Workshop Notes
Collection Systems Specialty Conference
Milwaukee, WI August 8, 2004

Notes were reconstructed from merged notes provided by Jeff Cantwell and Joan Hawley (Collection System Specialty Conference Committee Members). Most of the quotes are not verbatim, but summarize the essence of each statement. Speaker, questioner and respondent are noted where possible. Please refer to the CD and handouts for more information.

Introductions:

- Lawrence Cox, Downers Grove Sanitary District, Downers Grove, IL: Downers Grove has had a tremendous increase in building, especially commercial. Became aware of their I/I problem in 1973. Lawrence's department in Downers Grove performs all repair for their commercial and industrial customers
- Thomas Krueger, Village of Grafton: the Village has a population of about 11,000 with about 50 miles of sewer. Foundation drains were not called *illegal* because this presented a PR problem. The Village became aware of their I/I problem in 1973, like Downers Grove. In this year, some very large storms really brought the problem home. Their program is called *Clearwater Exclusion* and is enforced when the home changes owners. The Village has subsidized the installation of sump pumps. The program's success created a 3-year program – immediate buy-in.
- John Schombert, 3 Rivers Wet Weather Demonstration Program: 3 Rivers Wet Weather is a non-profit company established to address public and private concerns. It was originally modeled on the Rouge River Project (Michigan) but has evolved into a unique organization. Their area of direct influence covers about 1.3 million people, focused on the Alcosan 83 communities [greater Pittsburgh metropolitan area]. This covers about 4,000 miles of pipe on public land, with about the same 4,000 miles of pipe on private land.
- Michael Simpson, Reinhart Boerner Van Deuren: his firm was retained to develop private I/I program in the State of Wisconsin. Create a system that is credible and

enforceable – different ways to finance the issue of using public funds on private property. Ability to develop a private property program.

Panel discussion:

Krueger: discussed some of the issues of working with the public. Big problem for them was properties that were no longer compliant (politically correct term for the Village) under the new program. Politicians insisted that before any action taken against a property, must prove beyond a doubt that the property causing I/I problem. Village had to perform a dye test for each suspected property, and had to obtain permission from each property owner. The village made their own simple form for the property owner, simply having the owner acknowledge the work. There were no challenges after public hearings detailing the I/I program. The public hearings detailed the assistance that would be provided by the Village.

Simpson: his firm represented about 28-29 communities. Had to start with the concept of how an I/I program should work. Some of the communities had already done some work on the program, so felt they should not have to contribute funds to other communities way behind their effort. Early on they had to deal with layers of government at each community. Questions like: *who's in charge*? *Who pays*? *Who decides the particular details*? These all made it difficult for the program.

Cox: no question who's in charge in Downers Grove. Their status as a district gives them a fair amount of autonomy. Some of their homeowners would be faced with large dollar expenditure to resolve illegal connections. Since the system benefits from correcting the connections, the system should pay. When Downers Grove identifies an illegal connection, it gives you two choices: either you (property owner) pay all costs or you sign-up for the program and allow Downers Grove to pay. Since the cost to correct the problem (e.g. line the pipe) can run to $7,000, most join the program.

Schombert: it almost seems that no amount of money will solve the problem. We have calculated removal costs of as much as $4-5 per gallon. – but, some communities have been more proactive.

Cox: homeowners are hard to please. We've found they have a punch list of items they want completed when we do work for them. We have found it beneficial to keep the owners fully informed and select only the best contractors. Since Downers Grove pays all of the costs, that helps with relations. Education is key to the program.

Dan Romans, City of Superior, WI: how do you fund this? We have about 27,000 people. Do you fund this through the waste water fees, or do you create a separate stormwater fee?

Simpson: Six or seven years ago Wisconsin changed the law to create stormwater utilities. You can use a sewer charge or a property tax to fund this. There is wide latitude to the community to decide how to fund.

Michael Reilly, County of Santa Cruz: with about $7,000 to line the pipe, how much did you increase your rates to cover this?

Cox: we are just wastewater, not stormwater. It would probably be cheaper for us to line all of the service pipes to remove the I/I. Our rates went up $6/month in $2 increments. Now total WW charge is $20/mo, no debt. As a utility, we have to have the courage to raise rates. We have no debt. If any homeowner has a problem, we fix it. We figure the cost to do this at about $3/account/month. We calculated the cost to do all repairs, and then figured how many years it would take us to do the repairs at that rate. We are also on a 100-yr repair cycle. Formerly, were on a 500-yr repair cycle.

