

PROJECT CS-1528

WATER MASTER PLAN UPDATE

TECHNICAL MEMORANDA



**CDM
Smith**

Prepared For:

Detroit Water and
Sewerage Department

August 14, 2015

THIS PAGE INTENTIONALLY LEFT BLANK.

TM-1: Customer Involvement Program

1.0 Overview

DWSD leadership requested that retail and wholesale water customers be included in the 2013-15 update to the Water Master Plan. A Customer Involvement Plan was created to outline a process for engaging, listening, and responding to the collective voice of the customer throughout the update. The foundation of these processes included transparency, full and prompt disclosure of technical data, project issues, and recommendations, as well as group problem solving, and high levels of trust.

2.0 Customer Involvement Team

The task leader for this process was Charlie Fleetham of Project Innovations. Retail customer involvement activities were managed by Edna Bell of Serch Consultants, including a Retail Master Plan Steering Committee (RCSC), a group comprised of residential and commercial City of Detroit water customers. Teresa Weed Newman of Project Innovations managed the wholesale customer involvement process, including facilitation of the Master Plan Steering Team (MPST), a team comprised of DWSD staff, wholesale customers, and project staff.

3.0 Customer Involvement Process

1. **Wholesale Customer Involvement** – the Wholesale Customers were involved utilizing the TAC process. This process included updates at quarterly TAC Meetings, monthly or bi-monthly Work Group Meetings, Regional Operations Meetings, Customer Engineering Meetings, email communications, one-on one meetings, and monthly Master Plan Steering Team Meetings. Wholesale Customer meetings included (see Table 1.1 for complete meeting list and Table 1.2 for MPST participants):
 - a. Master Plan Steering Team Meetings (20)
 - b. Technical Advisory Committee (TAC) Meetings (8)
 - c. Analytical Work Group Meetings (10)
 - d. Customer Engineer Meetings (4)
 - e. Regional Operations Meetings (5)
2. **Retail Customer Involvement** - the Retail Customer Steering Committee (RCSC) was established to serve as the voice of DWSD's retail customers, to represent the interests and well-being of these individuals. Commercial/industrial representatives were chosen based on the list of top water users in the City of Detroit. Retail Customer meetings included (see Table 1.1 for complete meeting list and Table 1.3 for RCSC participants):
 - a. Retail Steering Committee Meetings (8)
 - i. These meetings included project presentations and briefings on issues of importance (ie. Water shut-offs) from DWSD executives.

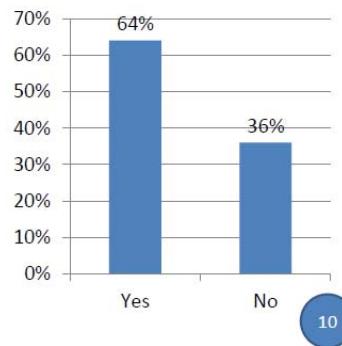
b. Neighborhood Meetings (6)

- i. These meetings included the use of an Audience Response System (ARS) to collect and array participant opinions to provide an opportunity for real-time discussions with participants. Two examples of participant survey questions from a meeting held on Feb. 20, 2014 follow:

Survey Question 2

I know people who have difficulty paying their water bill

1. Yes
2. No

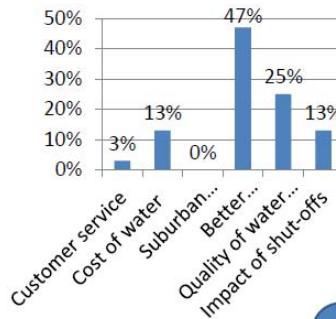


10

Survey Question 6

What are your biggest concerns about the future?

1. Customer service
2. Cost of water
3. Suburban expansion
4. Better infrastructure
5. Quality of water and public health
6. Impact of shut-offs



10

3. **Communicating Progress** - The Water Master Planning information is stored on the DWSD Wholesale Customer Outreach Portal (www.dwsdoutreach.org). The calendar contains all

meetings that have occurred during the update process. The Documents section is the repository for meeting documents, draft reports, interim reports, and the final report.



