Meeting Minutes

Advisory Technical Panel – Updating Infiltration and Inflow Control Program

Location: MWRD LASMA Visitor Center

Date: October 10, 2012 1:00pm to 4:30pm

Attendees: See attached

- A. Ms. Maureen Durkin, Supervising Civil Engineer, MWRD, welcomed the ATP Members.
- B. Mr. Steve Sticklen, Donohue & Associates, gave a presentation on Antecedent Moisture Modeling. This model simulates hydrologic cycle and effects of backto-back rain events, and takes into consideration rainfall dependent infiltration. After long-term calibration, the model could be used for predicting response of a sanitary sewer system to a given storm event.
 - 1. Ms. Durkin asked what are the other required measured quantities to be input into the model besides flow monitoring. Mr. Sticklen stated that there are several default values for coefficients and metrics. Initial estimates include size of the basin, depth of groundwater, depth of surface storage, time of wet weather response and the percentage of the storm that ends up as I/I.
- C. Ms. Durkin gave a slide presentation summarizing the MWRD Board of Commissioners (BOC) Study Session held on September 27th, 2012 and the elements to be included in the new I/I Control Program.
 - 1. Mr. Alan Hollenbeck, RJN, stated that in his experience, risk-based analysis has not been used in conjunction with I/I reduction programs. He stated that risk-based analysis for sewers characterizes a catastrophic failure or an interruption in service primarily under dry weather flow conditions. Ms. Durkin stated that the local sewer system owners should be doing regular sewer system maintenance to prevent catastrophic failures and a direct result of that will be the reduction of I/I.
 - 2. Mr. Hollenbeck stated that the criteria that drive the selection of a critical sewer for inspection may not necessarily be the same criteria that drive the selection/identification of an I/I source for cost-effective removal. He cited an example of a critical sewer being a 100-years old, 36-inch diameter clay sewer located under the railroad tracks. That sewer may never be a source of I/I, but there would be a catastrophic failure if it were to collapse; therefore, the risk-based analysis may not be aligned with an I/I flow reduction program. Ms. Durkin stated that this approach is to insure that the local sewer system owners are maintaining their system to avoid catastrophic risks while providing attention to I/I flow reduction. Mr. Hollenbeck stated

that if the objective is to prevent catastrophic failures, dry weather overflows, and other conditions that should be prevented within the system, then risk-based analysis should be used. However, if the objective is I/I flow reduction then there has to be some other aspect of short term and long term programs driving the analysis.

- 3. Mr. Sticklen noted that risk is the product of both the consequence and probability of failure, not just the consequence.
- 4. Mr. Sticklen stated that appears that when discussing risk and catastrophic failure of a sewer, the presumption is that if the structural integrity of the sewers is maintained then I/I will be reduced. Ms. Durkin stated that she believes that is what Mr. David St. Pierre, Executive Director (ED), MWRD, intended. Mr. William Sheriff, MWRD, stated that he agreed with Ms. Durkin's assessment and also acknowledged Mr. Hollenbeck's statement that risk-based analysis may not the best way to address cost-effective I/I removal.
- 5. Mr. Hollenbeck asked for clarification of the \$4,000/year/mile of sewer to be spent on local sewer systems. He asked if that number is directed at routine on-going maintenance only or system rehabilitation or if it is the sum of the two. He also asked if the miles of sewer include the private laterals as well. Ms Durkin stated that she believes the ED envisioned that the number includes maintenance and rehabilitation on public sewers and does not necessarily include the laterals.
- 6. Mr. Dale Schepers, Tinley Park, stated that he has feedback from the Village's attorneys on the ATP discussions. He stated that the more prescriptive the program is, e.g. the requirement to spend a certain amount of money on a specific item, those prescriptions turn into duties, and those duties become obligations that carry higher liabilities. He stated that if a requirement of the program is not met then the liability for claims against the municipality is increased significantly. He elaborated that there is a difference between a duty (regulatory obligation) and a responsibility with the law. With responsibilities, tort immunity is retained and exposure to liability is limited. He suggested that as the program is developed to be mindful of the prescriptive items, which are being discussed, may have another set of implications on liability and tort immunity.
- 7. Ms. Durkin asked the ATP what a reasonable timeframe is for cleaning the entire public sewer. Mr. Hollenbeck stated that there is an enormous amount of sewer that never has to be cleaned. He stated that if a risk-based approach is followed for sewers that need to be cleaned the candidates include sewers with frequent depositions, which do not amount to a significant number of sewers. He also stated that he has not seen a successful I/I reduction program that prescriptively states that the entire system should be cleaned on a specific time cycle. Mr. Ross Dring, Kimberly Heights Sanitary District, stated that within his system, he has gone into half of it during the course of televising, lining and lateral grouting. He stated that there was very little need for sewer cleaning and is reluctant to have a time frame of

