

Recommendations by Erick Shambarger & Jeff Polenske

1. The City should continue to place a high priority on effective flooding and basement backup reduction initiatives.
2. The City of Milwaukee DPW should complete the Private Property I/I Demonstration Project planned to start this summer (2011) and evaluate the results by using flow monitoring data to assess effectiveness of techniques used.
3. The City of Milwaukee DPW should evaluate the I&I improvements that were completed within the DNR stipulated sewersheds in regards to the impact those improvements had on the number of reported basement backups. This evaluation, along with the results from our PP II Demonstration Project will help us further prioritize improvements that will have the greatest benefit in reducing the risk of future basement back-ups.
4. The City of Milwaukee Department of Public Works should continue to construct streets with green infrastructure elements that help control storm water run-off. In addition to constructing several median and roadside bio-retention projects over the last few years, a contract was recently awarded to construct an alley utilizing two different pervious pavement options. DPW should utilize the lessons learned from these projects to assess whether such improvements should be considered with all paving projects being developed within areas susceptible to flooding.
5. The experiences from the Green Infrastructure Projects, the PPII demonstration project, the DNR stipulated I&I improvements and other storm water management initiatives should be comprehensively assessed to determine the most cost effective approach for specific challenges occurring in any one area of the City of Milwaukee or for determining a long range approach to City Wide challenges.
6. The City should continue to evaluate areas that have a history of surface flooding and identify measures that will improve appropriate storm water flow paths and/or identify storm water management measures that will better control storm water flows.
7. Work with Milwaukee County to evaluate the use of County Parkland to provide for temporary flood mitigation in areas prone to flooding.
8. The City of Milwaukee DPW and MMSD should re-evaluate the improvement plan for the poorly performing sewersheds in relationship to areas that have a history with basement back-ups. Where there is no overlap, priority should be given to areas with basement back-ups first.
9. The City should work with MMSD to incorporate emerging climate models and rainfall frequency into sewer design criteria to better meet the weather conditions that we are experiencing.
10. The City of Milwaukee should continue to engage in targeted separation of the combined sewers in areas where timing and volume generate a high risk of inflow-induced backups and where limited utility connections and an accessible outlet allow for separation to be cost-effective.
11. The City and MMSD should work together to determine if there are any locations where MMSD metropolitan interceptor sewers (MIS) could surcharge into a municipal sanitary sewer during large storm events; also, MMSD should identify critical elevations at connections to the MIS. Use this information for MIS or City system upgrades to minimize basement backups.
12. Request the State to assist in flood mitigation projects by providing financial assistance thru grants, or restoring funding to the Clean Water Fund program, etc.