Reilly: who maintains the pumps?

Cox: the homeowners do, otherwise their basements flood

Kenneth Roley, City of Salem, OR: we offer another alternative. We had a number of flooded basements which created a number of motivated homeowners. The city pays for a new lateral to the home. We then offer an in-house no-interest loan to the homeowner, or the city pays all costs and puts a lien on the property. With the lien, the homeowner does not have to pay anything until their home sells.

Romans: funding work inside the building; not paying to service the lateral. If it bad, their homeowners must fix. How do others handle this situation?
Most attendees affirmed they have raised rates in the last couple years, and had problems with it.

Raising Rates

Cox: we surveyed about 20,000 people and got 5,000 surveys back. 59% said our program was good. We've only received about 30 unhappy calls, which isn't bad for 62,000 people.

Schombert: as an example of how not to raise rates, we [Schombert is on a local WWTP board] had no change in rates for 11 years, and had to raise rates 54% in one-shot. Our local council strongly resisted and approved small incremental raises over many years. We'll be a long time catching-up.

Cox: never lower rates. We did that once because we were ahead. We fell behind because we did not raise rates soon enough.

Stan Browning, Greater Peoria Sanitary District: user class question: go across the board with rate changes, or target certain sectors?

Cox: a service pipe is a service pipe. Go across the board to all.

Romans: we only target residential because commercial is grandfathered as a CSO

Jack Keys, SCCMUA, MI: we have trailer parks. How do others handle them?

Cox: we have none. [audience howls in laughter]

Schombert: in Pennsylvania they're treated the same as condominiums or any other private lateral.

Don Johnson, City of Lansing, MI: offer footing drains offsets to contractors as offsets to complete the project

Public Education Program

Krueger: we used two public information hearings targeted to foundation drains, so we sent letters directly to impacted homeowners. We used personal contact to rally them to our meetings.

Schombert: an overflow connection involves many agencies. We partnered to create hand-outs and other educational materials (websites and brochures)

Cox: we had 1:1 meetings with the homeowners, either face-to-face via our inspectors or on the phone.

Simpson: discussed the Johnson County, KS guideline for a private I/I program. This program is available through Simpson [and is shown in his presentation]. – has entire program on a website and on a CD that they share, include ordinance, letters to homeowners, standards for repair, etc.

Krueger: we (Grafton) quantified the I/I from the foundation drains to calculate the cost to the WWTP. (but, didn't mention how much sewer rates would go up)We looked at

bang for the buck versus the money to expand our WWTP. (Followed and I/I study in the target area, identified the volume of I/I from foundations drains, compared cost of removal to cost of treatment, demonstrated cost effectiveness).

Tim Faas, Canton, MI: among our 30,000 homes, 10,000 have drains. 10 years ago disconnect was voluntary and we had about 2,300 homes participate. Now the interest has waned because the basements aren't flooding. Our metering program tells us that we need to get the rest of the homes disconnected. Our calculations tell us that the total cost of disconnecting is about the cost of increasing our stormwater basin. Our politicians may feel easier with the basin expansion.

Martha Burke, Seattle Public Utilities: we're responsible for both sanitary and stormwater. You need to look at the total cost. Seattle is spending a lot of money for stormwater. How does this type of work impact stormwater cost?

Schombert: the Federal Government calls this a Wet Weather Issue. Schombert discussed the rain barrel program demonstration project [see his presentation] for roof drains. - looking at lot level disposal.

Michael Simpson gave his presentation

1. Ordinance in place – very few audience members had this program in place and new territory.
2. Laws in the state probably have the authority – but need to put it together.
3. Overall ability to put together a program – most feasible is a standalone program that will address these issues.
4. One approach is Larry's – everything done by the City – the other method is to have the homeowner is responsible for construction/compliance.
5. Public Funds on Private Property
6. Johnson County – challenged in court – under Kansas Supreme Court was deemed appropriate to use the money for private property.
7. Create regulations to control bottom 10% of society.
8. In communities that have developed programs – after education they understand the benefits and once they get over.
9. Create rules for everyone to participate in the program.
10. Wisconsin Program – but will be similar to other states – but need to consult laws in other states.

