

Minutes
MULTI-HAZARD MITIGATION PLAN STEERING COMMITTEE
CITY OF ROSEVILLE CIVIC CENTER
Planning Conference Room
December 9, 2009

The Multi-Hazard Mitigation Plan Steering Committee was called to order on Wednesday, December 9, 2009 at 6:00 p.m. at the Roseville Civic Center.

SILENT ROLL CALL

The following Committee members were present: Grace Keller, *Chair*, Rita Brohman, *Vice Chair*, Jim Williams, Chris Wooden, Rod Rodriguez, Mike Isom, Russ Palchak, George Booth, Clair Alway, and Barbara Todd.

Committee Staff/Consultant Members present: Rob Flaner and Ed Whitford of Tetra Tech, Harvey Oslick of RBF Consulting, Dean Grundy, Carl Walker, Garth Gaylord, and Julia Burrows

No members of the public were present.

WELCOME AND INTRODUCTIONS

Grace Keller welcomed the Committee members to the December 9th meeting. She reviewed the agenda and the Committee members agreed to review the items included. Minutes for the October meeting were approved unanimously following corrections made as recommended by George Booth. The motion was made by Mike Isom and seconded by Rita Brohman. Those not in attendance at the October meeting abstained from the motion.

2009 PROGRESS REPORT

Rob Flaner reiterated that he had checked with the California Emergency Management Agency (CAL EMA) regarding the requirement to complete a 2008-09 progress report. CAL EMA staff is recommending that a 2009 progress report be completed and that a chapter in the Plan Update be prepared that summarizes all four progress reports. The Floodplain Management staff already prepared an update to the Floodplain Action Identifiers that was required for the Community Rating System Class 1 recertification this past summer.

Julia Burrows completed the update to last year's Progress Report based on input from staff members in the various city departments. There are still a few comments outstanding from departments and we are now seeking comments on the Progress Report from the Committee.

The Chapter in the 2010 Plan Update will include discussion of what the City completed, what we are doing and what we will do in the future to complete the action items identified in the Plan. The City has made significant progress on a number of areas. Highlights include the CRS Class 1 designation in 2007 and recent seismic improvements by some private developers.

The Committee agreed to submit any comments on the Progress Report to Julia Burrows via email by January 6, 2010. The Committee must also make a "wish list" of items to be added to the Plan when the Update is written.

FIRST RUN HAZUS RESULTS

Hazard Maps

Rob Flaner introduced Ed Whitford of the Seattle Tetra Tech office. Ed is the company's GIS mapping expert and lead of the GIS group. He is creating the HAZUS runs for the City's Plan Update.

Rob explained that the data is different than the 2004 runs. The models are better and more refined and the techniques and technology is better. We will be much more confident in the numbers than the base data from 2004. There will be a blended HAZUS run for the multi-hazard section. The former version had a flood module; there have been four evolutions in the software since we did the first plan. The previous plan just had a HAZUS for flood. Now more of the hazards can be evaluated through HAZUS software. This will be validated by public information and new data. Earthquake and dam failure will have HAZUS runs; landslide and wildfire will not have a HAZUS run.

Rita Brohman asked what is different with the models this time? Are the numbers for Roseville better or worse? Rob Flaner said that one of the inputs would be replacement cost versus assessed value. Replacement cost guides the regional multiplier for the reimbursement if there is a disaster. Grant applications must be replacement cost and we must directly support the cost not go by assessed value. This may change the numbers this time.

In California for residential, the replacement cost is \$120 per square foot in Roseville. The commercial replacement cost is \$83 per square foot. The \$120 per square foot for residential is only a base value of what is exposed.

The Committee had a discussion on what to set the content value for structures at as an input into the HAZUS modeling. Residential content is typically 50% of building value = the value of the contents. For commercial, the content replacement value can be as high as 100% to 120%. The insurance industry sets the contents value at 70% of the value of the structure and there is an ability to adjust. An increase in exposure means an increase in the damage estimate.

Flood HAZUS Discussion

In an average 100-year event, the depth of flooding might be 1.6 feet. The average loss is \$22,000 for the homeowner. The city will have a 70% value for contents. This will be used to calculate the replacement costs for a natural hazard in Roseville.

Rob stated there are only 130 structures in the floodplain in Roseville that have not been removed from the flood risk. (George Booth noted there are 75,000 structures in the floodplain in Sacramento County). Clair Alway asked if her home was one of them. Rob said no, the flood mitigation projects have removed your home from this list. The floodwalls do not, however, meet a 500-year flood event protection but if you add the two-foot above freeboard for new development, those are protected from a 500-year event.

