

METRO NASHVILLE-DAVIDSON COUNTY MULTI-HAZARD MITIGATION PLANNING COMMITTEE

Tuesday, October 4th, 2016

9 A.M.-10 A.M.

Nashville Emergency Operations Center,
2060 15th Ave South, Nashville, TN

Agenda

9 am	Welcome/Introductions	OEM/Heidi Mariscal
	General Discussion	
	Real Events discussion/lessons learned	
	Mitigation Strategy/Goals Review	
	Open Floor	
	Next Review Date	
10 am	Adjourn	

Annual Hazard Mitigation Planning Committee Plan Review 10/4/16

INVITEES

Altenbern, Cathy (Belle Meade);
Baker, Joe (Berry Hill);
Baxter, Jack (NES)
Becknal, Mark (Goodlettsville);
Bell, Harry (Goodlettsville);
Bennett, Robert (Berry Hill);
Birdwell, Jane (Goodlettsville);
Bradley, Mike (USGS);
Briggs, Michael (Planning);
Campsey, Tommy (Oak Hill);
Clawson, Jeff (Oak Hill);
Coles, Ron (Oak Hill);
Coombs, John (Goodlettsville);
Deaton, Amanda (Forest Hills);
Duncan, Jeff (Goodlettsville);
Eads, Tim (Belle Meade);
Ellis, Tim (Goodlettsville);
Franklin, Mike (NFD);
Gibson, Phillip (Goodlettsville);
Goodwin, Gary (Goodlettsville PD);
Heilwagen, Brad (AMEC);
Higgs, Jennifer (Planning);
Hill, Wade (Codes);
Hunt Sr, James (Belle Meade);
Hunt, Michael (WS);
Hyde III, Lanson (Forest Hills);
Hyde, Floyd (MNPD);
Kuoppamaki, Anna (WS);
LaRosa, James
Lindsey, Roger (WS);
Majors, Rachel (Health);
Morse, Brent (TEMA);
Palko, Tom (WS);
Popplewell, Cindy (AMEC);
Reardon, Beth (Belle Meade);
Robinson, Stan (WS);
Robinson, William (Public Works);
Sartain, Beth (Berry Hill);
Snyder, Jim (WS);
Thomas, Al (NFD);
Withers, Kathryn (Planning);
Young, Tim (Public Works);
Zurawski, Ronald (TGS);

Annual Plan Review Meeting Minutes

IN ATTENDANCE

Becknal, Mark (Goodlettsville)
Higgs, Jennifer (Planning)
Hunt, Michael (WS)
Mariscal, Heidi (OEM)

Palko, Tom (WS)
Reeves, Kenneth (Goodlettsville)
Robinson, William (Public Works)

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- Heidi started the meeting at 9am. Heidi explained that this is our annual review of the 2015 Hazard Mitigation Plan. There are no lessons learned/real world events to change the plan at this time. This meeting will concentrate on updating the status of action items in the Mitigation Strategy.
 - New detailed studies from FEMA on some areas, primarily North/Goodlettsville area. Anticipating receipt of a letter from FEMA (expected in November) stating new flood maps in effect, and would have to be adopted from Metro Council. Once Metro gets this letter, we will be in compliance period until April 2017, thus the appeal period is over. Metro Planning is anticipating having to send out ~3,100 letters for parcels that are new to being in the floodplain.
 - Mitigation Strategy Action Item Status Updates:
 - 1-1:** continuing
 - 1-2:** No changes yet; waiting on FEMA official changes to come through
 - 1-3:** No change. Possibly look at re-evaluating Wolf Creek Dam plans to be across the board flood plans.
 - 1-4:** still waiting on some, but some are completed and expected letter of final determination (from FEMA) within the next few weeks.
 - 1-5:** on-going
 - 1-6:** on-going
 - 1-7:** Pilot project has already started in 2016.
 - 1-8:** Planning states that Subdivision Regulations state that Planning shall look at Slope, Soils and floodplain, and they may look at geological features also.
 - 1-9:** on-going
 - 1-10:** on-going. Suggested to review public awareness programs with all agencies involved.
 - 1-11:** on-going
 - 1-12:** Study still not released (Tom P to follow up with Army Corp on status of report)
 - 1-13:** on-going. Planning/coordination/networking continuing with our colleges/universities
 - 1-14:** Currently on hold due to lack of funding.
 - 1-15:** The Metro Water valve exercising program involves staff operating certain water valves periodically to make sure they can be closed (are not “stuck” in the open position) in the event they need to be utilized during a water main break incident. MWS also has increased its efforts to monitor excavation work around major infrastructure.

