Detroit Water and Sewerage Department

Wastewater Master Plan

DWSD Project No. CS-1314

Stakeholder and Public Involvement Program

Technical Memorandum
Original Date: April 1, 2003
Revision Date: May 31, 2003
Author: CDM

Table of Contents

1. WWMP Technical Work Group Meetings…… 2

2. SSO Work Group Meetings…… 3

3. WWMP Workshops ……..4

4. WWMP County Workshops ……12

5. Precinct Meetings ……22

Stakeholder and Public Involvement Program

The Wastewater Master Plan (WWMP) has established a stakeholder involvement program designed to provide feedback and comment on ideas and findings of the planning process. The goal was to provide communication vehicles so that the final plan reflects input from the stakeholders. An outline of the different meetings held by the Master Plan Team is noted within each section.

1. Wastewater Master Plan Technical Work Group Meetings

The WWMP Work Group meets approximately once every two months to review findings to date on the Wastewater Master Plan and provide advice to the planning process. A list of the meeting dates is below:

June 21, 2001	Initial meeting
September 20, 2001	Planning criteria review
November 14, 2001	Interim Report on Planning Criteria
January 24, 2002	Review of Planning Level Alternatives
March 21, 2002	Review of Task B and Task C Issues
May 23, 2002	Work Group Meeting
September 27, 2002	Work Group Meeting
November 22, 2003	Work Group Meeting
January 2003	Work Group Meeting
March 21, 2003	Work Group Meeting
April 25, 2003	Work Group Meeting
May 16, 2003	Work Group Meeting

2. Sanitary Sewer Overview Work Group Meetings

The Sanitary Sewer Overflow (SSO) Work Group meets approximately every two months to assist in the technical evaluation of SSO controls and to participate in regulatory discussions to shape SSO policy guidance. A list of the meeting dates is below:

April 11, 2001	Work Group Meeting
May30, 2001	Work Group Meeting
June 26, 2001	Work Group Meeting
July 18, 2001	Work Group Meeting
August 29, 2001	Work Group Meeting
November 20, 2001	Work Group Meeting
January 31, 2002	Work Group Meeting
March 28, 2002	Work Group Meeting
May 1, 2002	Work Group Meeting
June 3, 2002	Work Group Meeting
June 26, 2002	Work Group Meeting
August 15, 2002	Work Group Meeting
September 23, 2002	Work Group Meeting
November 4, 2002	Work Group Meeting
December 13, 2002	Work Group Meeting
January 30, 2003	Work Group Meeting
March 21, 2003	Work Group Meeting
April 25, 2003	Work Group Meeting
May 16, 2003	Work Group Meeting

3. WWMP Workshops

Master Plan workshops were held with the wholesale and retail customers to provide detailed information relevant to the planning criteria and capacity requirements. Meeting minutes are below:

January 18, 2002	WWMP Task A Workshop - Southfield
July 16, 2002	Task B Workshop – Henry Ford Community College

January 18, 2003 – Task A Workshop – Interim Planning Criteria
Southfield Civic Center

An overview of the wastewater master planning process and its major goals was presented at the January 18, 2002 workshop for southeast Michigan's wastewater service providers. The planning area and population growth projections were discussed. Presenters outlined how the Wastewater Master Plan involves developing strategic
plans on the infrastructure that provides safe, reliable wastewater collection, treatment and management services to local communities.

Cooperation among sewer service providers across the sewer service area is crucial for developing broad-based support of the wastewater master plan. Stakeholder involvement is pivotal for the planning process. Consequently, nearly seventy wastewater service providers attended the meeting. Participation from wholesale customers will help give vision and direction to the master plan.

SEMCOG's forecasts were discussed. Demographic analysis of Census data looking at the region as a whole was shown. Tracking population changes forecasts the makeup of the region's future population. Growth impacts the wastewater system.

Key policy and contract issues for the master planning process were outlined. The impact of current and emerging regulatory issues was raised. Presenters addressed questions about future flows in relation to population growth and economic development. Needs for rehabilitation, replacement and extension of sewers and expansion of the wastewater treatment facilities were outlined. Expansion of the system and smart growth should reflect protection of the environment and community health.

Ms. Teresa Seidel stated that MDEQ supports the DWSD master planning effort. MDEQ will: 1) attend meetings, make comments in regard to how alternatives meet regulations; 2) review interim reports; 3) support the review and dialogue on alternatives, but MDEQ will not endorse findings or conclusions at the master planning level; 4) serve the role as an observer of the planning process. In response to a question on how MDEQ handles "master plans" in its regulatory review process,

MDEQ responded that the master plan does not replace the 208 planning process. MDEQ does have a regulatory review role in 208 planning.

