

APPENDICES:

Appendix A: AAR Outline

Appendix B: Rough focus call notes

BACKGROUND:

On 06 May 2007, NWK and NWO EOCs were notified of a potential flood event due to large amounts of precipitation forecast for the Missouri River Basin. NWK and NWO activated their EOCs and coordinated flood fight efforts generated by local requests or assistance. The initial forecast predicted flooding that exceeded the large flood events of 1993. Subsequent forecasts and actual flood levels did not come close to the flood levels seen in 1993. The EOCs in both districts stood down in late-May.

The NWK EOC distributed approximately 960,100 sandbags in the May event. And a total of 11-pumps were used in the event. The NWO EOC coordinated with Iowa and South Dakota throughout the duration of the event and provided flood fighting technical assistance and equipment to Hamburg, IA.

In each district, professionalism and responsiveness of all elements within the organization was excellent/exceptional. Both NWK and NWO felt that overall support, coordination, and responsiveness within their commands was excellent. Proactive involvement of senior and experienced decision makers early in the event is another practice to sustain.

AAR FINDINGS:

The primary findings from the AAR session:

1. EOCs and Districts were inexperienced/unexercised in responding to large-scale flood event. It was, however, repeatedly noted that neither district had been through a large-scale event within the last 10-years. Current staff-members had limited experience with flood-fighting. Both districts were, unequivocally, successful in proactively responding to requests for assistance generated by the flooding in the Missouri river basin.
2. GIS and mapping products need to be more integrated at all levels of operations. Both commands noted that GIS (or map) display of the flooding scenario proved to be useful – but not that GIS was not well-integrated into flood-fight operations at the field level or for use in upward-reporting.

AAR METHODOLOGY:

A focus-call was conducted with key participants from NWK, NWO, NWD, and HQUSACE. The AAR Outline is Appendix A. All participants were also invited and encouraged to email comments to Jennifer Chang – NWD.

The following section captures other issues identified in the AAR process including the two findings noted above.

ISSUE SUMMARY

1. Issue: Unexercised EOCs and Districts lacked wide-spread experience to comprehensively understand and execute the PL84-99 flood fighting authorities in a large-scale flood event.

Discussion: It has been over 10-years since either district has responded to a large-scale flood event in their AOR. Overall there was lessened familiarity of the Flood Fight (PL84-99) authorities, the district Flood-Fight SOP and roles and responsibilities to respond to a potentially large event.

Recommendation: Revise Flood-fight SOPs and outline exercise requirements for large-scale flood events. Need to train USACE flood fight teams on the program/authorities to understand the assistance that can be provided. Coordinate standard CCIRs with HQUSACE/UOC. Develop and formalize “battle-captain” role within EOC and their responsibility within flood fight SOP.

2. Issue: Best-practice. Decision Support Template at NWK

Discussion: NWK developed a decision support template to integrate maps, river forecasts, and decision points on various issues that need to be coordinated with local and state entities. Decision support template identified issues/decisions that needed to be addressed based on 12/24/36/48-hour river forecasts along the river.

Recommendation. Sustain this practice. Refine the template as an off-the-shelf product. Support the development of a decision support template at all NWD commands.

3. Issue: GIS / Mapping Products proved to be useful at all level of operations but GIS templates weren't readily available.

Discussion: GIS mapping products need to be integrated throughout the Operations. GIS Maps with integrated data need to be provided to field operations and flood-fight area teams.

Recommendation: Develop AOR specific mapping templates for flood-fight teams, EOC event management, and CCIRs for upward reporting to Division and HQUSACE. Develop off-the-shelf GIS maps of rivers in the AOR. These should be templates that can be rapidly modified with data based on a real-time scenario. Templates could also provide CCIR for upward reporting to Division and HQUSACE.

4. Issue: Communications – NWK's regular data bandwidth was inadequate to support EOC operations during the event.

Discussion: NWK added a DSL line to support EOC connectivity. Reporting and data requirements are more intensive during an event. Will the new USACE IM organization be able to rapidly augment bandwidth needs (dedicated for EOC use) at an acceptable cost in an emergency?

Recommendation: Establish an agreement/SOP with IM to ensure that EOC operations will be supported with adequate bandwidth and troubleshooting support to ensure operational continuity.

ISSUE SUMMARY (Continued)

5. Issue: Communications – NWO VOIP system experienced failure (approx 8 hours) without redundant backup capabilities.

Discussion: EM phone lines were not operable and there was no notice of failure until someone contacted EM personnel via cell phone. Will the new USACE IM organization be able to rapidly provide backup voice communication systems? NWO had an accurately updated emergency phone list that allowed communications to occur via cell-phone. Incoming calls (how were they handled or redirected???)