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1-16: on-going

1-17: NES has taken over occupancy of the new service center building and began operations out of it in January 2016. NES has also begun using the 10,000 sq. ft. training center that was also constructed at the site. Recommend closing this action item as completed (*close out at next revision*)

1-18: Metro Water is currently near 90% design on remaining flood mitigation projects for the OWTP and KRHWTP. Some projects are complete, and another is in procurement process.

2-1: on-going, review with public information plan/PIO's

2-2: on-going; MWS is waiting on State NFIP Coordinator.

2-3: MWS revised the mail out. MWS to include a reference to this plan in the mailing and direct the public to view the hazards and plan on OEM website.

2-4: Metro Planning has included the elevation certificate to the parcel on their website. Recommend closing this action item as completed. (*close out at next revision*)

3-1: On-going. River gage levels @ Cumberland River/Woodland suggested previously by the NWS to be lowered for faster action level. Update: The National Weather Service coordinated with Metro Nashville to lower the Cumberland River gage Action Stage from 35 to 30 feet.

3-2: no changes; review feasibility at next revision

3-3: no changes

3-4: Revised storm water business plan completed.

3-5: Five more properties SRL applications accepted and 100% federally funded; on-going.

➤ Other changes submitted to be included in next revision:

1. **Section 2, page 16 (Major Utility Reach/MWS):** Water & Sewer maps to be updated to show that Old Hickory Utility District is now served by MWS. (Figured 2-3 & 2-4 as pictured on next page)

2. **Section 4-2, page 9 (Drought):** *The main water supply is the Cumberland River. The two water treatment plants, Omohundro and K. R. Harrington, have a daily maximum capacity output of 144 million gallons per day. Both plants on an average day will pump a total of about 90 million gallons. If one plant is out of service, the other will supply the communities need with some assistance from adjoining utilities.*

3. **Section 5, page 19 (Action 1-17):** Close out as completed. See update above.