The challenge that the plan reinforces is providing consistent, reliable service. The magnitude of the problem is that it requires all stakeholders to work on regional solutions. The workshops are designed to garner essential input from stakeholders in the decision-making and implementation process. Meeting the needs requires comprehensive planning, coordination of efforts and collaboration. The January 18, 2002 meeting solicited customer support and participation in the planning process. Wastewater management is a partnership in a joint venture. The Wastewater Master Plan is the blueprint for action. The presentation reminded the customers how they help determine the way DWSD deals with issues such as expansion, sewer rehabilitation, operation and maintenance costs in the next 50- year lookout.

Customer Questions

Q. How does the wastewater master plan affect improvements to wholesale and retail customer service?

R. The master plan will outline a schedule of actions to be taken by the DWSD as regional service provider. Wholesale customers will then be able to plan for their local improvements in a cost-effective manner. The master plan will also address the retail service needs within the City of Detroit.

Q. What are practical population forecasts for small areas?

R. The master plan is being prepared based on population and employment projections developed by SEMCOG. SEMCOG has prepared these projections using the most recent data from the Year 2000 US Census. SEMCOG develops regional forecast numbers in concert with other state and federal agencies, then it disaggregates the regional totals to municipalities and smaller units similar to census tracts. SEMCOG communicates extensively with county planning agencies as it develops its small area forecasts.

Q. What is the framework of financing to support future projected system expansion?

R. The master plan will identify the regional costs for wastewater conveyance and treatment that will be shared among all customers served, or among a subset of customers should a particular improvement only benefit a limited number of customers. The framework for financing will be the current body of rate agreements that DWSD has in place. Recommendations for changes to DWSD's wastewater service contracts and rate methodologies will be made, and these are being discussed through the First Tier Partnering work groups with DWSD's customers.

Q. How do we narrow the gap between sewer needs and sewer funding?

R. A report prepared by SEMCOG in April 2001 identified a large gap between the needs for sewer system improvements and the available local, state and federal funding. Narrowing this gap involves seeking a greater commitment in funding at all levels of government, as well as finding lower cost solutions to sewer service and wastewater treatment. The 50-year master plan is focusing on finding the most cost-effective solutions for regional wastewater service.

Q. How do you determine future flow?

R. An analysis was done on household generation of wastewater and on industrial and business use of wastewater. These analyses concluded that households generate about 77 gallons per capita per day (gpcd) of wastewater, while business generate about 50 gallons per employee per day (gped). Large industrial wastewater flows are projected to decrease in the future as industries perform more water re-use, reduction and recycling.

Future per capita and per employee flows are not projected to increase in the future. In deed, they will likely decrease as flow-conserving plumbing fixtures and flow conserving water use practices become more widespread. For the 50-year master plan, we are projecting that per capita flows may decrease to levels seen in other parts of the United States where there is newer residential construction and traditions of water conservation --- about 70 gpcd.

Q. Will you take flow to outlying plants?

R. The master plan is looking at several alternatives for treating flow at existing treatment sites within the planning area.

Q. How are smaller plants taking the septage?

R. Septage is hauled by trucks to a number of permitted disposal sites in the planning area. A description of the sites is presented in Chapter 5 of the report.

Q. What about regulations – meeting state and federal requirements?

R. The master plan has identified a number of current and emerging (future) state and federal regulatory requirements to be addressed for the 50-year planning horizon. The current discussions regarding proposed regulations for sanitary sewer overflow (SSO) are the most immediate new requirements to address.

Q. How can wholesale customers realistically assist in the planning process?

R. Wholesale customers can assist by participating in scheduled work group meetings and workshops, reviewing and commenting on interim reports, and responding to requests for information.

Q. How is the quantity of flow estimated for future significant industrial users (SIUs)?

R. The planners looked at trends in industrial wastewater use and the relationship between employment by economic sector and SIU flows. Future SIU flows were assumed to change in proportion to employment projections.

Q. Could septage be hauled to some of the smaller WWTPs for treatment and disposal?
R. In general, the smaller plants lack capacity for septage treatment. Specially designed facilities are usually needed for disposal and treatment of septage.

July 16, 2002 – Task B Workshop – Interim Report on Critical Facilities, Capacity Management and Local SSO Alternatives

Question 1: ***Attendees were asked to rate the following meeting elements on a scale of 1 to 5 with 1 being poor and 5 being excellent. Following are the average ratings for each category***

Meeting Component	*Rating Average*	*Number of Respondents*
Meeting Facilities and Location	4.19	21
Meeting Format	3.95	21
Speakers/Facilitators	3.85	20
Handouts	3.2	20

Three evaluations had the following comments (verbatim) added to the table in question 1:

- Hard to read graphics
- Too many speakers were flat/uninteresting – need to be a bit more dynamic
- Southfield Pavilion better – 40 minutes not 65-80 minutes travel.

Question 2: ***Have you or a representative from your office attended wholesale customer meetings within the last year?***

21 responded to this question with 19 saying that yes they had attended a wholesale customer meeting within the last year and 2 who replied no.

