Introductions

The meeting began with introductions. The Amec Foster Wheeler team members introduced themselves; Jeff Brislawn will be the project manager supported by planners Kyle Karsjen and Clay Pacheco. Robert Olson brings senior review and experience developing the Lake Isabella Dam Failure Evacuation Plan. The meeting participants introduced themselves and their affiliation. Thirty six persons were documented on a sign-in sheet.

Project Objectives and Schedule

Jeff provided an overview of the project objectives and scheduled. The Evacuation Plan will contain information and tools for the management and response to a mass evacuation requiring regional coordination and will assist in the decision making process for allocation of resources, management of traffic, and organization of evacuees. It will be a multi-jurisdictional document that will include:

- Arapahoe County
- Denver City and County
- Aurora
- Adams County

The plan will complement existing emergency operations plans and protocols and be developed with input from subject matter experts, stakeholders and local emergency managers.

The plan will be developed over the next five months. A first draft is targeted for late July with a final in late August.

Dam Failure Consequence Assessment and Planning Situation

Jeff described an overview of the Cherry Creek Dam and there areas that would see impacts during a probable maximum flood (PMF) event. The PMF scenario is the worst-case and has a very low probability of occurrence but will be used as the planning situation. During a PMF event the areas around the reservoir would be inundated first, then the spill way into Toll Gate Creek that flows north through Aurora and into Adams County (and Sand Creek), then the Cherry Creek corridor through Denver if failure occurs. The resulting flood would destroy bridges and put thousands of people at risk in downtown Denver.
Robert Olson with Robert Olson Consulting and the Amec Foster Wheeler Project Team discussed planning considerations from the Oroville Dam Incident which happened in January in California but still an ongoing incident. He provided a handout with takeaways that could inform the Cherry Creek evacuation planning project. It was discussed how an evacuation warning was given first, then an order. Kyle Karsjen commented that the government cannot tell people to leave their property. However, they can motivate people with children to leave by arresting them for child endangerment.

**Plan Sections/Framework/Functional Areas**

Kyle walked through a slide that described the plan sections and functional areas. A key point plan summary was also provided as a handout that described the plan sections, content and intended audience.

**Working group roles and responsibilities**

Working groups have been identified that align with the plan’s functional areas. The role of the working group is to collaborate with Amec Foster Wheeler staff on the plan’s development and provide subject matter expertise in specific areas. The working groups and Amec Foster Wheeler leads are:

- Access and Functional Needs - Kyle Karsjen
- Animal Protection- Kyle Karsjen
- Communications and Warning – Clay Pacheco
- Family Reunification – Clay Pacheco
- Transportation Planning and Analysis - Jeff Brislawn

Planning considerations for each working group were introduced by the respective Amec Foster Wheeler lead. Discussion questions included challenges and capabilities and resources associated with each functional area. Highlights of the discussion are noted below by functional area.

**Access & Functional Needs**

**Challenges**

- Multi-lingual populations
- Public education
- Transportation resources limited
- Assisted living populations
- Assisted living communities in Glendale and Arapahoe County
- Prison populations
- May need to have a representative in the other work groups

**Capabilities & Resources**

- Denver 911 maintains active registry
- If there is an emergency declaration – locations of individuals can be mapped
  - This could set unrealistic expectations of what is done with the data
  - Could have legal issues (HPAA)
- Access to medical and electrical supported medical equipment
- Regional Access & Functional Needs committee and related knowledge
Animals / Pets

Challenges

- Service animals OK in Red Cross shelters, pets no
- Sheltering variability
- Timing of event – during day more animals at home if people are at work
- Need volunteers to manage relocated animals
- Trailers are required for cattle and horses
- Exotic pets
- Agricultural animals (chickens and goats)- set expectations for pets as priority in the plan

Capabilities & Resources

- Humane Society partnership with Red Cross
- Potential areas to relocate animals – zoo?
- Arapahoe county has trailers
- Adams county has some trailers
- Regional animal care group – meets once a month

Communication and Warning

Challenges

- Need unified message
- Adams County – Multi-tier reverse 911 vender coordination across 8 vendors would be needed
- Denver has four 911 vendors
- Who will control IPAWS? Need to be deconflicted
- Multiple notification systems
- Laws & Authorities for Notification
  - Who has the authority to issue messages?
  - Whoever issues the evacuation order must have accurate, up-to-date information from the dam manager
- How can we communicate to people who don’t work in the area?
- Coordinating among the different jurisdictions will be difficult
- Law enforcement officials knocking on doors will not work to evacuate undocumented immigrants because they will not answer the door.
- Multi-agency / jurisdiction JIC
- ID EOC’s and dispatch centers in inundation
- Alternate sites for EOCs need to be pre-identified
- Most of Denver’s on-air TV stations are in the inundation zone

Capabilities & Resources

- EMWIN
- Everbridge
- Code Red
• Reverse 911
• Some ESF 8 coordination amongst jurisdictions
• UDFCD alert system and monitoring of gages along Cherry Creek and South Platte
  ○ In sync with Army Corp on tri-lake system
• The National Weather Service can issue warnings
• National Warning System - NAWAS
• Sirens (tornado only and could send the wrong message)

Family Reunification

Challenges

• Re-entry policies; credentialing
• When is it safe to reenter?
• Daytime population increase; About 300,000 people enter Denver during the day to work
• Limited alternative housing
• Separated social networks
• The Red Cross center is in the affected flood zone
• Managing inquiries / calls
• Case management
• People claiming their pets are “service animals” so they can enter Red Cross shelters

Capabilities & Resources

• Red Cross
• Include ESF8

Transportation Planning / Analysis

Challenges

• Gridlock exists almost daily now, so using the highways to evacuate even more people will be problematic
• Where to direct people? E.g. go to south, west or north?
• There is nowhere in the state that can accept 300,000 evacuees
• Other jurisdictions would need to absorb evacuees in Metro area up to Boulder and down to Colorado Springs
• Evacuating up to higher levels of buildings has issues because of debris, sewer and water problems as well as post event access and stranding
• Light Rail and Rail corridors in inundation zone
• Trigger points – failure (phased evacuation)
• Flooded streets prior to evacuation from the rain event itself, further reducing roadway capacity
• Other areas could be affected including Chatfield and Bear Creek dams
• At some point, RTD would stop driving due to safety concerns for their drivers
• Evacuation routes – mapped
• Traffic management

Capabilities & Resources

• Are there traffic management centers or intelligent traffic management systems in place?
  o Aurora has one. They can green-light major corridors. This, however, would make movement worse on the crossing roadways.

Information collection needs/Next Steps
Amec Foster Wheeler will be working to further analyze consequence data from the Army Corps and research traffic studies and transportation impacts. Are there any traffic studies?

• Denver has traffic studies, but not for evacuation
• There is data from the Democratic National Convention preparedness efforts

Another step is to develop a refined consequence analysis and planning situation targeted to each functional area. Prior to the working group meetings Amec Foster Wheeler will develop initial evacuation planning framework for each functional area and coordinate with individual working groups.

Future working group meetings
There will be two future meetings of each work group in May and June. Look for an email from Amec Foster Wheeler staff related to future work group meetings timing and location. Emergency Management staff noted that the first two weeks of each month are typically booked with various meetings. The week of May 8th will be investigated for the Transportation work group. The week of May 22nd will be targeted for work group meetings for the remaining work groups. Works sessions will likely be ½ day sessions that occur concurrently over the course of a day.

Questions and Answers/Adjourn
The meeting adjourned at 3:00.