required sewer cleaning. Ms. Durkin stated that it may depend on the sewer system. She cited an example of a sewer system that had cleaned a portion of their system and when they submitted their post-rehabilitation flow monitoring report, their flows went up.

- 8. Ms. Durkin asked the ATP what would be more effective than a prescriptive sewer cleaning on a 10-year cycle. Mr. Sean Dorsey, Mount Prospect, stated that his experience with sewer cleaning must be coupled with televising or inspections so that the effectiveness of it can be determined. His approach has been to assess the condition of the sewer first with televising and inspections, then determine if cleaning is required. Mr. Aaron Fundich, Robinson Engineering, stated that it is expensive to clean larger diameter sewer, especially for communities that have to contract the work out. Mr. Fred Vogt, City of Rolling Meadows, stated that he has a system in place to identify sewer cleaning needs and stated that some sewers need to be cleaned while others do not. Mr. Fundich stated that manholes need to be inspected more frequently than the sewers because the freeze-thaw cycles damage the manholes' upper rings and frames which in turn allows significant I/I. Mr. Eric Murauskas, Baxter & Woodman, stated that the frequency of sewer inspection is a function of sewer material and sewer age.
- 9. Mr. Sticklen asked if the ATP is considering mandating a NASSCO (National Association of Sewer Service Companies) Certified approach for documenting inspections as part of the new program. Ms. Durkin stated that inspection standards as part of the program are a good idea. Mr. Hollenbeck stated that requiring NASSCO training and certification is a low cost item and the inspection standards are valuable.
- 10. Ms. Durkin stated that some communities may do sewer cleaning work in-house or have it contracted out. She asked the ATP the number of communities that do in-house work or have it contracted out. Mr. Dorsey stated that his community does both. Mr. Hollenbeck stated that a combination of in-house and contract work is the norm because majority of the contract work is generally for larger diameter sewers. Mr. Joseph Pisano, Village of Hillside, stated that municipalities have to manage with shrinking work force so the work is being contracted out. For some, if not a majority of municipalities is difficult to find the time and manpower required for televising and cleaning, because, even if the required equipment is on hand, it is used for maintenance work on the system if there is a problem. Therefore, if cleaning on a specific time cycle is required, some municipalities will not be able to comply with the requirement and will contract the work out. He also stated that municipalities have an obligation to provide sewer service to the tax payers and any service problems that must be immediately addressed and corrected so we should be mindful of additional prescriptions placed on top of the everyday operation requirements.
- 11. Mr. Dorsey asked what the goal of requiring sewer cleaning is. Ms. Durkin stated that it is to insure that the local sewer system has adequate capacity resulting in fewer SSO's and basement backups.

She also stated that the thought is sewer cleaning is more achievable because the municipalities may have the required equipment and not cause additional burden that mandating sewer televising would cause.