Question 3: ***What is the importance to your organization of the information presented at today's workshop?***

15 responded to this question with the following comments (verbatim):

- Capacity of the whole system
- Staying abreast of developments
- Semi-important
- Gather information for future planning

- How it affects water sources to the region
- Keep current with current and future DWSD policies
- Help in local measures for system O&M
- Communication is always important
- Somewhat
- SSO information
- Expansion of plans for regional capacity
- Status of activities
- Help assure regional consistency
- Reasonable
- Involved in DWSD CS-1314 I/I Study

Question 4: ***Meeting participants were asked to rate the importance of the following issues to their communities on a scale of 1 to 10 with 1=low and 10=high.***

Issue	*Rating Average*	*Number of Respondents*
Master Planning	7.50	16
Sustainable Growth	6.06	16
System Capacity	8.94	16
Partnering with DWSD	6.81	16
System Maintenance	7.75	16
Rates	8.00	16
Communication with DWSD	7.56	16
Contracts	6.43	16
SSO Issues	7.69	16

Question 5: ***Did the question and answer session adequately address your concerns?***

Thirteen meeting attendees answered this question on their evaluation. Seven responded yes and one responded no. The other five respondents to this question answered with the following comments (verbatim):

- Very limited questions
- Could have been more questions from the audience
- No, not enough time
- Not much Q&A—need to find ways to have a more interactive session
- Too much material presented for opportunity to conduct "workshop." Functioned as a "work group" session

Question 6: ***What issues would you like to see addressed at the next meeting?***

Eight meeting participants responded to this question with the following (verbatim):

- Plans from individual communities. Real case studies on SSO control.
- SSO Update
- Improved handouts, electronic material
- Discussion of rate/cost impacts of various alternatives
- How DWSD is maximizing their operations to reduce costs and SSOs. Their need for better technology and operations to more efficiently provide service.
- I/I reduction vs. treatment plant capacity expansion
- SSO—treat and release and lobbying for its acceptance through political channels
- Information available and sharing

Participants were asked to add any additional comments.

One meeting evaluation had these additional comments (verbatim):

- How can a cracked sewer pipe be rated "good" condition?
- Current F.D. monitoring has not experienced a major storm but about 1"/hr. How do we get up to 3 gpm/du for major event when dry weather volume is 1 gpm/du ??
- Has dry and WW I/I from residences etc. been separated from DW I/I etc. in models and rate structure?

Presentation Questions:

Q. Long term and mid term – what is long-term? What do you mean by long term? What are you talking about? What's long term? Is that forty years or fifty years or is it just long-term?

Generally, short term is within five years. Mid-term is 5-10 years. And long-term is over 10 years. In the case of the Wastewater Master Plan, the report will have decade by decade reports.

Q. Is Detroit planning on putting all this good information into a computer program?

(Awni Qaqish, DWSD): We are looking into this now. The information will be put into a GIS program, and the City is in the process of changing/updating its GIS system.

Q. Will your information be compatible with GIS programs in other communities in the service area?

(Awni Qaqish): The format will be established when the GIS contractor is on board.

Following the presentation on on-site disposal systems, Dr. Bulkley noted that 15 communities were identified as having poor conditions for on-site systems and only 12 communities have expressed a desire for sewers. The question was-what about the other three communities? And as a follow-up, Dr. Bulkley asked about the specificity of the number 159,204 as potential new sewer customers.

The twelve communities that want sewers are different from the 15 communities that have been determined to have poor conditions for OSDS. In regards to the communities with poor conditions for OSDS, it was acknowledged that it is not exactly known where the septic failures will occur and when. DWSD relies on information from multiple sources and growth projections to predict septic system performance probability. The precise person/household figures come from the projection calculations using SEMCOG growth projections for the referenced communities. The fifteen communities with marginal conditions are not yielding major problems, but a major future development in these communities is expected to cause problems that would have to be addressed.

Following on this topic, Phil Arginoff of MDEQ addressed the challenge of satellite treatment facilities. It was noted that as some development interests approach MDEQ, it becomes a balancing act how they get service and what MDEQ can say yes to.

The permits situation is more complex now.

Q. How do you define dry weather? How do you define dry weather as part of your footing drain evaluation?

In simple terms it is related to the number of days without rainfall. There are detailed technical criteria that define dry vs. wet.

Q. How can we obtain a footing drain map? Are these maps available?

CDM's GIS unit has them and they are readily available. Please contact Steve Rood (CDM)

Q. Did you do inspection of catch basins?

The catch basin inspections were not done with machines but rather physical inspections. were performed. The physical inspections found instances of large debris in the catch basins.

Q. What about inspections of manholes?

Manhole inspections will need to be done. A few have been inspected. There are problems with manhole inspections similar to problems with brick sewers.

A meeting participant stated that Southfield is in the process of lining sewers and wanted to know what product was used for the DWSD sewer linings?