4.0 Key Customer Input

The customer involvement process resulted in key input from customers that molded the strategy of the water master plan update. As noted in Table 1.1, more than sixty meetings were held over the planning period engaging customers in the process. Important feedback and key input received throughout the process included:

1. Retail Customers
 - a. Customer Service
 - i. Improve responsiveness to issues (ie. Running water/slow response to service requests).
 - ii. Improve communication between residents and DWSD.
 - iii. Acknowledge lessons learned from shut-off program and AMR program.
 - iv. Better education about water usage and how to reduce cost.
 - v. Commercial billing is cumbersome and should be simplified.

b. Infrastructure and Water Quality

- i. Educate residents about how water infrastructure is configured to address current needs and future needs of the City.
- ii. Explain options for energy recovery and water recovery.
- iii. Show how long-term planning provides wise investments into the system.
- iv. Water quality is exceptional but combined costs for water, sewer, and drainage are concerning.
- v. Address rehab and replacement of the distribution system.

2. Wholesale Customers

a. System Optimization

- i. Explain DWSD opportunities for system optimization.
- ii. Highlight opportunities for DWSD and customers to collaborate in energy cost reduction and redundancy.
- iii. Provide guiding principles for water treatment consolidation and repurposing.
- iv. Define the role of the CIP in overall decision making process.
- v. Address nonrevenue water.
- vi. Identify optimum pressure at master meters.

b. Redundancy and Reliability

- i. Identify critical mains and create a list of in-stock materials needed for repairs of these mains.
- ii. Show how upgrades to pump stations and treatment plants will increase reliability in the system.

c. System Planning

- i. Implement a dedicated Asset Management system to guide capital improvement decisions.
- ii. Develop methods for data collection and forecasting to be used to adjust planning projections on a regular basis.

Table 1.1: Listing of Customer Meetings
Wholesale Customer Steering Committee (MPST)

Meeting Date (2013)	Number of Participants
June 21	26
July 18	23
August 15	26
September 19	15
October 17	22
November 21	19
Meeting Date (2014)	Number of Participants
January 16	22
February 20	16
March 20	18
April 17	17
May 15	15
June 19	11
July 17	11
September 18	11
October 9	13
November 13	13
Meeting Date (2015)	Number of Participants
January 8	15
February 21	15
March 12	16
May 14	11

Retail Customer Steering Committee (RCSC)

Meeting Date	Number of Participants	Location
March 20 (2014)	15	Water Works Park WTP
June 19	43	Water Works Park WTP
August 14	5	Water Works Park WTP
October 23	24	Water Works Park WTP
December 11	11	Water Works Park WTP
December 12	3	Water Works Park WTP
February 12 (2015)	19	Water Works Park WTP
May 14	14	Water Works Park WTP

Detroit Neighborhood Meetings

Meeting Date	Number of Participants	Location
November 13 (2013)	12	Renaissance H.S., Outer Dr.
February 20 (2014)	15	New Prospect Church
May 15	N/A	Wayne County Comm. College
June 11	7	Precinct 12 - UAW Region 1A
July 17	7	N. Rosedale Park Comm. Center

Customer Engineering Team

Meeting Date	Number of Participants
August 22 (2013)	18
December 5	17
March 27 (2014)	13