- 12. Mr. Hollenbeck stated that he believes that typical municipalities already have a long term operation and maintenance program (LTOMP). They may not have a significant rehabilitation program because they don't have the funding. There should be minimum standards for proactive and reactive components of the LTOMP. He believes that the lack of funding is causing the limited attention to rehabilitation work resulting in increased I/I.
- 13. Mr. Dring asked the ATP if there are competitive bidders for contract cleaning, televising and inspecting. Mr. Murauskas stated that in his experience there are competitive bidders depending on the location ranging from local to regional contractors. Mr. Dorsey stated that his concern for competitive bids is for smaller projects because larger projects receive better bids due to economy of scale. Mr. Vogt stated that in his experience not a lot of bids are submitted if the contractors are busy and if the contract is for a smaller project.
- 14. Ms. Durkin asked the IEPA representatives if SRF funds could be applied to an initial compressive assessment of the local sewer system. Mr. Roger Vollbracht, IEPA, (speaking on a conference call from Springfield, IL) stated that the loan program does not cover any type of planning task; it only covers design and construction. He also stated that historically, SRF funds have been restricted to public sector work; however, the IEPA may be more flexible with funding private sector work if municipality were to operate and maintain the private lateral that is being worked on. He further elaborated that SRF funds can be used on the portion of the lateral that is located on public right of way. He stated that there are funds available for fiscal year 2013 at a 1.93% interest rate, which runs through September 30th of 2013.
- 15. Mr. Hollenbeck asked Ms. Durkin on her opinion of the MWRD BOC considering an MWRD-funded grant or loan program. Ms Durkin stated that the BOC would like to explore a private property program following the Milwaukee Metropolitan Sewage District's (MMSD) Private Property I/I Reduction Program. Mr. Hollenbeck stated that the program is funded by the MMSD and asked if we could assume that the BOC would entertain discussion of an MWRD-funded program. Ms. Durkin stated that the BOC is interested in exploring that option. However, the main consideration is the cost of it. She also stated that the MWRD has the authority to implement a low interest loan program, which was never developed, but the idea was to loan money to municipalities for public sector maintenance and rehabilitation. The MWRD's enabling legislation prohibits grants being given for public work; however the BOC would like to develop a possible loan program. The main concern of the ED is if the funding would count against our tax cap.
- 16. Mr. Vogt asked if the loan would be limited to public sector work only or if it could be used for private sector work. Mr. Hollenbeck stated

that there is an ordinance prohibition of funding public sector work in the form of a grant. He doesn't believe that there are any restrictions against loans for either public or private sector work. Ms. Durkin stated that the intent of the loan program was for public sector work. However, it is too early to determine if the MWRD will implement a program similar to MMSD's.

- 17. Mr. Vogt suggested that since the IEPA's SRF program is limited to the public sector, the MWRD-funded program should focus on the private sector.
- 18. Mr. Hollenbeck asked what the IEPA anticipates for the total SRF funds that will be available in 2013. Mr. Vollbracht stated that they may leverage the program in 2013 by taking the portfolio of old loans to the market and bond them to increase the funds that will be available. However, he was not sure if and when that will happen and if it will significantly raise the funds that are available. He stated that there may be \$250-\$500 million available. He also stated that a possibility of the SRF program could be to provide a large sum of funds to the MWRD and then they could lend smaller loans to various communities. He stated that this has been discussed with Mr. Geoff Andres, IEPA, because the IEPA does not have the time or manpower to handle 100's of such smaller loans.
- 19. Mr. Hollenbeck stated that there has not been a high use of the SRF loan program for sewer rehabilitation work and if there were a dramatic increase in sewer rehabilitation work as a result of the MWRD's new I/I program, there will be demand for SRF. Mr. Vollbracht stated that funds will be available. Historically, MWRD communities have not received funds because they did not complete the loan application process.
- 20. Ms. Durkin stated that the demand for SRF loans far exceeds what is available. She asked if a municipality were to apply for an SRF loan for sewer rehabilitation work, would they stand a better chance of obtaining the loan or is it highly competitive. Mr. Vollbracht stated that when the demand exceeds the availability it is because we consider what the needs are for the state by a pre-application that is submitted. Majority of the applicants do not move past the pre-application. He stated that there was unutilized money in 2012 that had been rolled into 2013. It is more than likely an applicant will receive a loan provided they submit planning documents and complete the loan application.
- 21. Mr. Hollenbeck asked the IEPA if they envision a process where the MWRD could take responsibility for the planning requirements. Mr. Vollbracht stated that a universal planning guideline could be established and annual funding could be provided to the MWRD where they would re-loan the funds to the communities that meet specified criteria. Ms. Durkin stated that instead of having planning documents submitted by all the communities in the MWRD service area for the IEPA to review individually, if a project is submitted for a system

assessment in accordance with the MWRD's yet to be determined standards that might be a way to facilitate a loan process. Mr. Vollbracht concurred with Ms. Durkin.