Awni Qaqish said that Insituform had been used and adapted well to either oval or round-shaped sewer pipes. This product is cost effective if installed and designed correctly and that it is important to do cleaning of the pipe at the time of the lining installation.

Q. Are pipe deterioration and corrosion sewage discharges associated?

Sedimentation can produce acids that break down the cement mortar on brick pipes. This seems to be truer with large trunks than with laterals.

In reference to the presentation, it was also stated that new taps within the system were not always installed properly and could lead to deterioration.

Q. On SSO control, some of the costs are ludicrous and too expensive for small communities. Is there an advocate for us?

Looking at the make-up of the state-wide SSO committee, it was noted that there are municipal representatives that bring the mindset that SSO control measures can be cost-prohibitive. Also represented on the committee are state representatives who see SSO's as simply illegal. Given the heightened attention to SSO's and the fact that they are a problem with all communities, it is possible that there are regional approaches that could develop.

4. WWMP County Workshops

The Master Plan Team conducted several county workshops to present Master Planning efforts to date. Meeting minutes are below for each workshop:

March 13, 2003	NE Wayne County Meeting
March 14, 2003	North Huron Valley/Wayne Co. Meeting
March 20, 2003	Oakland County Meeting
March 25, 2003	Macomb County Meeting
April 21, 2003	Roseville Meeting

March 13, 2003 – NE Wayne County Meeting

The Wastewater Master Plan meeting held on March 13, 2003 in Grosse Pointe Woods entailed a presentation on "What We Have Learned" followed by a question and answer session. The communities of Harper Woods, Grosse Pointe Woods, Grosse Pointe Shores, Grosse Pointe, Grosse Pointe Park, Grosse Pointe Farms, East Pointe, Roseville and Saint Clair Shores were the focus areas of the presentation.

The following table identifies the meeting attendees:

Name	Title/Affiliation	Telephone Contact
George Haberer	DWSD	(313) 964-9871
Carl Johnson	CDM	(313) 963-1313
Phil Brink	CDM	(313) 230-5624
Joe Ahee	Grosse Pointe Woods	(313) 343-2460
Sue Hanson	WC/DPW	(313)224-8283
Kereen Conley	WC/DPW	(313) 224-7679
Vyto Kaunelis	WC/DOE	(313)224-3632
Butler Benton	WC/DOE	(313) 224-6937
R. Marlin Sumner	Anderson, Eckstein and Westrick	(586) 228-9618
Mimi Pledl	PR Networks	(313) 237-3500
Frank Schulte	Public Works, GPC	(313) 417-1189
Brett Smith	Grosse Pointe Shores	(313) 886-0020
Vim Leidlein	Harper Woods	(313) 343-2505
Cliff Maison	Grosse Pointe Woods	
Paul Weitzel	GPC	(313) 417-1180

Upon completion of the presentation on the Wastewater Master Plan, meeting participants raised the following questions and issues:

1. Addressing the slide of reducing the non-sewerage flow by 50 Million gallons per day thus creating the capacity to serve to new customers, it was asked how DWSD's "growth pays for growth" policy fits into these projections. Are they conflicting ideas or can they work together?

2. There was a clarification question on household daily usage regarding household average daily usage and individual daily usage followed by a question on ways to reduce flow.

3. Question Number 2 led to discussion and questions on footing drain disconnections:
    - Which communities have footing drain disconnection programs in place?
    - What is the cost per household?
    - How have communities paid for the disconnections?
    - What have been the results from existing programs?
    - It was noted that State Revolving Funds may be available to communities for footing drain disconnection programs
    - Is there a package available from communities who have already implemented footing drain programs that could be made available to communities interested in similar programs?

4. What is the best way to get to the elected officials in this area?

5. Following the distribution of the community surveys, there were questions among the meeting participants on the Grosse Pointe Sewer separations (about 70% separated) and whether the Jefferson Relief Sewer was going to affect the two retention basins.

North Huron Valley / Wayne Co. Meeting

The Wastewater Master Plan team made a presentation at the Rouge Valley Customers Proposed Rate Meeting held at the Livonia DPW Offices on March 14, 2003. The presentation focused on the following DWSD communities: Livonia, Westland, Redford, Dearborn Heights, Plymouth City, Plymouth Township, Northville, Northville Township, Canton, Novi, Garden City, Inkster, Wayne, Van Buren and Romulus. Handouts of the Power Point presentation were distributed to meeting attendees.

