



# METER OPERATIONS DIVISION

OVERVIEW OF THE 2019-2020 METER OPERATIONS PROGRAMS



# METER CHANGE OUT PROGRAMS

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## AGING METER REPLACEMENT

- CURRENTLY REPLACEMENT IS PRIORITIZED BY AGE.
- MOVING TOWARDS REPLACEMENT BASED ON CUSTOMER USAGE PROFILE.
- THE FOUR YEAR METER CONTRACT PROVIDES A CONTINUOUS SUPPLY OF METERS.

Meter Operations  
Meter Aging Report  
Time run: 8/27/2019 1:41:03 PM

Meter Age	# of Accounts																# of Accounts
	5/8"	3/4"	1"	1 1/2"	2"	3"	4"	6"	7.5"	8"	10"	12"	18"	24"	5/8 X 3/4"	16"	
5	5,796	1,437	564	141	147	21	15	9		2							8,132
6	4,833	1,131	356	107	178	21	14	19		3	1	1					6,664
7	5,595	1,355	629	172	135	25	19	19		4		3					7,956
8	5,576	1,308	503	184	108	4	5	3									7,691
9	26,446	6,146	1,488	391	265	9	5	5		1	1						34,757
10	25,508	7,897	2,566	544	458	61	45	28		8	5						37,120
11	13,916	2,699	882	151	191	266	209	78		12	10						18,414
12	7,408	1,820	814	119	129		4	6		2	1						10,303
13	5,567	960	441	109	104	6	14	5		2	2						7,210
14	2,212	481	162	120	47	20	17	4									3,063
15	3,639	737	272	73	61	20	11	17									4,830
16	4,857	1,027	305	89	100	14	17	9			2						6,420
17	4,384	939	239	97	128	18	13	4									5,822
18	2,737	662	142	41	70	10	13	1									3,676
19	1,906	506	172	39	44	8	12	4			3						2,694
20	2,152	533	189	44	29	11	4	6									2,968
<b>Less Than 5 Years</b>	<b>35,492</b>	<b>8,479</b>	<b>2,391</b>	<b>548</b>	<b>722</b>	<b>166</b>	<b>122</b>	<b>65</b>	<b>1</b>	<b>19</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>18</b>	<b>48,035</b>
<b>Older Than 20 Years</b>	<b>18,461</b>	<b>5,844</b>	<b>1,315</b>	<b>316</b>	<b>302</b>	<b>34</b>	<b>23</b>	<b>22</b>									<b>26,317</b>
<b>Grand Total</b>	<b>176,485</b>	<b>43,962</b>	<b>13,430</b>	<b>3,285</b>	<b>3,218</b>	<b>714</b>	<b>562</b>	<b>304</b>	<b>1</b>	<b>53</b>	<b>33</b>	<b>5</b>	<b>1</b>	<b>1</b>		<b>18</b>	<b>242,073</b>



# METER CHANGE OUT PROGRAMS



## Summary Financial Metrics

Month Ended Fiscal Quarter		Jul-18 2019.Q1	Aug-18 2019.Q1	Sep-18 2019.Q1	Oct-18 2019.Q2	Nov-18 2019.Q2	Dec-18 2019.Q2	Jan-19 2019.Q3	Feb-19 2019.Q3	Mar-19 2019.Q3	Apr-19 2019.Q4	May-19 2019.Q4	Jun-19 2019.Q4
Water Volumes	Target	269,000	273,100	270,500	233,800	224,500	206,500	226,600	216,400	213,300	223,100	211,000	240,200
	Actual	372,613	302,476	221,531	215,105	232,770	202,686	227,697	232,094	218,435	208,812	204,605	
	Status	Green	Green	Red	Red	Green	Yellow	Green	Green	Green	Red	Red	
Total Active Meters	Target	178,000	178,000	178,000	178,000	178,000	178,000	178,000	178,000	178,000	178,000	178,000	178,000
	Actual	177,027	176,729	176,573	176,594	176,538	176,379	177,094	177,495	178,805	179,400	178,905	179,099
	Status	Yellow	Red	Red	Red	Red	Red	Yellow	Yellow	Green	Green	Green	Green

2,072 INCREASE IN ACTIVE METERS



# METER CHANGE OUT PROGRAMS

## METER REPLACEMENT COMPARISON

- 7,909 METERS OF ALL SIZES WERE REPLACED IN 2018.