HAZUS will be run with a list of assumptions. The Committee agreed to use a 70% of building value for the content replacement value. The insurance industry uses this and the City should try to maximize what homeowners can be reimbursed for in the event of an emergency. The methodology for this assumption will need to be explained in the plan i.e. need demographic, household income, etc data to explain why Roseville might have higher value contents in homes than other areas.

Other assumptions for HAZUS runs are set based on national standards. This is because when the City applies for a project and the benefit/cost ratio is figured, the City must be consistent with the standards set by the federal government.

Clair Always suggested that when we do our outreach we have a speaker on flood insurance. She would be willing to talk about the benefits of having flood insurance. She said we need to discuss how to be safe, and what happens if there is a breach in the floodwall.

Staff noted that the City of Roseville floodplain that has been set is 2/3 larger than the FEMA floodplain.

The consultants will also run a scenario on residual risk. This is the extent and location of where the water would go if we assume an overtopping of the City's floodwalls. We will take the same approach for the containment dikes located along the west side of Folsom lake in a public message. The plan will include a discussion of a residual risk of floodwater overtopping the City's floodwalls and the Folsom lake containment dikes.

Staff explained that in the City of Roseville, engineering has stringent local drainage requirements implemented after the 1986 flood. It's the "beach ball theory" where every building has to show if all storm drains are plugged and the water has to drain over land, then how will the water flow around the building and eventually drain so there is not localized flooding. Since 1986, all buildings have to meet this requirement. In the 1986 flood, the City found out that the lack of overland releases caused significant flooding. Even 1/10 of a foot of flooding causes significant damage to a structure as all flooring and sheetrock is ruined.

The consultants will run the model and import the terrain data for Roseville. Staff is still trying to secure the LIDAR data from the State of California Department of Water Resources. HAZUS will support communities trying to recover after a disaster and will help document information for a presidential disaster declaration.

At the open house, property owners will be able to type in an address and see an estimate of their 100-year flood impacts. Barbara Todd commented that this would be very useful for Sutter Roseville Medical Center. They have to prepare reports for their risks and would be very interested in this data.

The Committee formally adopted the assumption for content value. Rita Brohman made the motion to adopt a 70% of building value for content value and Clair Always seconded. The Committee unanimously adopted this value to be used as an input for the HAZUS runs.

Earthquake HAZUS Preliminary Results

Ed Whitford said that the soil classification data is an input in the maps. Roseville contains primarily Type C soil. The shake map has the known faults with the closest major fault being the Green Valley fault near Fairfield. The modeling looks at earthquake with a 100-year and 500-year probability. The census tract is used as a basis along with USGS data. The maps show some intensity occurring to the west closer to Sacramento. The mapping shows the Mercalli Scale and peak ground acceleration. Dunnigan had the most recent nearby earthquake with a 6.5 in the 1800s. The shake maps will not do every fault. There are probably 30 faults. Only one will have a shake fault scenario.

Rob Flaner said that the modeling would look at a certain event epicentered here with a 100- and 500-year probability. How would the ground and infrastructure hold up in the shake area is the question we are asking. What might the damage scenario look like a mile one way or another and what would the horizontal acceleration be?

Landslide and Wildfire Maps

The Committee also discussed the mapping for wildfire and landslides. The landslide map will show the size of the area that is susceptible. Dean Grundy said that the Fire Department GIS maps show the recurrence interval and burn intervals for past events. There is a damage function and data from the RMS system can show where fires occurred. There are also some

FRAP maps but the scale is not good. The County may have some maps. Kevin Dickson is the City's RMS and GIS specialist and is the contact for the Tetra Tech staff.

Risk Assessment Update – Dam Failure

Carl Walker introduced Harvey Oslick from RBF Consultants. He is the consultant leading the technical studies for the dam failure analysis. Carl said that the City is still dealing with the bureaucracy to obtain the needed maps to conduct the inundation mapping.

Carl has obtained inundation maps from CAL EMA rather than the Bureau of Reclamation that has not yet given the City the maps. The City needs the one-foot digital terrain model from the Department of Water Resources to perform our own inundation study. The DWR is trying to establish a process for release of the maps and has stated that by the end of January 2010 they will have a process in place. This has delayed our schedule in being able to provide data to Tetra Tech for the HAZUS runs. The Committee discussed making requests to Ken Worman at CAL EMA, Rui Cunha at the County and Assemblyman Gaines if needed for the maps from DWR.

Carl and Garth stated they had a meeting with the Bureau of Reclamation. They discussed:

1. What scenarios should be analyzed and will look at the worst-case scenario for a Dike 5 failure
2. IFSAR topography from RBF and the heights of the other containment dikes along the west side of Folsom Lake were also discussed. The depth downstream of two failures and the parameters on how fast the water leaves. RBF can run some scenarios that are not worst case.