11. Private Property – need to create a program – how do we do it.
    - Compliance
    - Maintenance
    - Follow-up inspections
    - Sump Pumps – connect to lawns – backsliding – disconnect the sump and reconstruct back into the sanitary system.
12. Most authorities are good at defining illegal connections – but out of the 28 communities 27 communities never talked about infiltration. If you don't talk about infiltration in the ordinance (violates health/safety) you can't be effective.
13. Wisconsin – sewerage districts can be created – Wisconsin has large and small districts with different laws for each district. Large District laws are more strong – provides the ability to allow to go on private property. Small districts – questionable whether or not they can go on private property.
14. Private Property – search warrants – probable cause to enter on someone's property to investigate – criminal case. Those principals do not apply to enforcement to municipal codes. Supremen Court – codes are to protect public health safety and wealfare – need to access all property. Administrative search warrant to evaluate a search warrant – demonstrate home owner refused access to property. Document that an Inspector could not enter the property for inspection. That gives you the ability to investigate the property. Wisconsin followed the Supreme Court – this was challenged. The scope of the inspection has to be limited to the scope of the program – ie violations of sump pump does not turn into building inspections. Taylor the search to whatever you are looking for.
15. Procedures to approach the homeowner – etc. defines if the
16. Legal liability – better approach would be to require the property owner to do the work with the regulatory agency to enforce inspections. Homeowners need to be satisified. Two aspects – contract liability and tort liability. In Wisconsin contract liability described in the presentation. Special law – you can not contract away that liability. Construction trade putting together contracts and hiring us to do the work. They agree to waive negligence…(talk with Mike on this)…If the municipality is going to undertake the work – written or implied.
17. Responsibilities need to be imposed on the different parties.
18. What is the difference between discretionary vs ministerial acts –
19. Municipality decides to not install a stop sign and the victim tries to sue the municipality. The decision to install the stop sign is a discretionary act. Once you installed the stop sign and not done properly – then an accident occuree then the municipality was liable.
20. Planning and designing of sewerage system is a legislative act and that is a discretionary act and is not the liability of the local municipality. Major road on the north side of Milwaukee – Local Sewerage District planned and installed the sewer district and put a manhole in the middle of the road. Maintenance work in the middle of the road – car swung around and got in an accident. Sued because the manhole should be placed in another spot. The court said how that sewer was design – municipality was not liable. Menesha failed to maintain a sewer line – basement filled and the homeowner sued – failed to maintain the sewer the municipality is

liable for the backup. They did not define why the maintenance was not defined. Allocate responsibility needs to be defined for inspection, maintaining.

21. How do you structure a system for private property I/I. Investigation/Inspection stage – munciipalities are good at doing that and should be doing that. If you neg. perform those – liability but damage consequences will be fairly small.
22. Legal perspective – if a municipality engages an independent contract to do the inspection service and the inspection service negliantly performs the inspection – the inspection service is liiable – not the municipality.
23. Building inspections/tank inspections – independent inspectors and contractors.
24. Design – require homeowner to take corrective action, municipality minimum standards of correction. Not how you solve the problem – but guidelines. If you do it – then you have liability.
25. Public Funding – Public Purpose Doctrine – what is public purpose? State of WI did a study htat there were too few of doctors in the city. The state provided grant money to MU – private institution – to expand their medical facility. Using public dollars to enhance a private institution. Supreme Court said you are taking public money and doing public works. The means to achieve that is MU – some residual benefit to MU – but at the end of the day it achieves public good. Overall good is public good – will be acceptable.
26. Private property – not increase the value of private property but to achieve a public good by keeping clear water out of the sanitary sewer system.

Bill Sukenik, MWH Norcross, GA: what are the implications of using tax exempt bonds for private property?

Simpson: if it is used as a grant, that is OK

Gary McAlpin, Broward County, FL: if we were to access a lateral with a camera, using a public main, must we notify the homeowner?

Simpson: only if the camera actually goes onto private property - The issue may arise when the homeowner asks how the Municipality got the information supporting a repair order.

Cox: if you find a problem, you should make sure you've done your investigation properly. For example, you should start-over by asking permission from the homeowner if you actually do go on to private lateral.

Cox: the homeowner is usually home when we TV. If we see a problem, we can discuss it with them.

Q: when establishing authorization for I/I work, is it best to establish an ordnance, or will something less formal do?

Simpson: my conservative bend says to do the ordinance. This is the most definitive. In the preamble of the ordinance, spell-out why it is needed and why the legislative body is doing this. Spell-out the purpose of the legislation, the reimbursement program, and the penalties for non-compliance.