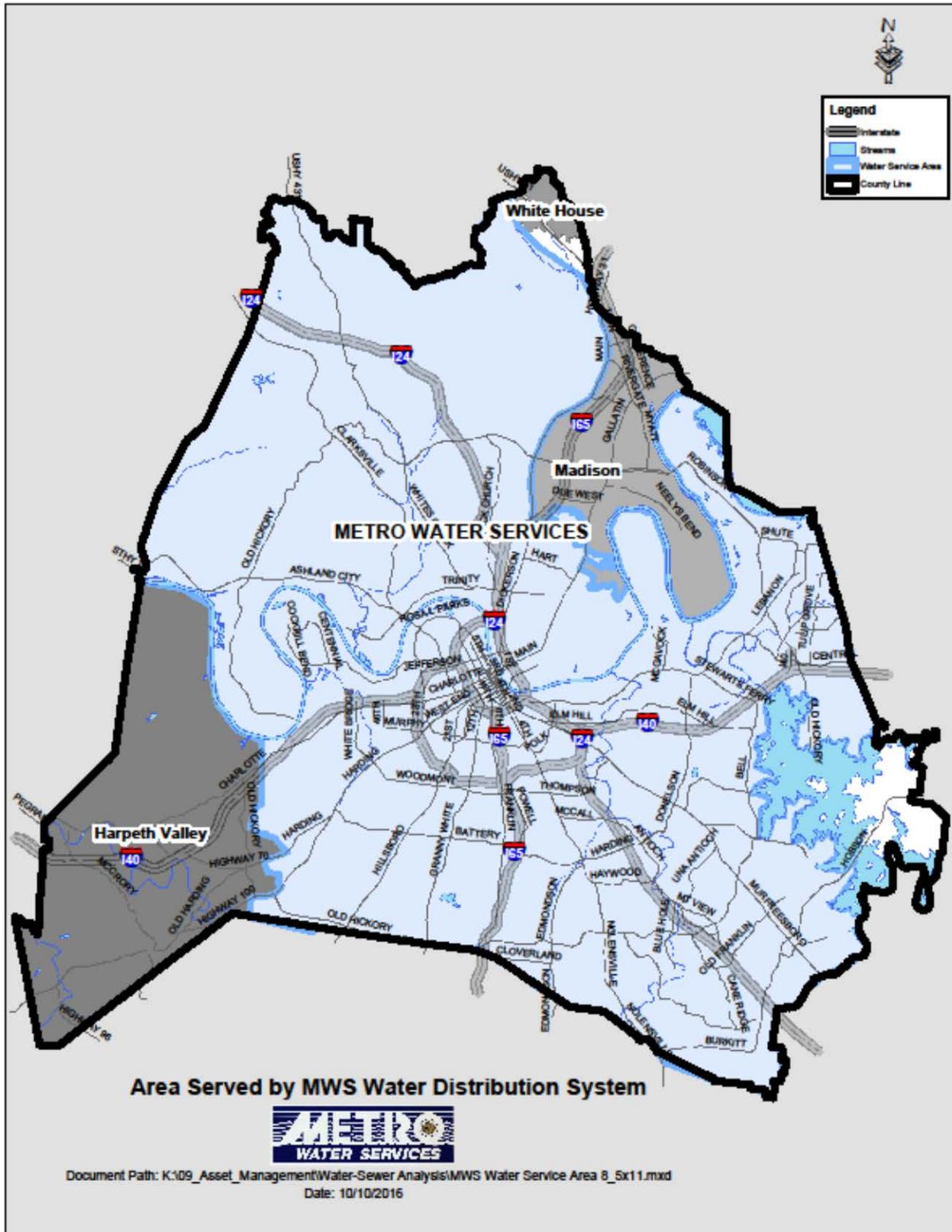
4. **Section 5, page 25 (Action 2-4):** Close out as completed. See update above.

➤ Next Review Date: October 3rd, 2017 @ 9 am @ Nashville EOC (unless there is a need for meeting earlier)

➤ Meeting adjourned at 10am.