Harvey asked how this would integrate into the MHMP. If we are trying to analyze damage in dollars then no probability will be assigned. We will give the biggest dollar amount for damage. What if something did happen? What will the evacuation look like? Where will the flooding occur? What is the worst-case scenario?

The Bureau of Reclamation and the City will frame out the possible scenarios to discuss.

In the 2005 Plan review, the reviewers stated there was sufficient risk that the City needed to address a dam failure scenario in the comprehensive plan update. The dam failure is a subset of flood and we need to look at how to assign probability. The analysis needs to include the more likely scenarios and worst-case scenarios and what to do to support emergency response.

The Plan will also include a multiple objective discussion i.e. if there is a seismic event and a dam failure. When we apply for grants in the future, we can now argue that mitigation has double benefit – to reduce loss from seismic and dam failure. We can show that the mitigation is a multiple-objective action.

An accurate assessment can only be done if we know the water heights behind the dikes is known - whether they are 100 feet high or 60 feet high. There will be a full and a dry scenario. The main scenario will be a worst case and then to make better decisions, the Committee has some latitude to choose the scenarios. In the plan we need to state why the scenario was chosen, assess the risk, and include the worst-case scenario.

Harvey said we might not see a difference because the inundation will be so vast. The level of data accuracy will be important whether it's from the State or IFSAR. These will be better terrain maps than the current Bureau of Reclamation maps. RBF has done an initial run with the existing terrain data and using worst case.

Carl, Ed and Harvey discussed the inventory and terrain mapping as well as contour data. The analysis depending on the maps used will be done by census block that will have number of

buildings in each area. Again, the scenarios will also include wet (when the dam is fully impounded and it's still raining) and dry (when the lake levels are low).

The staff said it is worth waiting for the additional data to make the analysis more complete and accurate. The model will be run now without the LIDAR maps to show wet and dry and then the data will be revised when with the new terrain model is received.

Outreach Strategy

The community outreach will begin in January 2010 with a press release, citizen's page on the web and a taping of the FOCUS show. The show will be hosted by Vice Mayor Pauline Roccucci and will have Dean Grundy, Gene Paolini, Julia and a floodplain representative.

In February or March, there will be an Open House with workstations and a survey tool. Rob Flaner toured the Rock of Roseville with Rita prior to the meeting and the Open House will be scheduled there to facilitate the community surveying. The building is available on Monday evenings or Saturdays.

The Open House as Clair suggested can include insurance agents as presenters. There can be a looped presentation and residents will be invited. Boy Scouts can earn an emergency preparedness badge and will be invited to help at the Open House. There will be stations for people to answer questions. Emergency kits can be on display. The Committee suggested the presentations could be taped and show online.

The Committee needs to provide input on a modified survey. Staff will send out the questions for review. We will assess the perception of people and the preparedness and ask what the current concern is. Twenty years ago it was flooding and in the last survey most people were worried about severe weather.

Roseville Emergency Operations Plan

Dean Grundy reviewed the City's Emergency Operations Plan. Staff distributed a copy of the full Plan to the Committee on a DVD. See attached outline for the discussion points.

Additions to the Handout as discussed by the Committee include for Part 4 that the Committee would like to see a Mass Evacuation Contingency in the Plan.

The Committee is to comment on Authorities, Hazard Summary, Quick Plan, Basic Plan and Basic Plan Attachments.

Comments should be emailed to Battalion Chief Dean Grundy at dgrundy@roseville.ca.us by January 6, 2010.

ACTION ITEMS

Grace Keller listed the Action Items for follow-up after tonight's meeting.

1. The Committee will provide comments on the 2009 Progress Report to Julia Burrows via email by January 6, 2010.
2. HAZUS data for the hospitals will be made available to staff at the health care centers and staff will do training so that the hospitals use the model for their own risk studies.
3. The community outreach will include a discussion of flood insurance including a presentation by Clair Always and invitations to insurance agents to discuss flood insurance.
4. Kevin Dickson will be contacted for wildfire mapping data
5. Julia Burrows will contact CAL EMA about facilitating access to the needed maps
6. Ed Whitford and Harvey Oslick will talk off-line about the dam failure scenarios

7. 2004 survey questions and questions used by Rob Flaner in the Contra Costa Plan will be sent to the Committee for their review and comment. The survey questions will be finalized at the January meeting.
8. Staff will set a date for the Open House at the Rock of Roseville
9. Julia Burrows to ask Planning GIS staff to forward new city boundary map including Reason Farms annexation to Ed Whitmore.
10. Comments are due by the next meeting to Dean Grundy on the sections of the Emergency Response Plan (see attached handout).

The next meeting will be Wednesday, January 27, 2010 from 6:00 p.m. to 8:00 p.m. in the Planning Conference Room.

PUBLIC COMMENT

No public comment was given.

ADJOURNMENT

The Steering Committee adjourned at 8:15 p.m.