Andy Craven, Strand Associates: If you need a peace officer to serve a warrant, what court must we use?

Simpson: the circuit court in Wisconsin is sufficient, which is our lowest-level court. He also noted that in Johnson County, KS they used class action warrants.

Schombert: we had a project of 500 laterals where we went into the main and inspected about 8-10' into each lateral. We did not notify the homeowner in this project, and encountered no problems.

Andy Lukas, Brown & Caldwell: is there a different light for industrial versus commercial and residential?

Simpson: no, treat all the same. Since the laterals are physically similar.

Dale Glidden, August, ME: there are concerns over investing money and liability into I/I. How do you defend yourself regarding your priorities? For example, if the house down the street floods, how do you justify that you did not put them higher on the priority list?

Simpson: you get lots of data, explain your program and the resultant program. This protects you because you made reasonable efforts. Most programs investigate and document the locations of the severe problems. If sought public input, you'd have documentation of reasonable approach to solving the public problem.

Cox: your program should agree with your documentation. If somebody is going to sue, they're just going to sue. We've found that a big rain can change the system, and new problems pop-up. Used the resultant outrage to get support for a new program, e.g., overhead sewer conversion; when the sewers run up the wall (pumped).

Simpson: floods should cause a re-evaluation, showing sensitivity to the public needs

Willie Gonwa, Triad Engineering: at the time of sale, when you sell the house, can you simply say that the house must be compliant to sell?

Cox: this is very appealing, but how do you handle the homeowner who calls to say: *I'm selling my house in five days. Get out here now or you delay the sale.* We want to prioritize the repairs and fix as we see fit for the good of the system. Also can't monitor the effectiveness of the program if the program is being implemented all over the place.

Simpson: use sale of the house in combination with prioritizing.
Inspection by local plumbers argues where the responsibility lies – a lot of licensed plumbers aren't doing the work.
Ergo: Downer's Grove requires a licensed engineer do the inspection.
Simpson: a lot of Milwaukee communities have a time of sale inspection requirement. However, if leave it to time fo sale don't upgrade the problem areas. A two-step, focused plus time of sale inspection might work as well.
Hawley: successful programs have both sale of house and focused programs and realtors do not like the programs.

Lawrence Cox gave his presentation

1. EPA said that the "one time" fix was all that was needed.
2. Blending in Illinois has been approved for years.
3. No quick fix – ongoing program. Flow metering needs to be extensive. Monitor the site for 9 week and then come back 3 years later 9 weeks. Completed the 1st two cycles. Working on the 3rd cycle. Have to stick with it.
4. Convinced the board have to go on the private side. Estimated what it was going to cost to fix the sewers on a 100 cycle. 2.5 million on sewer repairs. Calculate replacement cost and what cycle you are on.
5. Some money - maintenance projects – poor slopes, inline grease traps not designed properly,
6. I/I reduction projects
7. Transition occurs 5 week out – document that the service is leaking.
8. Goal in the basin is to rehabilitate everything.
9. First year required to do an air test – 8 failed out of 17 segments. Air test before the laterals are cut out.
10. Tools to find the water – smoke test,
11. Change the way we design

- Clean out at the transition
- Access agreement to measure monitor flows at the cleanout
- Goal is to rehab everything

12. Breaking connections – line service from main to the cleanout.
13. Migration problem needs to be addressed
14. EPA had poor recommendations on fixing the system. Only repair the joints that were leaking – 5 years later the joints around those leaking joints
15. I/I sources in the basement identify and eliminate
16. Sequence – line the main, line the service and then air test the entire system.
17. Replace manholes other than rehab Pre-cast manhole to have rubber boot and pass vacuum test.
18. Manhole inspected - pre-cast manhole fails vacuum test need to replace??
19. How to make the connection between the liner and the new connection.
20. Use pipe bursting very well.
21. Has this affected the use of using public money – Larry said they convinced the board that this is for the public good.
22. Don't line a sewer lateral for root control.
23. Have to address private property else you are not addressing the entire problem.
24. Homeowners vs Municipalities paying it.
25. One of the advantages – economy of scale if the municipalities do the work. Publicly bid the work – one contractor that will do all the programs. Success of the program will be how good the contractor is. If you satisfy the municipalities they will renew the contract for 5 years – they are now in the
26. 3 cleanouts/day. $1,800 for cleanout and sod installed. ASK Larry about this
27. The connection between the lateral and the home – replace new PVC with mission coupling. Get a drawing for this.
28. 100 % complete in the basin - with main sewer and will start on the laterals. Municipality will put in the cleanout and leave the access pit to eliminate a step in the liner. Hoping to line 50 services in a week.