Meter Installed Year: 2018

Meter Installed Month	Meter Installations by Size															Totals by Month	
	16"	5/8 X 3/4"	24"	18"	12"	10"	8"	7.5"	6"	4"	3"	2"	1 1/2"	1"	3/4"		5/8"
Jan									2	2	2	10	6	40	115	481	658
Feb									1		3	13	11	28	73	444	573
Mar									1	2	3	11	4	49	110	564	744
Apr							3		5	7	3	13	10	28	112	537	718
May										4	4	12	7	33	127	543	730
Jun										3	2	14	11	36	110	591	767
Jul									1	2	5	2	1	27	102	505	645
Aug										5	4	7	10	30	112	601	769
Sep							1			4	6	22	14	32	96	466	641
Oct							3		2	12	7	12	11	24	178	510	759
Nov			1				1		1	1	3	5	14	15	90	376	507
Dec						1					6	4	4	7	69	307	398
<b>Grand Total</b>			<b>1</b>			<b>1</b>	<b>8</b>		<b>13</b>	<b>42</b>	<b>48</b>	<b>125</b>	<b>103</b>	<b>349</b>	<b>1,294</b>	<b>5,925</b>	<b>7,909</b>



# METER CHANGE OUT PROGRAMS

## METER REPLACEMENT COMPARISON

- 7,062 METERS OF ALL SIZES HAVE BEEN CHANGED OUT AS OF AUGUST 30, 2019.
- THERE HAS BEEN AN INCREASE OF 1,458 METERS INSTALLED WHEN COMPARING THE FIRST EIGHT MONTHS OF 2019 TO 2018. A 26% INCREASE.
- BASED ON ACTUAL PERFORMANCE, METER PURCHASE ESTIMATES WERE SCALED BACK FROM \$4 MILLION TO \$1.2 MILLION OF THE CIP ALLOWANCE.

Meter Installed Year 2019 ▼

Meter Installed Month	Meter Installations by Size															Totals by Month	
	16"	5/8 X 3/4"	24"	18"	12"	10"	8"	7.5"	6"	4"	3"	2"	1 1/2"	1"	3/4"		5/8"
Jan		3								4	9	10	10	8	89	367	500
Feb		4								1	3	14	5	11	204	586	828
Mar		1					1				6	11	10	4	181	615	829
Apr		3							2	6	3	9	8	22	229	666	948
May	1	2									3	21	11	45	323	739	1,145
Jun									1	3	3	23	8	40	177	648	903
Jul		2									1	19	10	35	166	664	897
Aug		2							3	3	2	14	15	144	147	682	1,012
Grand Total	1	17					1		6	17	30	121	77	309	1,516	4,967	7,062



# METER CHANGE OUT PROGRAMS

## LARGE METER REPLACEMENT

- 492 METERS REPLACED FROM JULY 2018 TO JULY 2019.
- TEST RESULTS HAVE BEEN COMPILED AND ARE CURRENTLY BEING ANALYZED.