- 22. Mr. Hollenbeck stated that many of the highly publicized lateral insurance programs do not cover damage from backup of the public sewer, do not cover anything inside the foundation of the residence, and in some cases, will only replace a small portion of a lateral if it could be isolated. Mr. Dorsey stated that he has researched a lateral insurance program by the National League of Cities, and their program only fixed the immediate problem, rather than the entire lateral.
- 23. Mr. Hollenbeck stated that he is not aware of any ordinances in the Chicago area that require a lateral inspection and repair upon sale of the property. He stated that it doesn't mean it is not feasible but it is a big step from an internal inspection to insure sump pump disconnection. Realtors will resist it because it will add an extra step to close a property sale. He stated that the requirement for lateral replacement with teardowns is not unusual. And the requirement of lateral inspection and repair upon some level of home renovation/expansion is probably in the grey area. He believes that the requirement of a simple inspection of internal I/I sources upon sale could be implemented within the MWRD service area but there will be resistance.
- 24. Mr. Bill Meyer, Village of Oak Lawn, stated that he tried to pass an ordinance requiring the lateral and sump pump inspection upon sale of a house through his Village Board, but there was resistance from the realtors and the Village Board. He was able to pass an ordinance requiring lateral replacement upon a teardown. He stated that having the MWRD implement the criteria for lateral inspection and repair or replacement, beyond what the local municipality does, will help with rehabilitating the private laterals.
- 25. Mr. Hollenbeck stated that the sump pump connections are illegal under the MWRD ordinance, so it could really just be the matter of taking and enforcing the existing ordinance on a broader scale for compliance. He stated that a compromise he has seen is an escrow account because you can close on the home, pending completion of inspection and disconnection. He stated that if there is an MWRD requirement, it could push through a lot of the resistance.
- 26. Mr. Fundich stated that lining the lateral is one thing, but there will be resistance, if the foundation drain must be disconnected. He also stated that he has worked with several communities and acknowledges private laterals being a major source of I/I. However, the public officials generally do not want to address the private sector sources if the public sector had not been fully rehabilitated.
- 27. Mr. Pisano stated that his community has done inspections at the time-of-sale, premised by MWRD requirements under ICAP. He continues to do the inspections and has not had encountered resistance from realtors. He noted that it is just a visual inspection.

He asked what the intent is and what is being looked at to require homeowners pay \$300-\$400 in additional costs to televise the lateral. If the lateral is intact it gives assurance to the new homeowner. However, if the inspection's intent is to identify I/I sources but none could be detected then there is no return on the requirement of televising the lateral.

- 28. Mr. Dorsey stated a concern with televising the lateral is what is going to be done with the information. He gave an example of an original 1950's clay service lateral with roots in every joint and the need to replace it or line it would add an additional \$9,000-\$12,000 to the cost of selling the property.
- 29. Mr. Hollenbeck stated that there are several examples of closing ordinances for sump pump disconnection. He is not aware of a program that requires a service lateral inspection and repair at the time of sale. Mr. Dorsey stated that there is just as much private sewer as there is public sewer and it is just as leaky, if not more leaky. He stated that the private lateral is the big part of the I/I problem and it has to be corrected. His concern is paying the debt service, even if there was a loan program, it would require the participation of unwilling residents.
- 30. Mr. Pisano stated that in most cases the sump pump disconnection is an easy fix. The difficult situation is when the laundry drains into the sump pump, when there is a floor drain into the sump pump or stairwell drains connected to the lateral because they drain by gravity. He cited another example of groundwater infiltrating into older clay pipe joints and asked the intent of the lateral inspection. Ms. Durkin stated that it is to assess the condition of the lateral and if necessary to reline it or have it replaced.
- 31. Mr. Hollenbeck stated that he believes requiring a private lateral inspection and repair part of the closing ordinance is "dead on arrival."
- 32. Mr. Mark Toll, Daniel Creaney Company (representing Elk Grove Township), stated that the majority of housing stock in the Cook County area is valued at \$100,000-\$150,000 and then having the additional cost of \$10,000-\$12,000 to repair or replace the lateral; those houses will never sell or never go on sale.
- 33. Mr. Vogt stated that there are home inspection laws and a possibility is to revise or expand those laws to include laterals. He stated that his municipality has televised laterals upon request of potential home buyers.
- 34. Mr. Hollenbeck stated that he believes that the MWRD BOC recognizes the level of homeowner cost. He stated that sump pumps are easy to find and relatively easy to disconnect, while laterals are more difficult and expensive to inspect but may not necessarily have a conclusion after that inspection.

