Southern Nevada Impacts Associated with Tropical Moisture from Hurricane Norbert

Michael Paddock, Ph.D.,
Justin Pullin, and
Caleb Steele

National Weather Service
Las Vegas, Nevada
Outline

• Brief Overview of Key Components Leading to Such a High Impact Event on September 8
• Societal and Economical Impacts
• Discussion of NWS Las Vegas Products and Services
Moapa Valley Rainfall

Radar – 2:00 PM PDT
8 September 2014
Impacts

- Flood water exceeded the I-15 drainage system

[Image: Courtesy: Las Vegas Sun]

[Image: Courtesy: LindiMoo]

[Image: Courtesy: Shane Dukeman]

[Image: Courtesy: 8 News Now]
**Impacts**

- More than 20 miles of I-15 were washed out
- Nearby residents and travelers had to take a 3-hr detour along rural highways
- $5 million to repair I-15
- One lane of I-15 opened in each direction within 5 days
  - Some long-haul truck restrictions remained
Impacts

- 91 homes damaged in Moapa
- 48 homes damaged in Overton and Logandale
- More than 190 people evacuated
- More than $1 million in damages to Clark County infrastructure, ~66% was in the Moapa Valley
- Several swift water rescues
- Power plant employees stranded
- Union Pacific Railroad tracks damaged – services suspended
- Schools opened as shelters
- Red Cross served 209 meals
- 1,449 clean up items distributed to families
- 5 medical and mental health volunteers assisted
• First mention of tropical moisture on social media.
• Email weather briefing sent to core partners.

3 Sept. 2014
• Social media posts and email briefings to core partners continued.

4 Sept. 2014
• Social media posts and email briefings continued.
• Held a conference call with core partners.
• Issued a Flash Flood Watch for 7th and 8th.

5 Sept. 2014
• Weather Briefings posted in WebEOC.

6 Sept. 2014
• Flash Flood Watch expanded to include Lincoln county.
• Social media posts and email briefings continued.

7 Sept. 2014
• Social media posts and email briefings continued.


**Products/Services**

**Timeline**

- **8 Sept. 2014**
  - 1:17 PM PDT
    - Social media posts as well as email and WebEOC briefings continued.
  - 2:30 – 2:40 PM PDT
    - Flash Flood Warning issued for the Moapa Valley and I-15.
  - 7:45 PM PDT
    - Received reports of possible dam failure and swift water rescues along I-15.
  - 10:45 PM PDT
    - Contacted Flood Control District.
  - 9 Sept. 2014
    - Issued Flash Flood Emergency
  - 1:30 AM PDT
    - Conducted numerous local and national media interviews.
    - Event assessment begins.
    - Talking points created.

- **9 Sept. 2014**
  - 1:30 AM PDT
    - Participated in Clark County EOC conference calls.
  - 10:45 PM PDT
    - Participated in Clark County EOC conference calls.
  - 7:45 PM PDT
    - With treat of additional storms, we deployed to EOC – arriving by 2:30 AM

Courtesy: Las Vegas Sun
9 Sept. 2014
9:00 AM PDT

• Shift change for EOC liaison.

3:00 PM PDT

• Shift change for EOC liaison.

7:00 PM PDT

• Final briefing at EOC.
• Transitioned to remote support

10 Sept. 2014

• Local and national media interviews continued.

22 Sept. 2014

• Participated in daily Clark County conference calls, sometimes twice a day.
• Provided WebEOC briefings at least twice a day

Courtesy: Steve Marcus
“We are so appreciative of the support we are receiving and thankful for all the personnel and volunteers who have made our recovery a priority”

- Aletha Tom, Chairwoman of the Moapa Band of Paiutes Tribal Council

“You guys have been phenomenal”

- Irene Navis, Clark County Emergency Management Director

Contact Information: Michael.Paddock@noaa.gov