentucky



(Note the "boat's eye view" camera angle)

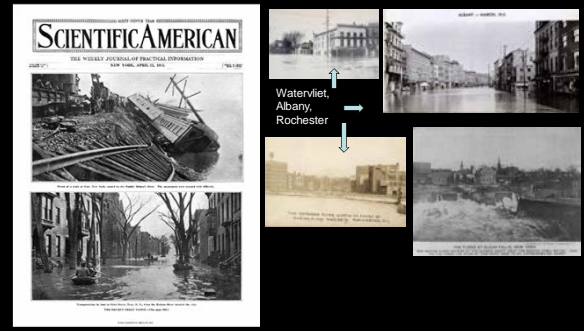
## Parkersburg, West Virginia



## Pennsylvania



even New York  
(might have received more attention under different circumstances)



Rolling disaster down Mississippi River to ~May 1



A. E. Henry NWS  
Bulletin Z, 1913



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## Widely recognized as a national calamity in 1913

(Origin of the title for my research weblog)



"Instant books" published about it in 1913 (in collection of Trudy E. Bell): <http://nationalcalamityeaster1913flood.blogspot.com/2013/02/profitting-from-pain.html>

1913 storm system and flooding was the United States' **\*most widespread natural disaster\*** ~1,000 dead; \$300 million (1913\$)

= ~\$115 billion in 2013 dollars  
= Hurricane Katrina centered on the industrial north!

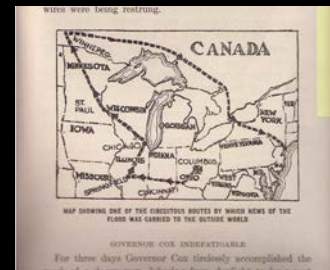
<http://nationalcalamityeaster1913flood.blogspot.com/2013/03/like-war-zone.html>

## II. INFRASTRUCTURE

- Why so deadly in Ohio: NO DATA, NO WARNING – communication blackout since telegraph and telephone wires downed 3/21



Communications disrupted for days – New York stock exchange cut off from Chicago's



## Disrupted mail, comms, trains in eastern half of nation (no radio)



## III. WHO TOOK CHARGE 1

- Ohio Gov. James M. Cox in Columbus: "Every man must be on the job all the time"
- Ohio National Guard, railroads, state public health, mayors, appeals to U.S. public for \$
- Worked closely with telephone company: Green and Bell
- Evening press briefings
- Image of cool calm amid chaos



James M. Cox (1870-1957); "Boy publisher" Dayton *Daily News*; US House of Representatives; Governor Ohio

### III. WHO TOOK CHARGE 2

- In Dayton, NCR president John H. Patterson – turned his hilltop factory into relief HQ
- Built ~200 rescue boats, housed and fed flood refugees
- ‘whirlwind’ fund-raising to finance flood control
- Let press and photographers follow him everywhere



John H. Patterson (1844-1922); Founder NCR; long concerned about floods; unethical but paternalistic; technically a felon

### III. WHO TOOK CHARGE 3

- Individual telephone operators and wire chiefs (Bell and Green in OH, Wampler in IN)



More high-wire horror at <http://nationalcalamityeaster1913flood.blogspot.com/2014/02/high-wire-horror.html>



Long Lines

BTN

### III. WHO TOOK CHARGE 4

- Newspapers: lifeline (typesetting by motorcycle power), official notices



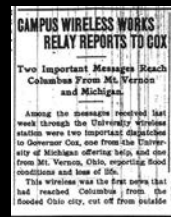
Cleveland Plain Dealer 3/25, 3/27, 4/1



Columbus Citizen 3/26, 3/27

### III. WHO TOOK CHARGE 5

- High school and college students with new technology of “wireless telegraphy” (radio)



More about wireless to the rescue at

<http://nationalcalamityeaster1913flood.blogspot.com/2014/04/wireless-to-rescue-birth-of-emergency.html>

OSU Lantern 4/2

Columbus Citizen 3/26

### “The sun is shining in Dayton!”

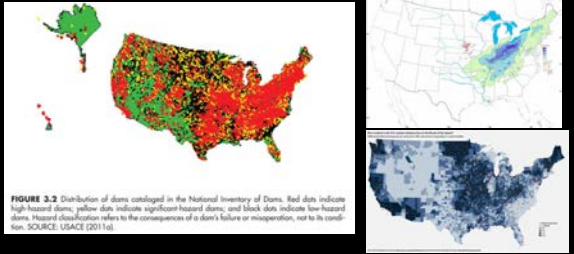
- Lone telephone operator John Bell direct line to Cox in governor’s office 24/7
- Dayton *Daily News* flashed first word from flood-stricken Midwest to the world
- Patterson kept flooded Dayton *Daily News* publishing on NCR printing press
- Dayton *Daily News* publisher Cox, newly elected Ohio governor, got a newspaper press rushed from Columbus to Dayton

### IV. LESSONS AND CAUTIONS 1

- “This 1913 pattern *definitely could happen again*. In fact, whenever we see a slow-moving winter storm pattern of deep lows and blocking highs, that’s an absolute signal there will be significant flooding somewhere around the Midwest, depending on the details of placement.”
- Sarah Jamison, senior hydrologist, National Weather Service, Cleveland
- <http://nationalcalamityeaster1913flood.blogspot.com/2012/12/being-very-afraid.html>

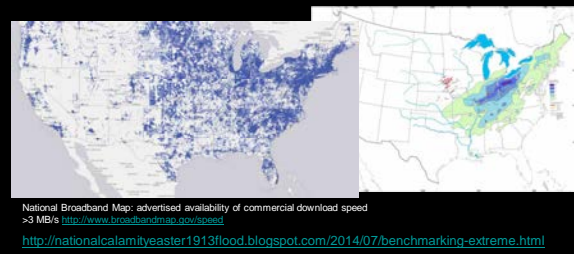
## IV. LESSONS AND CAUTIONS 2

- In harm's way today: high-hazard dams, nuclear power plants, toxic waste dumps...



## IV. LESSONS AND CAUTIONS 3

- ...communications, cell towers, internet servers...



## IV. LESSONS AND CAUTIONS 4

- Think *LOW tech*: If big power outage, *can't* count on land lines, cell phones, TV, internet, cell phones, satellites (battery life; wet equip.)
- Think *ingenious initiative*: linotypes and presses with motorcycles, etc.
- Think *independent*: If communications are down, will have limited central coordination

## IV. LESSONS AND CAUTIONS 5

- Think *collaborative*: political leaders with communications engineers (Cox: Green "electric scout" Ralston: Wampler "night governor")
- Think *setting tone* for public confidence (Cox 38 hours, son, torches)

## IV. LESSONS AND CAUTIONS 6

- Think communications plan for the *long* slog to recovery – months, years, a decade



## Power of water: Chillicothe



## One of the ironies of flood is fire



## Public health



## Damage to farms



MCD

## Thank you!

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This presentation is dedicated to  
Craig B. Waff, Ph.D., May 3, 1946 - June 12, 2012  
Husband, father, colleague, friend,  
who was with me in my 1913 flood research  
from the very beginning in 2003



Publications and research papers on 1913 disaster  
available at <http://trudyebell.com/1913flood.php> and  
<http://nationalcalamityeaster1913flood.blogspot.com/>



Timeline, Ohio  
Historical Society



Ohio



The Rotarian



New York  
Archives

Two articles in engineering  
magazine *The Bent* of TBI



Traces, Indiana  
Historical Society



Arcadia book *The Great  
Dayton Flood of 1913*