- 35. Mr. Fundich cited an example he is familiar with, which is a Sanitary District that serves 600 homes, which has lined their complete system, yet still has an I/I problem. He stated that if you assume a low-end cost of \$10,000/home to investigate and line the private laterals and disconnect the foundation drains the total cost is \$6 million. He stated that they are estimating that it is more cost-effective to provide local I/I storage for the entire community at \$2-\$3 million.
- 36. Mr. Dorsey stated that the problem with local storage is the criteria for choosing the design storm. The cost goes up for more intense storm events and there still could be basement backup problems. Ms. Durkin stated that local storage may reduce the frequency of basement backups. She stated that the MWRD's policy in recent years has been that local storage could only be interim solution, citing that the MWRD does not want to treat the excess flow. However, the ED as recently modified it indicating that the local storage can be permanent, provided it meets our requirements and the Village understands that it is designed for certain storm event.
- 37. Mr. Hollenbeck stated that he has never seen a successful I/I program rely completely on flow reduction or completely on local storage. It is usually a combination of flow reduction and local storage.
- 38. Mr. Schepers stated that during the MWRD BOC Study Session, the transport and treat option has been eliminated, although when the ED said that the MWRD would consider the transport and treat in certain case-by-case situations and is not a blanket allowance. He believes that the same approach toward I/I reduction will not work for everybody and stated that the approach by the Downers Grove Sanitary District's (DGSD) is appealing. A \$12/house is charged quarterly, considering that 40% of my community is comprised of homes less then 20-years old, those laterals will not need to be addressed for significant time. The money can be used to address the older laterals first by lining or replacement until the flow target is achieved and then relax the quarterly charge. This type of approach may work for his community but others may not have the desire or capacity to go that route. He also stated that the best approach is to fashion a program that allows flexibility but continues to require improvement of some measure to address any type of political resistance. He also stated that his community did inspect laterals off the main line because it was inexpensive and they were able to find foundation drains tied into the lateral. After the inspections he determined the vintage and variety of houses which had those connections. Mr. Dorsey asked if the foundation drain connection could be seen. Mr. Schepers stated that they could be seen but were limited to 60-70 ft off of the main line sewer.
- 39. A question was asked to Mr. Schepers if his community has ownership and maintenance responsibilities of the lateral to the connection to the main line sewer. Mr. Schepers stated that the lateral from the house to the connection to the public sewer is the responsibility of the homeowner.