DWSD Large Meter Installation Work Orders  
July 2018 - July 2019

MONTH	JOBS	
JULY	16	
AUG	34	
SEPT	55	
OCT	56	← WEEK 1: TWO DAY CONFINED SPACE TRAINING
→ NOV	50	WEEK 4: BURTON WORKING ON DMA PROJECT
DEC	24	WEEK 4: SELF INSTALLED 68 METERS @ GRISWOLD
JAN	40	
FEB	33	
MAR	35	
APR	33	
MAY	39	
JUNE	33	
JULY	44	
<b>TOTAL</b>	<b>492</b>	



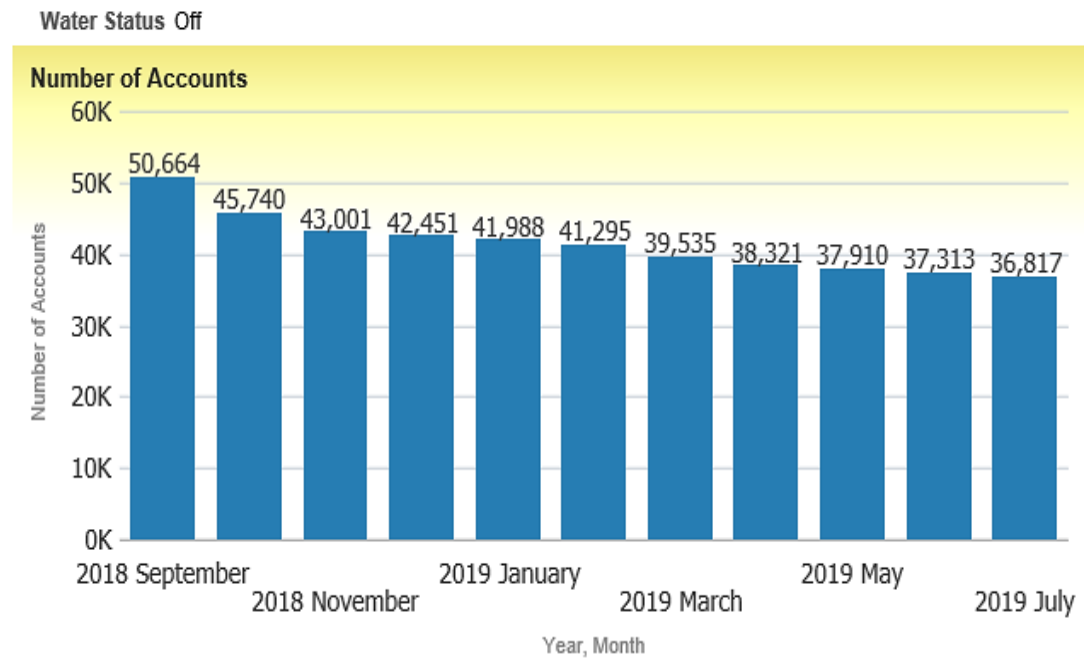
# METER CHANGE OUT PROGRAMS

## NON-AMI ACCOUNT IDENTIFICATION AND REPLACEMENT

- WORKING WITH THE DETROIT LAND BANK IN IDENTIFYING BUYERS OF PROPERTY IN THEIR INVENTORY.
- PROCESSED 16,817 PREVIOUSLY UNREPORTED DEMOLISHED STRUCTURES THROUGH THE DEMOLITION CLEAN UP PROJECT.
- REDUCED NON-AMI ACCOUNTS THROUGH DATA CLEAN UP AND METER INSTALLATION FROM 50,664 IN SEPTEMBER 2018 TO 36,817 IN JULY 2019.