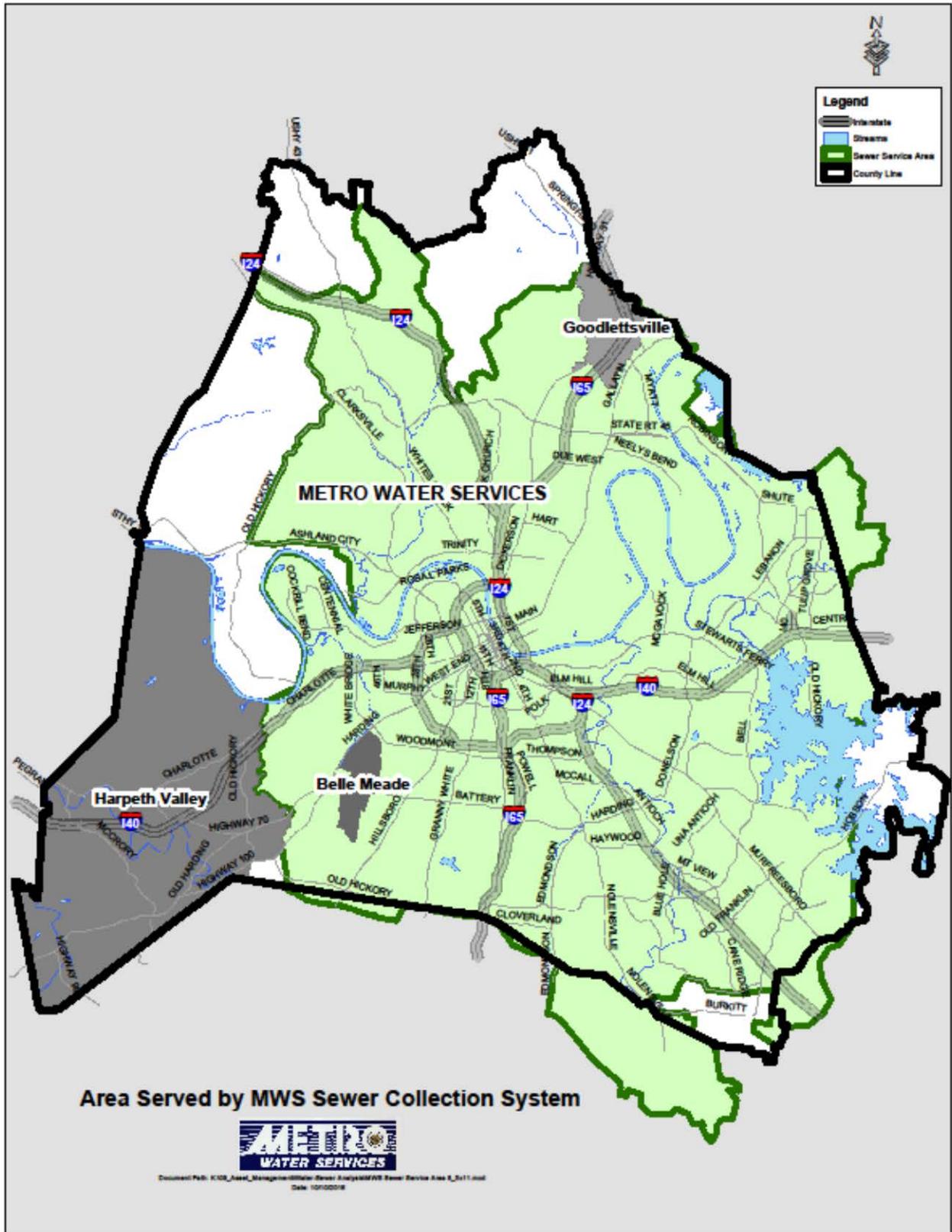
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Map to replace MWS Water Distribution Service Area (Figure 2-3)



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Map to replace MWS Water Sewer Service Area (Figure 2-4)



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2015 Approved Original Action Plan

ACTION PLAN

The Action Plan presents the prioritized recommendations for Metro to pursue in order to lessen the vulnerability of people, property, infrastructure, and natural and cultural resources to future disaster losses. The recommendations are presented in order of priority to the community both in terms of need and effectiveness. The recommendations are also listed under the corresponding developed goal. Each recommendation includes a cost estimate and community benefit to meet the regulatory requirements of DMA. Action items that have already been completed or that were not recommended are included at the end of this section.

Below is a summary of all the action items and the responsible agencies. Detailed information for each action item is following in this section.

Table 5-1: Mitigation Action Plan Summary

Action #	NASHVILLE/DAVIDSON COUNTY HAZARD MITIGATION ACTION PLANS SUMMARY	Responsible Agency
1-1	Based upon the priority list, the action plan recommends that Metro initiate design and construction of high priority capital improvement projects.	MWS
1-2	The CPT recommends that ordinance language to provide added protection for critical facilities and prohibit hazardous materials and public health hazards from the floodplain is drafted, circulated for review and adopted.	MWS, Planning, Codes
1-3	The Nashville Office of Emergency Management (OEM) should review the costs and benefits of preparing a detailed flood response plan that identifies specific actions to take at different flood level predictions.	OEM
1-4	The studies underway in the approximate A Zones should be completed and adopted into Metro's floodplain regulations. The studies should then be submitted to FEMA with a request to revise the FIRM.	MWS
1-5	Develop a property acquisition plan and associated policies to acquire properties in the repetitive loss areas.	MWS
1-6	Fund, acquire, and install appropriate hardware and software.	OEM
1-7	The MWS Stormwater Division should review the costs and benefits of formalizing Metro's inspection and maintenance program to include detention facilities as well as streams and ditches.	MWS
1-8	It is recommended that the definition of a critical lot be expanded to include specific geological details and defined subjectively during plat review and that the critical lot concept be used in review of other developments.	MWS, Planning, Codes
1-9	MWS Drainage Maintenance staff should make site visits in response to complaints or inquiries from property owners. Staff should be trained in retrofitting techniques and be comfortable providing retrofitting guidance during site visits.	MWS
1-10	The severe weather hazards of drought and wildfire, extreme temperatures, thunderstorms and high winds, tornadoes; and winter storms are recommended to be included in a multi-hazard, seasonal Public Awareness Program. (see Goal #2)	
1-11	It is recommended that Metro personnel participate in training in the use of the RSDE program.	MWS
1-12	The CPT recommends assisting the City of Goodlettsville with the FEMA repetitive loss buyout program and associated flood mitigation initiatives.	MWS, OEM