- 40. Mr. Schepers stated that a pilot area was identified and they did prerehabilitation flow monitoring, did complete public sector rehabilitation work and then did post-rehabilitation flow monitoring. He then televised the private laterals to determine condition and if any foundation drains were connected. He then went to his Village Board to determine what to address next; but they didn't want to move forward. He believes that if the MWRD develops a program that contains the regulatory requirements, he will have an obligation to address those items.
- 41. Ms. Janet Pellegrini, USEPA, stated that it appears that the new program will reduce the level of responsibility and asked who supported the program. Mr. Schepers stated that his municipality conducted resident information meetings with areas targeted for rehabilitation to educate the homeowners. He stated that typically after conducting the information meetings about 60% of the homeowners allow internal sump pump inspections.
- 42. Mr. Dring stated that the ordinance for his sanitary district allows them to conduct internal inspection of every home. He stated that information letters of explanation were sent to all the homeowners and there was cooperation.
- 43. Mr. Dorsey stated that his Village coupled home inspections with water meter replacement. They trained the contractor that was doing the water meter replacements to do building inspections at the same time and he was also televising and flow monitoring the public sewer. He stated that home access was successful because if the water meter wasn't replaced, the water was shut off. The issue was enforcement of the correction to I/I sources. He cited home owner resistance to the disconnection of a sump pump.
- 44. Mr. Dorsey stated that billing for excess flow charge would be difficult because his Village has combined and separate systems connected to the MWRD interceptor. Mr. Toll stated that some local sewer systems may also connect into another public sewer system, which would make the billing system more difficult.
- 45. Mr. Hollenbeck asked if enforcement of the program could be tied to the restriction of issuing sewer permits for non-compliant communities instead to fines. Ms. Durkin stated that action may be a potential solution and stated that historically, a permit moratorium was in place for some communities that did not submit their annual summary reports. She also stated that the BOC requested further details of enforcement aspects of the program and acknowledged that it may be burdensome on some communities and may not be effective on others.
- 46. Mr. Fundich stated that there are several economically disadvantaged communities that do not have funds to rehabilitate their systems. He also stated that there will be political resistance if the penalty for having excess I/I is that a permit will not be issued for a strong economic development.

- 47. Mr. Hollenbeck asked what the enforcement penalty is under the current ICAP program. Mr. Fundich stated that the penalty is \$1000/day until compliance. Mr. Hollenbeck asked if that fine was ever imposed. Mr. Abbas Bhikhapurawala, MWRD, stated the he does not recall any fines actually charged. Mr. Hollenbeck stated that the current program is, to a large extent, a voluntary program. He stated that he is not aware of any lawsuits or fines and is not sure if penalties have to be imposed under the new program. Ms. Durkin stated that there were some consent decrees for non-compliance. Mr. Hollenbeck acknowledged that there were a few consent decrees, but is unaware of broad based penalties. Mr. Fundich stated that it was the threat of the non-compliance penalty that resulted in rehabilitation work being done.
- 48. Mr. Dorsey stated that flow monitoring is uncertain due to different storms and ground conditions and asked how the flows will be specifically measured. Ms. Durkin stated that the ED has a desire to back away from 150 GPCPD. The way the special condition is written in the draft NPDES permit is that the 150 GPCPD is a trigger for action. She stated that she is aware that 150 GPCPD is difficult to achieve and that the ED's goal is for communities to be focused on maintenance and rehabilitation work, a dedicated funding source, annual reporting to the MWRD and the reduction of basement backups and SSO's. The ED has not envisioned flow monitoring being a priority to this program; however, one idea is that the MWRD may be able to provide assistance to the communities if they want to assess their maintenance and rehabilitation efforts.
- 49. Mr. Sticklen stated that MMSD will install flow meters, maintain them and provide the raw data to the tributary agencies at no charge under their program.
- 50. Mr. Hollenbeck stated that he believes the extremes of what can be done under the program could potentially be a problem. He stated that he has never seen a program that does not have pre and postrehabilitation flow monitoring. There have been some programs that invest too much or not enough in flow monitoring and to implement a new program without flow evaluation is unrealistic. He stated that if the criteria of the program were to focus solely on reducing basement backups and SSO's flow monitoring is not always needed. He stated that the shift of flow based metrics (GPCPD) to performance based metrics (basement backups and SSO's), there is less reliance on flow meters, however, there does not appear to be that shift under this program.
- 51. Mr. Sticklen stated that if the metric becomes the frequency of basement backups and SSO's, events may be too infrequent to determine whether funds are being spent effectively to reduce them.
- 52. Ms. Durkin asked the ATP what the design storm should be. Mr. Sticklen stated that one must measure actual flow to actual rainfall, and the design storm could never be metered. Mr. Hollenbeck stated

that under the current program the design storm for the conveyance system is the 3-year reoccurrence interval 2-hour duration storm. He also indicated that the current design storm is on the low end of occurrence intervals compared to the 5-year and 10-year intervals determined by other regulator agencies as the acceptable performance level of a sewer system.