Customer Workshops

Meeting Date	Number of Participants
June 3 (2014)	35
August 26 (2014)	39

Regional Operations Meetings

Region/Date	Representing	Customer Participants
Region One 3/10/2015	North Macomb County, N. Oakland County, Lapeer County, and St. Clair County.	Chesterfield Twp., GLWA, Genesee County, Bruce Twp., New Haven, Washington Twp., and Rochester Hills
Region Two 12/11/2014	Oakland County	Auburn Hills, Orion Twp., Pontiac, Commerce Twp., Rochester Hills, West Bloomfield Twp.
Region Three 11/12/2014	South Oakland County, North Wayne County	Hazel Park, SOCWA, Troy, Redford Twp., Warren
Region Four 10/28/2014	West Wayne County, South Oakland County, YCUA	Canton Twp., OCWRC, Northville Twp., YCUA, Belleville, Allen Park, Van Buren Twp., Plymouth Twp., Northville, Novi, SOCWA, Livonia, Farmington Hills, and Dearborn
Region Five 2/27/2015	North Wayne County and Wayne County	Dearborn Heights and Wayne County
Region Six 2/27/2015	South Wayne and Monroe Counties	Berlin Twp. and Lincoln Park

TAC Analytical Work Group

Master Plan Update/Presentations	Number of Participants
January 22 (2013)	24
May 21	25
June 18	27
July 23	24
August 27	29
November 1	29
January 21 (2014)	33
March 25	31
January 20 (2015)	21
March 24	26
May 12	16

TAC Meetings

Master Plan Update/Presentations	Number of Participants
January 31 (2013)	78
April 25	67
July 25	59
October 24	41
January 30 (2014)	64
April 24	64
February 17 (2015)	98
April 30	94

Table 1.2: Master Plan Steering Team (MPST) Participants

Name/Organization/Address	Phone Number	Email
Julie Aichler, CDM Michigan	313-230-5631	aichlerje@cdmsmith.com
Fred Barnes, DWSD BOWC	810-217-2161	fredtheengineer@comcast.net
Bob Belair, Canton Township	734-394-5284	bob.belair@canton-mi.org
Tarolyn Buckles, BOWC Technical Advisor	313-964-9517	buckles@dwsd.org
Rodney Burlett, DWSD	313-267-4863	rburlett@dwsd.org
Jody Caldwell, OCWRC	248-296-9092	caldwellj@oakgov.com
Ann Casey, CDM Smith	816-412-3170	caseyam@cdmsmith.com
Coline Coleman, Livonia	734-466-2262	ccoleman@ci.livonia.mi.us
Carrie Cox, OCWRC	248-858-0958	coxcc@oakgov.com
Terry Daniel, DWSD Water Operations Director	313-926-8110	tdaniel@dwsd.org
Greg Eno, DWSD Public Affairs Specialist	313-964-9477	eno@dwsd.org
Tim Faas, Canton Township	734-394-5160	tim.faas@canton-mi.org
Charlie Fleetham, Project Innovations Inc.	248-476-7577	charlie@projectinnovations.com

Grant Gartrell, DWSD	313-926-8139	gartrell@dwsd.org
Dave Guastella, TYJT	313-963-0612	dguastel@tyjt.com
Chuck Hersey, Public Sector Consultants	734-890-7393	chersey@pscinc.com
Zahid Jawadi, DWSD	313-964-9074	jawadi@dwsd.org
Carl Johnson, Project Manager, CDM Smith MI	313-230-5635	johnsoncr@cdmsmith.com
Tim Kuhns, Novi	248-735-5647	tkuhns@cityofnovi.org
Sue McCormick, DWSD Director	313-224-4701	mccormick@dwsd.org
Jeff McKeen, SOCWA	248-288-5150	jmckeen@socwa.org
Jim Meenahan, Engineering Society of Detroit	248-705-1936	jmeenahan@sbcglobal.net
Gary Mekjian, Farmington Hills	248-871-2535	GMekjian@fhgov.com
Karen Mondora, Farmington Hills	248-871-2534	kmondora@fhgov.com
Teresa Newman, Project Innovations Inc.	248-476-7577	teresa@projectinnovations.com
Cheryl Porter, DWSD Chief Operating Officer	313-926-8135	cporter@dwsd.org
Don Rohraff, Livonia	734-466-2607	drohraff@ci.livonia.mi.us
James Rydquist, Tetra Tech	313-244-9804	james.rydquist@tetrach.com
Biren Saparia, DWSD-SCC	313-267-8977	saparia@dwsd.org
Balvinder Sehgal, DWSD	313-926-8131	seghal@dwsd.org
Mary Lynn Semegen, DWSD-Water Quality	313-926-8102	semegen@dwsd.org
Joan Weidner, SEMCOG	313-324-3343	weidner@semcog.org
Lyle Winn, AEW	586-726-1234	lwinn@aewinc.com
Eric Witte, Dearborn	313-943-2372	ewitte@ci.dearborn.mi.us
Larry Witt, DWSD-Engineering	313-267-4861	witt@dwsd.org