29. BSSRAP– building sanitary sewer assistance Repair Program. Serious equity program – they pay for everything for replacement. If they have a root problem – they might have to replace the line but the Downers Grove will not pay. They have resolved this – ASK Larry
30. Document and then tell the folks what it needs.
31. Downers Grove determines what work needs to be done and if it is an emergency.
32. Lateral design – all different and they work with the contractor to repair/replace.
33. When you sell your program – sell the BSSRAP – fix the building backup – homeowners like it.
34. Air testing program has been successful
35. Use water quality pipe, use machine tap,
36. First week – vocal contractors would not pass the air test – hadn't pushed the pipe, fittings are cracked, tightening the couplings
37. Blockages in the main – used to pass the costs off to the homeowner. Offer $1,000 programs to offset the costs. Appear to be responsive. 44 backups - $28,000 since 1998.

Q: why air test the lateral? Is this new? Why not use water?

Cox: the test is new to our district. We need to use a special contractor. This is mostly done on tear-downs.

Downers Grove – test the tap (worst place to have a leak, specialty contractor, in 3 to 4 days can test 15 taps)

Q: what is the cost for your flow monitoring?

Cox: we used to use an engineering firm, but now we do the flow monitoring ourselves. We spend about $60-70,000 per year (including staff time). As we use the equipment more, be become more familiar with it. We own 22 meters and move them around every 2-3 weeks. We tie our data in to the six rain gauges we own. Analysis is done in house – wants his field people to know what is happening.

Q: you said you shifted the basis of your life cycle from 500 years to 100 years. And, you have no debt. Please explain your funding.

Cox: $22/month fully funds our 100 year cycle of repair work. The $6/month increase brings us up to $22/month. We have not yet instituted the last $2/month rate increase, so we're currently at $20/month. Monthly service charge $5.50/month, $1.50/1000 gallons, $30 real estate property cost. There is not relationship between volume of usage and fixed assets – therefore did not include that in the ratio.

Jeff Cantwell, Isco: how much has your staff changed?

Cox: let's see, we added a full-time tech for our TV, and a staff engineer. All told we added 2 ½ people. And went to a three man crew for laterals.

Q: in the 70's and 80's, uncapped laterals were a big source of I/I. Do you have problems with homeowners knocking caps off?

Cox: yes. Lawn mowers seem to have a magnetic attraction to PVC clean-outs. But they provide good access for our TV and flow metering.

Q: have you considered putting a magnet next to the clean-out and burying it?

Cox: We found that some laterals need to be rodded annually. We also like the access for TV and metering

Q: how many employees do you have for the sewer department?

Cox: 27 including the WWTP, lab, etc. 11 MGD plant

Q: what are the demographics of Downers Grove?

Cox: we're upper middle-class, with the average home at about $70-80K. As a typical bedroom community, our values are soaring.

Sukenik: your program sounds like Disneyland ®. We have to tell customers to solve their own problems. Do you think you could scale-up to 100,000 people?

Cox: bring it on! We did a lot of research. I've been asking for this for 20 years. We had two big storms that brought the public to our meetings. This, along with a new trustee, offered a change in thinking. The new people would not accept that we could not solve the problem, so I pulled-out my old memos. Bigger communities would have an economy of scale.

Q: talk more about your field people. How are they trained?

Cox: I have 5 field people and 1 supervisor. The supervisor spends most of his time in the office on the phone talking about the Bisrap program. We're small and everyone needs to be versatile. Two employees are specialized on tv lines and one for contract repair – non-engineers.