- 53. Ms. Durkin asked the ATP if the MWRD required annual reporting of sewer funding utilization and what is being spent on the system, will it cause the same liability as mandating funds to be to be spent on the system. Mr. Schepers stated that if the MWRD were to mandate a specific amount of funds to be spent on the sewer system, then one taxing body is mandating actions onto another taxing body. He also stated that previously under the IEPA grant program a user fee had to be established and used toward I/I reduction. Mr. Hollenbeck stated that establishing a user fee, which was the cost to operate the system, was a requirement if grant funds were received.
- 54. Ms. Durkin asked the ATP if there would be resistance if the MWRD were to develop a guideline number for what the sewer owners should be collecting to maintain and rehabilitate their systems and to determine what funds are being spent on the system. Mr. Schepers stated that how that question is asked and answered should be researched and discussed. The obligations must be determined to avoid one taxing body mandating actions of another taxing body. He also stated that he believes some communities will not spend funds to fix their system unless a grant is provided to them. Mr. Hollenbeck stated that a distinction must be made between annual proactive and routine maintenance, and system restoration rehabilitation. Ms. Durkin stated that it may be useful to have two guideline numbers.
- 55. Mr. Hollenbeck stated that homeowners of separate sewer area communities have small lot sizes. Therefore, green infrastructure (GI) could be part of the complete solution for the sump pump and downspout disconnections. Mr. Dorsey stated that rain gardens are expensive and can cost \$15,000-\$25,000.
- 56. Mr. Toll stated that storm sewers are also at capacity and there are also localized drainage issues. Swales can be located in the homeowners' front or backyards and they may fill them not knowing that they are there to retain and convey stormwater.
- 57. Mr. Pisano stated that a problem with sump pump and downspout disconnection is that there are icing issues during the winter.
- 58. Mr. Hollenbeck stated that he is aware of the technical arguments against GI; however, the politicians and regulators make GI a compliance requirement. He indicated that it would be a mistake to dismiss GI, especially if there is a mechanism or a program to receive funds for implementing it. He stated that every major consent decree from the USEPA and the Department of Justice within the last 5-years has included GI as a part of the requirement for compliance. Mr. Adam Gronski, MWRD, stated that GI is included in an MWRD draft

- 59. Mr. Murauskas stated that local communities can set up inter governmental agreements for economy of scale contract work.
- 60. Mr. Vogt stated that if there are concerns with MWRD spending funds on private systems the municipalities could reimburse the MWRD. Ms. Durkin stated that reimbursement for the municipalities could be a potential solution. She also asked who would be letting the contract, inspecting the work and paying the contractor, where should those costs come from. She stated that just because the MWRD has a purchasing agent, a construction department and a design department, it may be problematic if those costs came from the MWRD budget. Mr. Vogt stated that the times a joint purchasing agent was used; the municipalities had their own contracts and paid their specific contractor which was stated in the specifications.
- 61. Mr. Schepers stated that another item that should be investigated is the ownership of the storage within the MWRD TARP System. He stated that because his community, as well as others, helped to fund the construction of TARP, there is storage that the municipalities are entitled to. Mr. Schepers continued to state that President O'Brien stated during the study session that he is aware that all the taxpayers funded TARP. Since local storage could be an element of the long term success of the new program and if the municipalities already own a portion of the storage, then asked if it would be equitable to build additional local storage. Ms. Durkin stated that TARP does not serve all communities within the MWRD service area.
- 62. Mr. Dring stated that he believes that some communities have stormwater retention and a lot of the combined sewer system communities don't have it so there is some off-setting equity.
- 63. Ms. Durkin stated that TARP was built for the combined sewer area communities with the goal of flood control, pollution prevention and CSO prevention. She also stated that TARP was federally funded so all US taxpayers funded it. Ms Durkin asked Mr. Schepers if the question he is asking is related to capacity of the MWRD. Mr. Schepers stated that cost effectiveness of rehabilitating the pinhole leaks at \$1000s/gal/day removed or be able to transport and treat at \$2/1000 gallons should be addressed.
- 64. Mr. Hollenbeck stated that an MWRD-funded grant or loan program could be used as a tradeoff for the separate sewer area communities that helped to fund TARP. Ms. Durkin stated that a grant or loan program is being looked at. She also stated that the MWRD did construct several stormwater reservoirs from the 1960's though the 1980's, before MWRD had stormwater management authority, which was done to address the fairness of TARP serving specific areas.