Recommendation: Determine what kind of VOIP redundancy and notification in case of system outage. Work with EOCs and IM to ensure that 24-hour emergency lines are always viable if the standard phone system goes down.

6. Issue: Intra-District communications should be improved during a large-scale flood event to ensure situational awareness of conditions along district boundaries.

Discussion: District boundaries and assigned-state liaison boundaries don't always align. Consequently, there is a need for greater coordination between adjacent districts to ensure that there is situational awareness of conditions and USACE activities in any given state.

Recommendation: Revise Flood Fight SOPs to ensure that reporting done from field teams in border-areas of state/district boundaries get shared with adjacent districts.

7. Issue: Communications – District coordination with States and FEMA were positive and proactive.

Discussion: Relationships were in place with the other Federal, State, and Local entities. Liaisons were sent to state EOCs (MO, NE, IA, SD) and were factors in maintaining positive State/USACE interactions. Actively participated in FEMA conference calls.

Recommendation: Maintain working relationships with state and local entities.

8. Issue: Reporting – Current ENGLINK sitrep distribution methods are not suitable for Blackberry users (typically command leadership that may be TDY or otherwise unable to access their computers).

Discussion: ENGLINK sitrep releases are not done in blackberry friendly way. Blackberries do not allow users to view attachments or go to websites very easily.

Recommendation: Sitreps should be reformatted and released to ensure that sitrep emails provide all users with BLUF (bottom-line up-front) type of information.

9. Issue: What IF event had escalated to 1993-proportions. What support would have been requested?

Discussion: Both districts agreed that lots of additional engineering support would have been needed. District engineering staffs are shrinking and, in an emergency, there is less capability within the District to manage the surge in workload while continuing to provide day-to-day engineering support.

Recommendation: District flood fight plans might need to include an augmented roster of positions that would be needed if a large-scale flood event occurs.

1. Role Call
2. Moderator Introductions/Ground Rules

Ground Rules for Conducting the AAR.

- Participants are participants, not a passive audience. The facilitator should prepare leading questions and may have to ask it of several people.
- An AAR is a dynamic, candid, professional discussion of events and projects, focusing on performance against the known standards and/or expected outcomes. Everyone involved with the event should participate to share an insight, observation or question that will help identify areas for improvement.
- An AAR is not a critique. No one, regardless of rank, grade, or position has all of the information and answers. AARs maximize learning and continuous improvement by allowing everyone to learn from each other.
- An AAR does not grade success or failure. There are always areas of improvement and strengths to improve as well.
- Round Robin – Each participant will be given a chance to say something. Limited discussion is encouraged to clarify issues and statements. Differing viewpoints should be simply stated but extensive discussion/debate on issues should be minimized.

Primary Focus Areas for AAR:

- District Operations (EOC operations, District support, Command/Control)
- FCCE Programmatic Decisions (Program/policy/regulatory issues and decisions)
- Funding, upward support and upward reporting (Division and HQ roles/responsibilities)

Questions to answer:

- What was supposed to happen?
- What actually happened?
- Why did it happen that way?
- What could be done to improve the way we do it next time?

3. Commander Comments (if any are online)
4. AAR Discussion

We will focus on one-command at-a-time. Each participant will be given a chance to say something. Limited discussion is encouraged to clarify issues and statements. Differing viewpoints should be simply stated but extensive discussion/debate on issues should be minimized. Written/emailed input is welcome, too. (jennifer.c.chang@usace.army.mil)

NWK Round Robin
NWO Round Robin
NWD Round Robin
HQ Round Robin

Mark Clark
Jack Hurdle
Liz Miller
Shannon Leef

NWO
Colleen Horihan
Paula Peters
Pam Graham
Katie Schenk

NWK
Alan Toole
Paul Flamm
Dave Matthews (Geo-Tech)

PAUL FLAMM – AAR some steps taken. Funds requested for formal AAR.

1. Stood up EOC promptly when the forecast.river levels rose
2. 24-7 quickly stood up. Funds requested and received.
3. As the event went on, the FLOOD FIGHT SOP was dusted off. We haven't had a full-scale flood-fight in a decade. We learned that standing up the EOC...our space was limited. We modified – designated battle captains for various areas. Shifts. Integrated EOC actions.
4. Battle-rhythm. Briefings were set up. Need more admin staff. Need to clarify roles a little better of EOC staff.
5. Decision Support Template – created. To look forward about when decisions needed to be made about deployment, sand bags, etcetera
6. Use of GIS. Critical...need a GIS duty officer.
7. Creating Maps to include in sit-reps and posting on website. Need to do this. Helped external stakeholders.
8. Deployed liaisons to State EOC. Just in time training. Selected personnel based on their inherent strengths.
9. Needs: more checklists, revise our flood-fight SOP, need to see how we do our floodfight teams, make up and deployment timeline. Templates for our levee-units.