The following table identifies the meeting attendees:

Name	Title/Affiliation	Telephone Contact
Mary Ann Schol	Staff Assistant/OCDC	(248) 858-1117
Doug Buchholz	Manager/OCDC	(248) 858-1119
Mohammed Gill	Asst. Super. Eng/DWSD	(313) 224-4790
Tim Faas	Director Operations/ WTUA	(734) 453-2793
Blake Roe	Dearborn Heights	(248) 223-3442
Marge Horvath	Exec. Assistant/Dearborn Heights	(313) 277-7413
Greg Weeks	Wade Trim/Garden City	(734) 947-9700
James Gallogly	DPW Director/Northville	(248) 449-9930
Jackie Milliken	Chief Acct./Redford	(313) 387-2737
Walter Alix	Vice President	(248) 454-6370
Kevin Roney	Public Utilities Mgr./Livonia	(734) 466-2608
Vyto Kaunelis	Deputy Director/WCDOE	(313) 224-3632
Ramzi El-Gharib	City Engineer/Wayne	(734) 728-9100
Steve Kalinowski	Sr. Assoc. Wade Trim/Wayne County	(734) 947-9700
Patty Duha	Director Water & Sewer/Van Buren Twp.	(734) 699-8913
Phil Brink	CDM	(313) 230-5624
Carl Johnson	CDM	(313) 963-1313
George Haberer	DWSD	(313) 964-9871
Mimi Pledl	PR Networks	(313) 237-3500

Upon completion of the presentation on the Wastewater Master Plan, the meeting participants raised only the following few questions:

1. Is the Contract Work Group meeting at this time and who is on it? What are some of the issues being discussed in the Contract Work Group? Following Carl Johnson's response to these two questions, it was asked if these issues roll down to the 2nd tier customers.

2. Are you thinking of how you'll deal with the private sewers over the next fifty years? What about a ten year time frame?

3. The final question addressed the per capita and per household water usage numbers. How was this number arrived at? A meeting participant made reference to the empty households during the day in her neighborhood and wondered if those numbers were accurate. The final question on water usage amounts asked if the numbers quoted in the presentation were "service-wide" usage numbers.

Oakland County Meeting

DWSD Wastewater Master Plan Presentation
Oakland County Commissioners Auditorium
Thursday, March 20, 2003

Name	*Affiliation/Title*	*Telephone Contact*
Jane Bais-DiSessa	Berkley, City Manager	(248) 546-2470
Fred Collins	Berkley, Councilman	(248) 318-3874
Rick Shepler	Berkley, Director of Public Works	(248) 546-2430
Renzo Spallasso	Beverly Hills, DPS Director	(248) 646-6404
Dennis Dembiec	Birmingham, Director Engineering Services	(248) 644-3865
Wayne Domine	Bloomfield Twp.	(248) 433-7731
Carl Johnson	CDM, Project Manager	
Tom Biehl	Clarkston, Bloomfield Twp. and Franklin, VP, HRC	(248) 454-6365
Thomas Zoner	Commerce Twp, Supervisor	(248) 960-7070
Jennifer Chambers	Detroit News	(248) 647-7402
Marilyn Gosling	DWSD, Water Commissioner	
George Haberer	DWSD	
George Ellenwood	DWSD, Public Affairs Manager	(313) 964-9460
Michael Webb	Hazel Park, City Council	(248) 398-8358
Michael Sunquest	Hazel Park, Water and Sewer	(248) 542-0340
Jay Mader	Huntington Woods	(248) 547-1888
Linda Richardson	Independence Twp., Director DPW	(248) 625-8222
JoAnn Van Tassel	Lake Orion Village, Manager	(248) 693-8391 ext 101
Steven E. Adams	Lyon Twp, Trustee	(248) 486-5925
Jon Austin	Madison Heights, City Manager	(248) 583-0829
Marilyn Russell	Madison Heights, Council	(248) 584-1103
Richard Clark	Madison Heights, Council	(248) 398-3023
Benny McCusker	Novi, Director, DPW	(248) 735-5640
John McCollough	Oakland County Drain Commissioner	(248)858-1110
Sandra Greenacre	Oakland County Drain Office, Supervisor Water & Sewer Billing	(248) 858-1106
Doug Buchholz	Oakland County Drain Commission, Deputy	(248) 858-1119
John Basch	Oakland County Drain Office	(248) 858-4934
Gayle Murphy	Oakland County Drain Office	(248) 858-1120
Kevin Larsen	Oakland County Drain Office	(248) 858-0981
Amy Stickney	Orchard, Hiltz & McCliment, Inc	(734) 522-6711
Vicki Putala	Orchard, Hiltz & McCliment, Inc., P.E.	(734) 522-6711
James Marleau	Orion Twp, Treasurer	(248) 391-0304
Jerry Dywasuk	Orion Twp., Supervisor	(248) 391-0304 ext 201
Joe Palm	Other, 13302 Sullivan Road, Emmet, MI	(810) 395-9923
Shirley A. Clancy	Oxford Twp, Chair, Water/Sewer Commission	(248) 628-7025
Mark Slown	Oxford Village, Village Manager	(248) 628-2543
Robert F. Hunter	Pontiac, Assistant Director, DPW	(248) 505-3459
Mimi Pledl	PR Networks	(313) 237-3500
Chester Koop	Rose Twp., Supervisor	(248) 634-6889
Dick Cole	Royal Oak, City Engineer	(248) 246-3264
Tom Trice	Royal Oak. Director, Public Services	(248) 246-3184
Ed Haapala	West Bloomfield Twp, Utilities Director	(248) 451-4785

The Wastewater Master Plan presentation for the Oakland County was held at the Oakland County Commissioners Auditorium on Thursday, March 20, 2003. The 61 Oakland County communities were invited (a copy of the meeting attendees is attached). The presentation gave an overview of the Wastewater Master Plan with a focus on Oakland County.