Table 1.3: Retail Customer Steering Committee (RCSC) Participants

Name/Organization/Address	Phone Number	Email
Kevin Binion, Kingdom Global Communities, Inc.	313-492-8046	kevinbinion@gmail.com
Tarolyn Buckles, BOWC Technical Advisor	313-964-9517	buckles@dwsd.org
Rodney Cole, DTE-Regional Manager,	313-235-9448	cole@teenergy.com
Jacqueline Collins Bolden, Delray United Action Council	313-790-8717	duac_jcb@sbcglobal.net
Dennis DaPra, Uncle Ray's Potato Chips	313-834-0800	dennisd@unclerays.com
Sr. Cathey DeSantis, Detroit Catholic Pastoral Alliance		dcpa3@sbcglobal.net
Maggie DeSantis, SE Warren/Conner Dev. Coalition	313-331-3287	mdesantis@warrenconner.org
Chris Dorle, Detroit Future City	313-499-3331	c dorle@detroitfuturecity.com
John Dwyer, General Linen Supply Co.	313-873-5980	jdwyer@general-linen.com
Arthur Edge, Far Northwest Community Assoc.	313-208-8141	sirarthur@sbcglobal.net
Josh Elling, Jefferson East, Inc.	313-331-7939	jelling@jeffersoneast.org

Juan Escarendo, Community Growth Partnership	313-758-1807	escarendo313@gmail.com
Larry Fodor, Wayne State University	313-577-4352	aq4880@wayne.edu
John George, Motor City Blight Busters, Inc.	313-978-7218	jgeorge@blightbusters.org
John Graves, Businessman-Resident	313-674-0304	prnetwks@aol.com
Peter Haag, Henry Ford Hospital	313-916-7194	phaag1@hfhs.org
Kenyetta Hairston Bridges, Detroit Economic Growth	313-237-6097	kbridges@degc.org
Artina Hardiman, Mack-a-Live	313-574-5609	artinatinsley@yahoo.com
Tina Harris, FWDCA	313-412-0783	harrislt@detroitmi.gov
Jeff Jackson, MGM Grand	313-850-1720	jjackson@detmgm.com
Malinda Jensen, Detroit Economic Growth Corporation	313-963-2940	mjensen@degc.org
Kevin Johnson, Rosedale-Grandmont Community Assoc.	313-835-6136	kjohnsonm.1@prodigy.net
Chadd McCormack, Henry Ford Hospital	313-916-7454	cmccorm3@hrhs.org
Katrina McCree, DMC Sinai-Grace	313-966-5318	kmccree@dmc.org
Toni McIlwain, Ravendale Community, Inc.	313-485-8138	toniberni@aol.com
Ederle Moore, 6 th Precinct	313-272-6149	ederleem@sbcglobal.net
Maurice Morton, Detroit Academy Arts & Sciences	313-485-9212	moegmorton@yahoo.com
Emmett Moten, Business-Resident	313-610-7038	esmoten@sbcglobal.net
Daniel Mulligan, Project Seed, Inc.	313-333-2714	dmulligan@projectseed.org
Daniel Murakami, Henry Ford Hospital	313-999-5043	dmuraka1@hfhs.org
Steve Perkins, (Owner) Sugar and Spice Nursery	313-407-8784	steve128@sbcglobal.net
Megan Pitts-Nunn, Henry Ford Health Systems	313-475-3993	mnunn5@hfhs.org
Sandra Ramocan, Matrix Human Services	313-790-4296	sramocan@matrixhs.org
Selwin Ray Rogers, Midwest A.S.N.	313-690-2838	rayrog@yahoo.com
Ken Scott, Green Acres-Woodward Civic Org.	313-819-7065	kls1146@att.net
Nicole Spieles, Greeley and Hansen and Resident	313-628-0730	nspieles@greeley-hansen.com
Cornell Squires, Detroit L & S Term Planning	313-460-3175	cesquires131@gmail.com
Kathy Stott, SW Detroit Environmental Vision	313-842-1961	kathy.sdev@gmail.com
Eddie Tinsley, Biz-Tech, Inc.	313-883-1441	eddie@biztechsys.com
Dan Trpevski, Faygo Beverages	313-925-1600	dtrpevski@faygo.com
Edgar Vann III, Wayne County Community College	313-350-9272	edgarvann3@gmail.com
Felicia Venable-Akinbode, Detroit Public Schools	313-218-1876	felicia.venable@detroitk12.org
Ms. Elizabeth Williams, Mack-a-Live	313-824-3900	lizerica3@yahoo.com
Ms. Rosa Yoder, Marathon Oil Co.	313-297-6381	rmyoder@marathonpetroleum.com