Mark – how did the communication flow went btw NWK and FEMA.

Paul – FEMA did have a person with the state. I had been talking to Region. FEMA had a daily state call – NWK was on the call. FEMA had a liaison at state with our liaison.

Need better coordination between districts – NWO/NWK. Federal levee in MO that is NWO – that would have been a little better to know about in time line.

Katie Schenk – it was helpful to have CC of sit-reps.

Our reporting tempo was a little slow.

Dave Matthews:
High pools at many of our dams – first time in a long time. Add'l surveillance activities – went quite well – even though not very regularly exercised. We have good surveillance plans in place – OPS folks could step right in. Lot of turnover.
Chief – geotech...supervises dam-safety program mgr...interested in levees.

MAJ Little:
As we stood up the EOC...we had a fair # of senior folks involved in the EOC. Directing people in the field and comfortable making decisions. Involved early-on...

Alan Tool
Things went well – would like to point out the serious professionalism. Little conflict and turf-battles. One thing that has changed in the last 10-15 years – we have a dependency on the Internet. It was helpful but it could be a limitation...if we had an Internet slowdown. We put in a DSL line...Need an alternate data connection...

Battle Captain concept worked out really well.

Flamm – DSL was critical. For any event...broad-band cards were needed for field people.

NWO –
Katie – operation went very well. From our perspective – we only have one permanent person in EM. We did really well. Our phone system went down – VOIP. Very bad...just phones in this case. We had couple of diff flood events several things going on – state Liaison in South Dakota. We need better LEVEE MAPS. We have our EOC at west-center and our engineers are downtown. Logisitcally – it was difficult. Colleen went downtown when we went 24-hours. We need to consolidate our operations SOON. Funding for AAR – we still haven't received it. We need to recruit more people from the district to do reports – so we can get the reports out faster. Our interface with Engineering was great. EM team was great.

Colleen – overall things went very well. EM has developed relationships with States – Iowa and SD. We knew who people were. Coordination with states was good...they felt comfortable with their requests to us.

Internal coordination – things went smoothly. We contacted our warehouse folks on Sunday AM – and people were responsive. Engineering Division – quickly assembled teams – prepared to send them out. It's been 1997 since we had a big event. They selected engineers with field experience.

Invaluable – we have an EOC telephone directory with CMT and IM folks etcetera. It was great...VOIP was down – IM got phones back up. We were out for about 8-10 hours.

I referred to the ER all the time – I believe we followed it pretty well. It wasn't too bad – we were able to follow the guidance pretty well with some judgment calls made. With CMT involved we were comfortable with the decisions made. I've been on the other end – in the sandbag throwing business.

We need to work on...when we move to the new bldg – what do we do when the phones go down?

Contractor – needs maps of our levee projects. Good maps. To hand out to our flood teams so they know where they are going.

When teams came back – they had lists of supplies that they would have liked to have had in their lists.

Possibility of flooding in Dennison IA – in March NWO constructed a flood structure. Removal of the structure – there are some key recommendations...

Difficulty of removal – a factor in the locality for not using.

NWD – Baird – is there ways that Division could help NWK or NWO?

Katie – keep the district integration going. That was helpful. Our RRCC office was there when you need them...

Paul – we worked through our own Water Control.

Judd – we were fortunate that the reservoirs weren't releasing. No timing issues. No flow impact issues.

HQ – Liz Miller –

Overall it went well. Blackberry dependency. Cellphone dependency. It varies – we have to figure away to communicate. UOC may be looking at comms.

Mark Clark – IA – things worked out great MVR – NWO worked fine.

Sitreps – need to make sure that MVR is involved. No hiccups – state of IA was pleased.

Jack Hurdle – one comment...

It's been 10-years since we've had big flood fights. If this thing had escalated to 1993 event – would you have needed assistance from other districts/divisions?

Consider what kind of augmentation would have been needed – and how to coordinate nationally.

Flamm – from NWK perspective – engineers would have been needed...if event has escalated.

Katie – we have a huge mission – it is increasingly difficult to handle everything that is coming. Engineering staffs are getting smaller – we have a bigger execution requirement. And something is going to give – we can't do everything and have back-up. These events drain our resources being able to execute.

Liz – ReadinessXXI – would like to think how 84-99/mil contingencies should be merged...organizationally???