John Schombert made his presentation

1. Big Issue in Allegehny County – enforcement and policy. Started out as a grant/demonstration program and then moved to a non-profit organization.
2. Large stakeholder process
3. ALCAN and public health and 3 Rivers – independent board. No government involved.
4. Primary source of funding is federal dollars – EPA clean water act. Local/political delegation.
5. PA – commonwealth state– local independence average population 7,000, 500 political appointees. Can't use the metropolitan concept – cause of all these agencies.
6. Full time public relation manager. Take advantage of opportunities.
7. 83 communities <12 have had a proactive approach. No respect for the sewers. The dilema needs to take the responsibility NEED TO TAKE OUT OF THE POLITICS.
8. Lots of overflows - Huge impact on the local economy and drinking water.
9. System wetwell overflow levels – locks/dams/marinas – fly a big orange flag with CSO on it. Constant outreach to boat owners. Recreational season 130 days – 110 days SSO flags were flying.
10. In wet weather the main rivers meet water quality standards. Small streams do not meet it even during dry weather flows.
11. 4000 miles of private laterals (analysis is about 1:1 – main to laterals)

12. Municipalities/Penn DOT – connect storm to sanitary sewers
13. High percentage of manholes are brick – huge source of infiltration
14. Sewers in stream
15. A couple of proactive communities – generally time of sale. 3 or 4 are doing video inspections at time of sale.
16. Can't do it with public funds. Homeowners irritated to replace laterals at $5 to 10K/lateral.
17. Communities have started to Spend money – but not effectively and not consistent.
18. Localized rain bursts – 250 homes can be flooded on a significant rain event.
19. 350 CSOs on the rivers – huge recreation rivers.
20. $500/home inspection, grouting and sealing. Did only 8 feet from the main.
21. Actual effectiveness is still being monitored. Went through a dry weather spell and will validate data. Q: on the Monroeville rehab project, only 12 homes? Why?

Schombert: we looked at 48 homes, using dye injection and other means. We felt that these 12 needed our rehab. We had to prioritize our demonstration money. Complete rehab for 12 homes and partial rehab for other 36 homes.

Q: part of your marketing plan relies on news articles and op-ed pieces. Are these effective?

Schombert: yes, generally. We've had some negative press on the $3 Billion price tag, but we're now doing this over 10-15 years and not the 5 years we had originally planned. The press is generally good to us.

Q: who does the point-of-sale inspection on the home? How did this come about?

Schombert: some of the bigger money communities have been doing this for years. The consent agreement requires full inspection.

Q: when will you have the cost-effectiveness data?

Schombert: in about 5 years or so. We have stopped the demonstration portion of our program because it takes too much time. Many of the demonstrations are on our website.

Q: were there differences in each basin on regulatory issues?

Schombert: there were about 45 different plans until the consent agreement. These were not effective. Now they're all the same, and more effective. Our GIS standards are uniform.

Joan Hawley, Superior Engineering: $500/home represented what?

Schombert: robotic inspection and sealing of the laterals

Hawley: what was the most effective part of your public outreach?

Schombert: pooling resources was more effective than having 83 communities each work on their own. Not one agency can do it – needs to be a consensus. Overflow connection – partnership.

Cantwell: please comment on your great website. Who created this, and who maintains it? How does it help your outreach?

Schombert: we had an outside tech model this to bring CSO/WWI information to the local 83 communities. The website uses a flash program that was done outside, but is maintained inside. 130 pages of content for use.

Q: what is your website?

Schombert: www.3riverswetweather.org Shared service calibrated radar rain sites. Use 33 ground level radar. Using view associates. Create a virtual equivalent. Elaborate QA/QC – program the site for watershed data. You can pull the data off automatically. Any wet weather purpose, this is an important tool.

Q: how and why did you start as a non-profit?

Schombert: we first tried to work within the county government. It took six months to do any contracts. Hiring and firing was tied to the county. Dr. Dixon allowed us to become a non-profit, which gave us more flexibility. We may be unique under the Clean Water Act. Being a non-profit allows us to obtain outside grants. We can perform think-tank and public policy things. Allowed us to incorporate through the health agency with an independent board. 5 board members are appointed: 2-health agency, 2-ALCAN, and 1-sitting member of state legislature. Works effectively. EPA gave them support in developing the support for them. Attracts foundation grants (Heinz gave $1.5million over 5 years). Allows them to do things that EPA grants will not let them do.