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1-13	The CPT recommends assisting local colleges and universities in obtaining outdoor early warning sirens through grant funding and connecting them to the city's existing early warning siren systems.	OEM
1-14	The satellite city of Oak Hill (located within Davidson County, TN) is aware of certain areas in their jurisdiction that have historically experienced flooding during significant rain events. In an effort to address these and any other such issues that may exist, Oak Hill has initiated a 3 Phase Drainage Study/Correction Plan (see below). It is recommended to include this project from The City of Oak Hill in this Multi-Hazard Mitigation Plan as it mirrors actions with Metro Water Services, and applies to the over goal.	City of Oak Hill
1-15	Based upon the priority list, the action plan recommends that Metro initiate design and construction of high priority capital improvement projects	MWS
1-16	The Clean Water Nashville Overflow Abatement Program (CWNOAP) Design Management Manual (Section 2.6.1) stipulates that all plan projects abide by the following flood elevation considerations.	MWS
1-17	NES has planned the construction of a joint Training and Operation Center in the northern part of the service territory to be located on Myatt Drive.	NES
1-18	In restoring MWS' water and sewer facilities from 2010 Flood impacts, site-specific flood risk mitigation was employed as possible/feasible in bringing facilities back on line. Further, it has been MWS's practice since the May 2010 flood to incorporate flood mitigation into capital projects planned for the facilities that were impacted by the flood. Since the flood, the designs were modified to elevate the facilities above the flood of record to minimize the potential impacts of future floods.	MWS
2-1	Develop and conduct a multi-hazard, seasonal Public Awareness Program that provides citizens and businesses with accurate information describing the risk and vulnerability to natural hazards, and is implemented on an annual basis.	OEM, MWS
2-2	Metro Water Services should request the state NFIP Coordinator to conduct Agent and Lender Workshops in support of the community's overall NFIP program efforts.	MWS
2-3	MWS currently sends an annual mailing to the approximate 10,000 properties located within the 100-year floodplain. It is recommended that MWS Stormwater Division continue the mailing and that the mailing be modified to include other natural hazards of concern that have been identified through the hazard mitigation planning process.	MWS
2-4	Discussions should be held with Metro website staff on the best way to post Elevation Certificate data on the website and procedures to maintain the data.	MWS
3-1	The Nashville Office of Emergency Management (OEM), with help from the MWS Stormwater Division's engineers, should review the costs and benefits of developing flood crest prediction programs for other streams with reporting gauges.	MWS, OEM
3-2	Metro officials should talk to their state legislators and Tennessee Department of Environment and Conservation staff about the feasibility of amending the State's dam safety laws.	MWS, OEM
3-3	Metro's Stormwater Division should pursue a Cooperating Technical Partner agreement with FEMA in order to get its mapping standards to better fit local conditions or make the community a higher priority for mapping support.	MWS
3-4	Develop a financial strategy to design and construct large capital improvement projects. The strategy shall incorporate a cost-sharing plan to leverage local, state, and federal funding for stormwater management activities and projects.	MWS
3-5	The CPT recommends applying annually for potentially available HMGP and FMA grants.	MWS, OEM