DWSD Staff and Consultants - RCSC

Name/Organization/Address	Phone Number	Email
Fred Barnes, DWSD BOWC	810-217-2161	fredtheengineer@comcast.net
Edna Bell, Serch Consultants	313-475-5867	edna.bell@tasmd.org
Anne Carter, Serch Consultants		anne.carter@tasmd.org
Tara Danforth-Brown, DWSD Public Affairs	313-964-9287	tarbrown@dwsd.org
Terry Daniel, DWSD Water Operations Director	313-926-8110	tdaniel@dwsd.org
Greg Eno, DWSD Public Affairs Specialist	313-964-9477	eno@dwsd.org
Charlie Fleetham, Project Innovations Inc.	248-476-7577	charlie@projectinnovations.com
Curtise Garner, DWSD Public Affairs Specialist	313-701-2147	cgarner@dwsd.org
Dave Guastella, Tucker Young Jackson Tull, Inc. (TYJT)	313-963-0612	dguastel@tyjt.com
Carl Johnson, Project Manager, CDM Smith Michigan	313-230-5635	johnsoncr@cdmsmith.com
Tashia Kelly, DWSD Public Affairs	313-964-9575	tkelly@dwsd.org
Darryl Latimer, DWSD Deputy Director	313-224-4784	latimer@dwsd.org
Sue McCormick, DWSD Director	313-224-4701	mccormic@dwsd.org
Teresa Newman, Project Innovations Inc.	248-476-7577	teresa@projectinnovations.com
Linda Philson, DWSD Public Affairs	313-964-9576	lphilson@dwsd.org
Cheryl Porter, DWSD Chief Operating Officer	313-926-8135	cporter@dwsd.org
Constance Williams-Levy, DWSD		cwilliams@dwsd.org
William M. Wolfson, DWSD Chief Administrative and Compliance Officer/General Counsel	313-224-4707	wolfson@dwsd.org

5.0 Customer Comments on the Final Draft Water Master Plan Update of May 29, 2015

Written comments on the final draft of the Water Master Plan Update from the following customers and stakeholders:

- Mr. Jeff McKeen, General Manager of SOCWA and Master Plan Steering Team member
- Mr. Ronald Melchert, Chairperson, NOCWA
- Mr. Ray Rogers, General Chairperson, Detroit Long Term Planning Committee and Retail Customer Committee member
- Ms. Joan Weidner, Plan and Policy Development, SEMCOG, and Master Plan Steering Team member
- Mr. Jody Caldwell, Oakland County Water Resources Authority and Master Plan Steering Team member

The final version of the plan was edited to address specific questions, comments, and updated information provided by these reviewers. The detailed review and thoughtful comments from these customers and stakeholders was greatly appreciated.

THIS PAGE INTENTIONALLY LEFT BLANK.