After the Power Point presentation, meeting attendees raised the following questions and issues:

1. Concerned about the projected population increases that would amount to approximately 1600 people per year, it was asked: Does this mean we are expanding into the green fields, and is this consistent with current policy recommendations?

2. What are you doing to help communities manage wet weather events?

3. Addressing the 40% figure of non-sewerage flow, it was asked if there was a scientifically verifiable model that was used to derive this number. And further what data and what methods were used?

4. As a follow-up to question 3 on excessive flow issues, there was a concern that a substantial proportion comes from areas that are closer to the water table and/or certain select areas. Given this, is the proposed solution a fair distribution of costs?

5. By eliminating footing drains, can you save costs? Will it really save dollars? Is this a CSO issue?

6. Follow-up to question 5, by putting it into sump pumps and onto back yards, isn't there a problem with mosquitoes?

7. In addressing their unhappiness with the rates formulas, Novi noted that DWSD has extensive pipe in Novi including interceptor pieces that are being neglected and creating costs for them. How will the Master Plan address this?

8. Referring to Wayne County capacity - WTUA- and the discussions of going to Ypsilanti, it was asked-- how does this affect the Master Plan?

9. Have you been able to identify the communities that make up the 40% non-sewerage flow? Is it your expectation that those communities will find some other means to address this 40%

10. In regards the non-sewerage flow reduction, do you see a regional strategy in terms of funding to correct this non-sewerage flow reduction?
11. How does this 40% compare to other similar areas throughout the country?

12. Do you see part of the Master Plan to be a funding strategy to affect this problem?

13. Have you looked at the impact of the Comprehensive Water Master Plan on the Wastewater Master Plan?

14. Given the great concern on rising rates, when looking at expansion, what is the impact on operational costs of the system with the Wastewater Master Plan?

15. Saying that it had been stated that non-sewerage flows look at water usage and sewerage flow together, Orion Township noted that large portions of their community are served by DWSD but that they also areas in the township that have their own wells. In response to that will you re-look at your methodology for areas such as Orion Township?

16. Where does the sludge go and how are wastewater costs affected for this? Will sludge be increased by the Master Plan?

17. When was the last Master Plan for water? Why did it take this long to re-do? Was it spearheaded because of regional actions and political actions?

18. Questioning the $14-$26 Billion infrastructure costs, it was stated that the City of Detroit should do their homework and that the suburbs have been more efficient in managing their systems and keeping their infrastructure costs low.

19. Noting that one element of the Master Plan is to establish sewer service boundaries, it was commented that it appears that in this Master Plan that sewer extensions will be allowed anywhere. Doesn't this contribute to urban sprawl? How can a Master Plan be developed without establishing service boundaries?

20. Detroit requires suburbs to file and get approval for all sewer extensions so isn't the authority with Detroit?

21. Suggest that through the Master Plan process DWD and SEMCOG should work closely with communities.

22. Madison Heights said that they have been asking DWSD how the rates formula is calculated. Noting recent year increases of 8%, 13%, 6.2%, they want to know what is being applied. Additionally addressing the recent Detroit News article on the size of the DWSD Public Affairs department, it was asked: Can we get answers to those questions from your rates group?

23. What's the big secret on rates? Please take that question back to DWSD.

Macomb County Meeting

The Wastewater Master Plan presentation for the Oakland County was held at the Sterling Heights City Complex on Tuesday, March 25, 2003. John Graves from PR Networks attended the meeting and recorded the following questions in the discussion session after the presentation.

1. What percentage of non-sewerage is generated in Detroit versus non-Detroit cities?
2. Have you decided if satellite systems will be constructed outside Detroit, if so, where?
3. Can you verify where water intakes are located in the system?
4. Are there any water intakes in Lake St. Clair?
5. Will gdrssa4 password work on website?
6. Will digital recorders continue to be utilized?
7. What will happen to over billing in Sterling Heights before August, 2002 due to inaccurate meters?
8. Will GDRSS come into play when billing is of 40% in Macomb Twp and will meters be re-tested?
9. Why are totalizers used if they are inaccurate?
10. Who is at fault for erroneous meters, contractors or DWSD?
11. Now that GDRSS is in place, will adjustments occur if fixed costs are higher than actual flow?
12. How will communities be advised of adjustments of flows?
13. When will new sewer rates be available to communities?