Sandy Maas gave her presentation

1. Duluth passed an ordinance to make all homeowners put in a sump pump. Headlines stated the next day that the all homeowners will spend $1000 for this – ordinance was rescinded in 2 weeks.
2. Flow monitoring
3. Positive effect on the homeowner
4. Demonstration projects – full blown grants
   - Sump pumps, gutters, landscaping, electrical
   - Didn't get enough bang for the buck for landscaping.
5. Group bid formats worked well for contractors as well
6. Overflow points – needed to stop or control
7. City Council made council – ordinance was changed. Mandatory inspection and disconnect and grant up to $1800 and will have a penalty of $50/month on utility bill for noncompliance
8. Public information is critical – no one wants to pollute.
9. Neighborhood meetings, community events, home shows, schools, start with the kids.
10. Leaf Erickson video has been a very effective
11. Homeowners state – why do I need to disconnect – I don't have any water in my basement – that's because the footings work so well.
12. EPA Administration Order – 12 year plan – don't know if it will be accepted – if it will – it will be a consent decree.
13. Modifications to the curretnly drain disconnection program
14. Storage tanks –designed for a 25 year event – but is not a permanent solution and will not stop all overflows.
15. Laterals – lined or replacing –

Q: for public information dissemination, have you considered the Chamber of Commerce or Rotary meetings?

Mass: yes, we use them. We take every opportunity.

Q: how many people do you have to conduct your 1:1 one-hour meetings?

Maas: 6 water quality specialists. 4 are full-time.

Q: are you a combined system?

Maas: no, we're separate.

Q: how do you know that 80% of your I/I comes from the private sector?

Al Rankin, SEH, Inc: we're the largest city on Lake Superior. We're 40% of the flow to the WWTP. When it rains, we blow them out. We replaced all of our manholes. We have 40 flow meters. We drowned a dog in a basement once, so we know we have a problem. Flow meters explain where the clear water is coming from.

Q: explain about your ordinance [sump pump].

Maas: the sump pump order was very unpopular. It was rescinded in days. We still had to fix the I/I problem. Minnesota law said we could not use public money to on private property. We went to St. Paul to ask for an OK on our demonstration program, and got one year. The program went very well, and it became permanent. The laws were changed so that is now OK to use public money to fix private I/I.

Jaynellen Holloway, Fehr-Graham & Assoc: do you have more information on your school program?

Maas: yes, consult me. [Sandy's phone number is: 218-730-4064, her address is City of Duluth, 520 Garfield Avenue, Duluth, MN 55802]

Q: why a consent decree?

Maas: because we're bypassing and overflowing. This becomes a non-permitted discharge.

Q: do you have a target number of homes? $1800/home = what?

Maas: we target 500 homes/year. $1800 is the most we pay for a home. Generally we pay $400 for the pump, $150 for electrical, $350/house trap. Average cost for a sump pump is $2,000.

Q: what is your website?

Maas: www.duluthstreams.org

Q: where are you putting the water from the house?

Maas: each one is different. Some never shut-off. Some ice-up. Some go to other yards. We no longer get involved in where the discharge goes.

Q: how many will get the $50/month surcharge?

Maas: 75 homes have failed to comply, and have not allowed inspection.

Q: where does the $50 go? To the government, to property taxes?

Maas: it goes to the gas-water-sewer bill. If they don't pay, they get shut-off.

Q: why are your laterals so bad?

Maas: root intrusion, very cold weather, big changes in temperature between seasons; they're very old and not maintained.

Group Discussion

Q directed to Simpson: in slide 12 you say we may create sewer districts. Washington State is trying to rid these. What is the trend in the Eastern part of the US?

Rick Arbour, Brown & Caldwell: 2 things: regionalization for cost-effect and scale of economy. In California many special districts have been created. The politicians want to control this. Relatively immune or less susceptible – Big reserves and the politicians want their money.

Glidden: Maine is depressed, and need regionalization. Local towns are concerned about service degrading. Smaller towns fear they'll have to pay for older towns, both for water and sanitary. Water & Sewer are separate business – the city wanted to take it over. Citizens complained that the quality of service would deteriorate.

Ralph Johanson, GRW Engineers: a lot of areas are growing together. I know an area with 210 plants that are not operating.

Mark Braun, City of Portland: in our city, plumbers can line pipes and use materials that we have not approved.
State of Wisconsin – plumbing code states if you are going to do repairs outside the foundation – a sewer contractor performs the work and if inside a plumber needs to do it.
Certified materials

- Plumbers maintain the sewer to the curb line – 4" then from curb to the line
- Liner product – not approved.

Pete McCarthy, Green Bay MSD: Ministerial actions of the maintenance of a collection system are a development of CMOM. Maintenance and procedures can be discretionary. Ministerial is in directing work. If it fails, the municipality is not at risk.

Q: who else has looked at permitting of construction at or near an interceptor? We require digital photos.

