

## **City of Milwaukee**

200 E. Wells Street Milwaukee, Wisconsin 53202

## Meeting Minutes FLOODING STUDY TASK FORCE

ALD. ASHANTI HAMILTON and ALD. JAMES A. BOHL, JR., CO-CHAIRS

Gerry Novotny, Rep. Sandy Pasch, Jeff Polenske, Kevin Shafer, Erick Shambarger, and Ken Yunker

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Thursday, January 6, 2011

10:00 AM

Room 301-A, City Hall

Meeting convened: 10:06 A.M.

Members excused: Ald. Ashanti Hamilton and Rep. Sandy Pasch

1. Introduction of members.

Members introduced themselves and spoke briefly on their organizations and backgrounds.

2. Appearance by Jim Owczarski, Deputy City Clerk, relating to open meetings and open records law.

Mr. Owczarski appeared and spoke on open meetings and open records law.

3. Climate trends for Southeastern Wisconsin.

Mike Hahn, Southeastern Wisconsin Regional Planning Commission (SEWRPC), presented a PowerPoint on this issue (attached to Council file 100665). He presented background on rain and flood events while noting that 100-year floods have a probabilty of occurring of 1% in any year, while a 50-year event has a 2% probability of occurring. Many of the storm sewers in the city were built with a capacity for a 5-year event, per Mr. Hahn. The amount of rain calculated over the amount of time it fell is also used in the calculations. As the climate changes, the rain event calculations may need to be recalculated, as well as the amount of impervious surface that exists that was not present in the past. In the June 2008 rains, over a 3-day period, the amounts of rain varied widely across the Milwaukee metropolitan area. Area rivers also contribute to peak flows in the Milwaukee River among the watershed areas. There have been 10 large floods in 96 years in the Mllwaukee River watershed, which is a large river and it is expected that over 15 years there would be 1-2 floods, while 4 floods have occurred during the past 15 years. There are indications with the river flood data over many years that we have been getting more flooding over the past 15 years.

Mr. Hahn said that there are indications that we're experiencing climate change and

we will be seeing differing patterns than we have, although it's too early to revise study design approaches. Mr. Shafer noted that the Milwaukee area is experiencing heavier rainfalls over a shorter period of time more often. Ald. Bohl noted that several studies that he has seen have said that we are experiencing a climate change, which may or may not be accurate. Mr. Hahn noted that these flooding events reflect the trend of changes over the past 50-60 years.

Citizens who came to the table and spoke were:

Bruce Wiggins - executive director of Milwaukee Urban Gardens, said that a good way to address this issue is to keep water out of the sewers to begin with and to do that through green solutions, such as disconnecting downspouts and the use of rain barrels. More rain barrels would probably be utilized if an incentive program were offered and installation of these barrels could function as an employment program. Mr. Shafer noted that the Milwaukee Metropolitan Sewerage District (MMSD) does offer incentives and rain barrels.

Richard Wanta - Wisconsin Underground Contractors' Association, said that his members and other trade association members can provide information on problem areas or potential solutions.

## 4. Overview of recent flooding-related activities in Milwaukee

Jeff Polenske and Kevin Shafer presented a PowerPoint Presentation (available online in Council File 100665) and noted that MMSD receives sewer flows from 28 communities, some of which have combined sewers which contain bothrain and sanitary sewer water). MMSD averages 2.5 overflows per year and is allowed 6 overflows per year by the state. With the July 2010 storms, the rain hit so fast and so hard in a localized area that the water could not get to the deep tunnel fast enough. The water flows from private laterals (3,000 miles of sewers) to municipal sewers (3,000 miles of sewers) to MMSD sewers (300 miles of sewers). Prior to operation of the deep tunnel in 1994, there were 50-60 overflows per year by MMSD. Approximately 26% of the system is a combined sewer system. In the city, there are 2,446 miles of sewers with 198 miles of them being over 90 years old with 1,500 miles of private laterals. These private laterals are the responsibility of the homeowner. Prior to 1954, homes were allowed to connect their foundation drains directly to the sanitary drain. There were a number of homes grandfathered in so there are a number of homes that are putting rain water into the sanitary sewer system. Mr. Polenske noted that the likelihood of a system being overwhelmed are those with laterals in disrepair or that have clear water draining into the sanitary sewer. Mr. Shafer noted that a lot of foundation pipes are collecting water from the roof, not just from the foundation, so a large volume of water is going into the system at a fairly fast rate.

Storm sewers are designed to accommodate 1.5 inches of rain per hour and combined sewers are designed to accommodate 2.0 inches of rain per hour. In July 2010 the rain was of just too high of an intensity for the sewers to accommodate. Mr. Polenske noted that there are a number of residents who don't report basement overflows as they don't want that noted on the property. Ald. Wade came to the table and asked the percentage of number of properties that reported flooding and Tim Thur, Dept. of Public Works, said that approximately 125,000-140,000 properties experienced flooding, which is less than 10% of properties. If properties get the same amount of rain in a different area of the city, they may experience the same backwater issues as was faced by the northwest side in 2010. With dye testing, it was shown that 77% of the dyed water infiltrated the private lateral. A large number of properties may result in flooding at one property based upon location or

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geography. Both the city and MMSD have been funding improvements to reduce flooding, both surface and in homeowners' basements.

Citizen who came to the table and addressed the task force:

Kay Baldwin - Milwaukee resident who lives on Kenwood Blvd who has experienced increasingly bad flooding over the past 3 years.

## 5. Next meeting agenda.

Long-range maintenance plans of the Dept. of Public Works and MMSD relating to flood prevention.

Review reports:

Mayor's Independent Audit Committee report of 2004 Final report and Analysis of the Sewer Maintenance Fund.

3rd meeting:

Inflow and infiltration Issues - city and MMSD Residential sewer later program study

Mr. Shambarger would like to discuss green initiatives and land-use plans and consideration of flood-plain areas.

The Feb. 3rd meeting might be moved to Feb. 10th due to conflict with 2 members.

Meeting adjourned: 12:01 P.M. Linda M. Elmer Staff Assistant