Non AMR Trend Water Off

Time run: 8/29/2019







# 2019 - 2020 BUSINESS PROCESS IMPROVEMENTS

# METER DATA MANAGEMENT PROGRAM

## METER TESTING

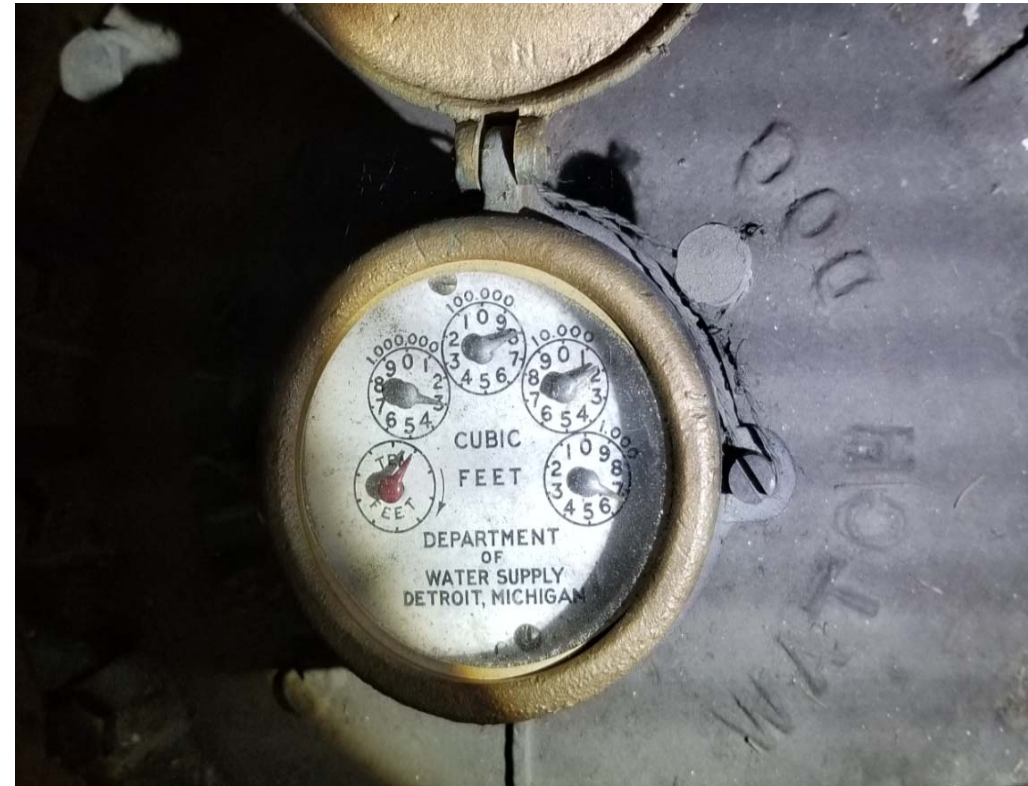
- SMALL METER TEST BENCH HAS BEEN INSTALLED AND STAFF CERTIFIED.
- LARGE METER TEST BENCH APPROVED BY THE BOWC IN AUGUST 2019.
- INSTALLATION AND INTERGRATION WITH SMALL BENCH AND DWSD SOFTWARE TO BE COMPLETED BY THE END OF 2019.
- UPDATED METER MANUALS AND TESTING PROTOCOLS AS RECOMMENDED BY VEOLIA.



# METER COMPLIANCE PROGRAM

## TARGETED POPULATIONS IDENTIFIED AND ACTIONS TAKEN

- ASSIGNED DEDICATED STAFF TO ADDRESS AMI ACCOUNTS THAT ARE SENDING TAMPER ALERTS.
- NON-AMI ACCOUNTS THAT ARE EITHER OWNED BY THE DETROIT LAND BANK OR PRIVATELY HELD.
- UPDATED COMPLIANCE PROTOCOLS DESIGNED TO REDUCE RELIANCE ON SERVICE INTERRUPTIONS AND INCREASE INTERACTIONS WITH THE REVENUE PROTECTION UNIT (RPU) IN ORDER TO GAIN COMPLIANCE.
- ABILITY TO ASSESS A MISSED APPOINTMENT FEE FOR REPEATED MISSED APPOINTMENTS (*fee will not be applied for 1<sup>st</sup> missed appointment and will be waived for legitimate reasons*).



*THIS METER WAS INSTALLED IN 1955 AND IS STILL DEPLOYED IN THE DWSD SYSTEM.*



**THANK YOU!**

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For more information visit: [www.detroitmi.gov/dwsd](http://www.detroitmi.gov/dwsd)

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