Roseville Meeting

A presentation on the Detroit Water and Sewerage Department Wastewater Master Plan entitled "What We Have Learned" was given Monday, April 21, 2003 at the City of Roseville training center. A copy of the meeting attendees is attached. The presentation gave an overview of the Wastewater Master Plan to date with power point handouts distributed to all meeting attendees.

April 21, 2003 Wastewater Master Plan Presentation Attendance

Name	*Community/Affiliation*	*Phone Contact*
R. Marlin Sumner	SEMSD	586 228 9618
Peter Provenzano	Roseville	586 445 5417
George Haberer	DWSD	313 964 9871
Carl Johnson	CDM	313 693 1313
Mimi Pledl	PR Networks	313 237 3500
Bob Hison	St. Clair Shores	586 772 9027
Brian McGrail	Roseville	586 445 5466
Thomas Aiuto	Roseville	586 445 3466
John Imbrunnone	St. Clair Shores	586 445 5374
Don Hublon	St. Clair Shores	586 726 1234
Wayne O'Neal	Eastpointe	586 445 5016
Mark Wollenberger	St. Clair Shores	586 447 3312
John Chown	AEW, Inc	586 726 1234

After the presentation, the following questions and issues were raised by meeting participants:

1. Addressing the issue of requiring residential sewer line inspections to be done at the time of house sales, the following questions were asked:
    a. How would the inspection be done? Using video cameras?
    b. Who would do the inspections?
    c. What would be the cost of a video inspection?
    d. Is this being proposed only for Detroit houses or for house sales throughout the DWSD service area?
    e. How often do such inspections need to be done?

2. Noting that the suburbs are aware of the leaks in the system and are working to reduce them, there were questions on system leaks and Detroit:
    f. What is the leak rate in Detroit?
    g. Who is paying for repairs to Detroit leaks?
    h. Is there a separate factor being calculated so that Detroit residents actually pay for the loss?
    i. Is the cost to repair Detroit leaks passed on to the suburbs in any way?

Following the response that Detroit residents pay for the leaks in the City of Detroit, a meeting attendee commented that "a lot of people don't feel that is the case."

3. Marlin Sumner volunteered that SEMSD has determined a 50% excess inflow on an annual basis (not including rain).

4. Questions were raised regarding programs to reduce excess inflow:
    j. Which communities have instituted footing drain disconnection programs and how do they operate?
    k. Who pays for the inspection and repair of footing drain programs? (It was noted that the disconnections are expensive and can range from $3,000 - $7,000 per house).
    l. It was also noted that footing drains and condition of service lead need to be considered together since footing drains can affect the service lead condition.

5. Flow Management questions/issues included the following:
    m. Referencing prior studies and planning it was asked whether things are changing as to what is cost effective with to regards to DWSD and flow management.

    n. How often does SEMCD exceed 102cfs?

    o. It was noted by Sumner that there can be a relationship between rate issues and reduction of flow issues that may result in different scenarios to maximize the system.

6. Will Detroit have water loss rates lower than 10% in our lifetime?
   This question was followed by some comments regarding media reports on DWSD, specifically suburban water rates and uncollected Detroit water bills. A meeting attendee also noted that 2/3 of the DWSD customers live outside the city of Detroit.

7. There were several comments/questions addressing the importance of communication with DWSD and residents as follows:
    p. We need to understand how the rates are being assigned
    q. Why are we charged these rates?
    r. What is the benefit to us?
    s. In order to adequately explain to our customers, we need to know what the problem is and where the costs are being assigned

5. Precinct Meetings

The Master Plan Team attended two precinct meetings in efforts to share Master Planning information that can be passed on to residents. Meeting minutes and discussion items are below:

Presentation to Eighth Precinct Police Community Relations Meeting June 24, 2002

DWSD's presentation on the Wastewater Master Planning process was given at the 8th precinct monthly meeting on June 24, 2002 following the initial meeting opening formalities. Carl Johnson and Shannetta Griffin from CDM gave the presentation. George Haberer from DWSD answered some questions following the presentation.

Copies of the PowerPoint presentation were distributed to the overflow audience. Shannetta Griffin gave a general overview of the process, described the public involvement component, and gave some background on DWSD and CDM. Carl Johnson addressed the particulars of the Wastewater Master Plan including coordination with other long-term planning processes, coordination with wholesale customers, wastewater infrastructure issues and wastewater service issues in Detroit. Infrastructure issues included condition of the sewer system, sewer inspections and future improvements. Both Shannetta Griffin and Carl Johnson stressed the importance of public involvement in this process. Following Carl Johnson's portion of the presentation, meeting attendees were invited to ask questions and make comments.

Following are the highlights of the question and answer session.