Nancy Schultz, CH2M Hill: City of Milwaukee requires professional inspectors.

Schultz: how many test laterals?

About 50% raised hands

Hawley: how many own all laterals?

About 50% raised hands

Gonwa: regarding owning laterals – if you own them you maintain them. If it plugs with grease you have to pay. Your liability goes way up.

Cox: we're careful not to own. We always label our program as *repair assistance*. If you use a one-call system [call before you dig] and you cannot locate the lateral, you have liability. Imagine, though, telling the homeowner they must locate their laterals or pay the consequences. One of the reasons why they have cleanouts. Who else is going to locate the laterals? Point of connection record – where it goes from there no one knows. Directional drilling – water line broke – water went in the sewer and backup their home. Court decided that the City was respinsible for the repair since they should have marked it.

Foster Crowell, Corpus Christi: could WEF identify who owns their laterals? We want to divest. Could we see your ordinances?

Schultz: any one with experience in trying to change ownership of laterals?

Crowell: we decided two years ago to take everything up to the curb line.
Portland, OR, 140 years of code that you own the lateral to the curb. If you operate the main sewer you operate till the curb. Clean outs are not dominant. Grease in the system- if the property owner puts grease in and causes a blockage then the City. In 1906 the records were clear and a number of private branches were allowed to go along the curb to the main – if it goes beyond the curb line they now maintain/own.

Unidentified person: we passed an ordinance that resolving private sewer conflicts is the responsibility of the county. In problem areas, we had to take-over. We can ask the private sector to pay.
County ordinance – the utility has the right to ask the homeowners to establish a line to meet public standard and then they took over the line.

Keys: in '95 we had condos go in, and had a high rainfall flood all the condos. A lawyer said we had to provide separate laterals for each unit.

Scott Jamieson, Alberta Capital Region Wastewater Comm.: we had a similar situation, and we used a private sewer.

Schultz: Wisconsin public code limits the number of connections to a private sewer. If there are too many, it becomes a public sewer.

Cox: we use one pipe per building to reduce the number of laterals to maintain.

Unidentified person: our small community says home owns the lateral and what comes to the main line. Since the home owner probably had no say in the design, why are they liable later?

Cox: any service coming to my main must pass the air test. Pass that and we service it.

A: inspect the home before you acquire it and protect your butt.

Marsha Slaughter, City of Oklahoma City Water Dept: I have a war story. Tulsa has a lateral program. The Mayor found a problem with her lateral two weeks after purchasing a house. She was able to go after the inspector and have the seller pay. Homeowner inspection gives you facts on the condition of the sewer

Anthony Blenko, North Huntingdon Twp: for those sump pumps that are installed when the drains are disconnected, has anyone seen flooded basements when the power goes out?

Hawley: battery back-up.

Dan Berg, City of Duluth: install a floor drain check valve, and allow the water to infiltrate in an emergency. (Also, next year please provide milk at lunch and don't put mayonnaise on the sandwiches.) Ball check valve is installed – install to not flood during an emergency situation.

Unidentified person: Elk Grove performs tree trimming as part of its I/I program. Protecting the power lines helps cut I/I

Johnson: in Michigan we use water powered pumps. The city water pressure runs the pump.

Faas: the law in Michigan changed. So Canton has the residents pay the first $3,000 then Clinton pays the balance. Helps keep the public satisfied.

Mike Zima, Dekalb Sanitary District: regarding those municipal water-driven turbines, we found some that ran constantly. We had to notify the customer that their water

consumption had gone way up. They had a huge water bill that was about five times normal. Battery back-up is better.

Q to Cox: what made you OK with spending money on private I/I?

Cox: provisions in our statutes, we're a sanitary district. We checked with our attorney and he OK'd it.

Q: do you ever file a complaint against a bad plumber?

Slaughter: yes, we have a qualification review board for working in the right-of-way. We have the same for contractors.

Warren Barnes, Butler County Environmental Services: if we have plumbers hitting the main, we send a bill and talk to their insurance and bonding company.

Chuck Gilbert, North Huntingdon Twp: contractors put in outside lines, and have no license.
Cox: unless the local city states. The IL dept of health 5 ft from the house. Entire subdivision was surcharged. Sanitary district put in a flow meter and a homeowner had a blockage – emergency dig. No gasket in valve. Entire subdivision without gaskets. Class Action Suit 100 homes. Inspection/Consequences.

Meeting adjourned