- 65. Mr. Hollenbeck stated that in the 1980's a cost was established for transport and treatment which was used to determine what costeffective rehabilitation was, and it would have to be updated. Ms. Durkin stated that the new program is not another ICAP or costeffective analysis. Mr. Hollenbeck stated that at some point, the elements that will be required to be disconnected or corrected on private property must be determined; unless the MWRD is prepared to allow certain elements, like existing foundation drains, to remain.
- 66. Mr. Schepers stated that be believes that there should be a costeffectiveness check to everything that is done under the new program. He also stated that removing I/I at the source must be proven as the most cost-effective approach because the cost of all of the work is funded by the rate payer.
- 67. Mr. Gronski stated that an issue is the cost involved if a treatment plant is flooded and out of commission. He stated that if a treatment plant sees ten times the normal flow rates and is required to be expanded there is a capital improvement cost involved. Mr. Fundich asked if treatment plant expansion is off the table. Mr. Gronski stated that there is limited land available because the treatment plants are surrounded by communities. Mr. Dorsey stated that Hanover Park and Egan are not giving the MWRD any problems. Mr. Gronski stated that those treatment plants absolutely have problems. He stated in 2008 Hanover Park had 75MGD coming onto the plant compared to a normal 9MGD. With that amount of flow entering the treatment plant, there was discharge over the emergency overflow level, flow coming in from the waterway and personnel were sandbagging the treatment plant trying to avoid flooding. Mr. Schepers stated that one factor of the cost-effective analysis Naperville used is the avoided treatment plant expansion cost. He also stated that a cost comparison will need to be done because the elected officials will ask for it.
- 68. Mr. Fundich stated that the MWRD could buy more land for treatment plant expansion, but it does come with the added benefit of adding more rate payers. Right now the I/I removal cost is solely on the separate sewer area communities, but if rate payers, located in the combined sewer area are added, it could lower the rate per user, which should be assessed when there is resistance from the elected officials.
- 69. Mr. Meyer stated that the elected officials think that the MWRD should be responsible for the I/I removal and the cost associated with it. They really don't understand the intricacies of the I/I problem and there will be resistance from them to a new program.
- 70. Mr. Gronski stated that the USEPA and IEPA have an emphasis placed on the reduction of basement backups and SSO's, and at the same time have shifted away from treatment plant expansion as a solution to the problem. He also stated that there has been talk about requiring NPDES permits for the satellite communities and if they would even allow local storage solutions. Ms. Pellegrini stated that there has been talk of the NPDES permits for the satellite communities

and would have to ask about what the policy is in terms of local storage.

- 71. Mr. Hollenbeck stated that ICAP was coupled with a generous state grant program which alleviated the resistance to the program in the first place. However, there will be resistance encountered with the new program because it does not appear to be coupled with available grants.
- 72. Mr. Jay Patel, IEPA, stated that they are looking at SSO's very closely. Currently, SSO's are not being reported because if the local agency does not have an NPDES permit, they don't report the SSO, even though it is required.
- D. Ms. Durkin summarized the formation of the sub-committees, private sector inspections, elements of a LTOMP and annual expenditure goals, and private property assistance program and a loan program. She asked the participants to volunteer for the subcommittees and send her emails indicating their interest in doing so.
- E. The next meeting is tentatively scheduled at 1:00 pm on Wednesday, January 16, 2013 at the LASMA Visitor Center.