Question and Answer Segment

Fire Hydrants. It was asked whether fire hydrants are part of the Wastewater Plan and what is the condition of the fire hydrants? Carl Johnson responded that fire hydrants are included in the water system, but that they would be willing to take questions and comments on them. George Haberer said that there are over 40,000 fire hydrants in the system and to let DWSD know if there is a problem with a particular fire hydrant. Later in the meeting, someone else asked for a phone number to call to report problem fire hydrants. It was stated that the number was included in the DWSD Customer Services Brochure available after the meeting.

Sewer Location. A meeting attendee was interested in knowing where the sewers are actually located. Carl Johnson and George Haberer informed them that there are primarily located in the streets or in the back of houses where alleys may have been but that the sewerage is transported to the Wastewater Treatment Plant on Jefferson. As an added comment to this question, a resident voiced concern over a cave-in in their neighborhood.

Downspout Disconnection Program. It was asked if and when the City would be doing a downspout disconnection program. Carl Johnson answered that DWSD was in the process of conducting a pilot program to determine what should be done. He said that downspout disconnections would be implemented under the CSO program. When someone asked if the city would be paying for future downspout disconnections, there was general laughter.

Sewer Repairs. A question concerned how decisions are made on repairing and replacing sewer pipes. In response, Carl Johnson noted that there are a number of factors that go into the recommendation from the City regarding repair or replacement.

Sewer Cleaning. Responding to a concern regarding sewers that back-up and have particular problems, George Haberer asked for specific addresses and locations so that DWSD can facilitate any necessary cleaning. DWSD's inspection program will also assist in this.

Master Planning Process. It was asked if the master planning study only involves number crunching and whether visual inspections were part of the process. Carl Johnson said that visual inspections of the system are done by individuals and cameras. Looking at complaints over the past 15 years is also part of the process. When asked to quantify number crunching versus in-field work, Carl Johnson said that it was 80% from data and studies and 20% from field study.

Presentation to Thirteenth Precinct Police Community Relations Meeting November 26, 2002

Meeting Summary

A. Introduction

Shannetta Griffin of Camp Dresser McKee (CDM) introduced Detroit Water & Sewerage Department (DWSD) executive staff George Ellenwood and George Haberer in addition to project management team members, Carl Johnson and LaJoyce Mullins-Williams.

B. Wastewater Master Plan Presentation

This presentation was scheduled as part of the 13th precinct meeting to give an overview of the Wastewater Master Plan to area residents. Carl Johnson discussed the importance of public involvement in the process and seeking input through community meetings.

Addressing the Wastewater Master Plan, Johnson discussed the necessity of long-term planning and sharing information through such vehicles as:

- DWSD workshops

- Precinct briefings
- City Council briefings
- WWMP advisory committee
- SEMCOG

The DWSD Wastewater Master Plan consultant team used handouts to show the overall 50 year plan as well as specific city of Detroit components. Some of the particular topics addressed included:

- The Wastewater Master Plan as a proactive plan for managing the sewer system
- Bringing sewer service to the city — description of the service area
- Explaining why a framework for determining DWSD's future service area is essential.
- Improvements to retail customer service
- Needs for rehabilitation, replacement and extension of sewers

C. Highlights of Questions and Comments from Meeting Participants

Sinking Sewer Lines

A resident addressed the problem of sinking sewer lines and drains that no longer work and said that the community would like to know when these problems would be taken care of. She gave a specific location at 36 Longfellow. George Ellenwood asked for her name and contact number and committed to contacting the resident personally. George Ellenwood also informed the residents that Clarence Dishman is the contact person for such restoration issues. Another resident said that she was having similar problems but would save her question until after the meeting. Other locations were given directly to George Haberer and George Ellenwood who met with residents after the meeting.

Sewer Fire

A resident brought up the recent sewer that caught fire at Cass and Amsterdam on November 23, 2002. Carl Johnson responded that sewers can catch fire from sewer gas build up which is flammable. Sometimes the fires are caused by people dumping oil or gasoline that can catch fire. That is a violation of the sewer use ordinance. Sometimes there is an automobile accident and the gas tank breaks and leaks into the sewer.

Sewers as Breeding Location for Mosquitoes

As a question independent of the Wastewater Master plan, one resident questioned whether DWSD sewers are a breeding place for mosquitoes. Specifically it was asked if DWSD sewers are safe from mosquitoes or if there are preventive measures that can be put in place. There was a particular concern since neighbors in the precinct had contracted the West Nile virus. It was also asked if catch basins will be sprayed to avoid West Nile. Carl Johnson responded that the Wastewater Master Plan team is talking with the Public Health Department in Detroit about a program to address West Nile Virus infection. Detroit does have a program and the sewers will be sprayed. Water will be treated against this threat.

Water Mains as Part of the Wastewater Master Plan

A meeting attendee asked if the water mains are included in the wastewater project. Carl Johnson replied that there is a parallel project on the water system. The water mains are the subject of that parallel study.

Closing

*It was decided to wrap up so that residents could meet with George Haberer and George Ellenwood individually. Other concerns and locations were handed in to them.