

2020 TAP Reconcilable Rider Reports and Projection Model

For: **Philadelphia Water Department**



<u>Sheet Name</u>	<u>Description</u>
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TRR_Summary	Summary of assumptions and results by period of major variables requested of Raftelis
TRR_Assumptions	Dashboard of assumptions, allowing for variable scenario selection
TRR_Projections	Results by month of major variables requested of Raftelis
Data Source	Description of data source for reports DR-1, DR-2, DR-3A Participants, and DR-4
DR_1	Water Monthly Retail Billed Volume
DR_2	Sewer Monthly Retail Billed Volume
DR_3A Participants	Monthly Number of TAP Participants
DR_4	Monthly Total TAP Discount Amount

Assumptions used to develop the Results below

Assumption or scenario type

Subscription Projection

Cost per participant

Consumption

Scenario name

Flat

Updated

Actuals and flat

Short description

Cost per bill of \$51.25

Consumption of 796 CF per customer per month and flat consumption over time

	Average Monthly			Total TAP Water Consumption (CF)	Total TAP Sewer Consumption (CF)
	Number of TAP Participants	Total Number of TAP Participants	Total TAP Discount		
Reconciled Period (March 2019 to August 2019)	15,245	91,472	\$ 4,468,951	692,269	692,129
Most Recent Period - Actual (September 2019 to February 2020)	14,767	88,603	\$ 4,540,864	705,639	705,432
Most Recent Period - Projected (March 2020 to September 2020)	15,180	106,260	\$ 5,445,825	845,830	845,830
Most Recent Period - Entire (September 2019 to September 2020)	14,989	194,863	\$ 9,986,689	1,551,469	1,551,262
Next Rate Period (October 2020 to September 2021)	15,180	182,160	\$ 9,335,700	1,449,994	1,449,994

	Scenario or Assumption	
<i>Subscription Projection</i>	Flat	
<i>Cost per participant</i>	Updated	
<i>Cost per participant (based on actuals)</i>	\$	51.25
<i>Consumption</i>	Actuals and flat	
<i>Consumption per participant (based on actuals)</i>		796

Data Type	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual
Projected Increase in Participants												
Participants	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020
Total Participants	14,687	15,025	15,386	15,652	15,665	15,057	15,050	15,337	13,533	15,251	15,180	14,252
Discount	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020
Total Discounts	\$ 733,379.39	\$ 676,146.93	\$ 734,220.93	\$ 793,729.82	\$ 746,115.00	\$ 785,359.29	\$ 816,998.50	\$ 798,192.83	\$ 692,787.06	\$ 778,209.04	\$ 812,659.76	\$ 642,016.74
Water Consumption	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020
Total TAP Water Consumption	112,511	104,488	113,669	122,924	116,438	122,239	126,658	123,645	107,145	120,669	126,488	101,034
Total Sewer Consumption	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020
Total TAP Sewer Consumption	112,507	104,483	113,650	122,903	116,379	122,207	126,622	123,617	107,112	120,637	126,447	100,997

Data Type	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
Projected Increase in Participants	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Participants	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	
Total Participants	15,180	15,180	15,180	15,180	15,180	15,180	15,180	15,180	15,180	15,180	15,180	15,180
Discount	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	
Total Discounts	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00
Water Consumption	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	
Total TAP Water Consumption	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833
Total Sewer Consumption	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	
Total TAP Sewer Consumption	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833

Data Type	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected Next Rate Year
Projected Increase in Participants	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Participants	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021	Jul 2021	Aug 2021	Sep 2021	Oct 2020 - Sept 2021	
Total Participants	15,180	15,180	15,180	15,180	15,180	15,180	15,180	15,180	15,180	15,180
Discount	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021	Jul 2021	Aug 2021	Sep 2021	Oct 2020 - Sept 2021	
Total Discounts	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 777,975.00	\$ 9,335,700.00
Water Consumption	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021	Jul 2021	Aug 2021	Sep 2021		
Total TAP Water Consumption	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833
Total Sewer Consumption	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021	Jul 2021	Aug 2021	Sep 2021		
Total TAP Sewer Consumption	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833	120,833

Data in DR_1, DR_2, DR_3A Participants, and DR_4 are from reports run on a static copy of basis2 captured on 2/29/2020.

DR-1: Water Billed Volume (March 1, 2019-February 29, 2020)

Customer Group	Discount Group	March 2019 Water Billed Volume (CCF)	April 2019 Water Billed Volume (CCF)	May 2019 Water Billed Volume (CCF)	June 2019 Water Billed Volume (CCF)	July 2019 Water Billed Volume (CCF)	August 2019 Water Billed Volume (CCF)	September 2019 Water Billed Volume (CCF)	October 2019 Water Billed Volume (CCF)	November 2019 Water Billed Volume (CCF)	December 2019 Water Billed Volume (CCF)	January 2020 Water Billed Volume (CCF)	February 2020 Water Billed Volume (CCF)
TAP	All Groups	112,511	104,488	113,669	122,924	116,438	122,239	126,658	123,645	107,145	120,669	126,488	101,034
Non-TAP	Senior Discount*	87,572	78,824	85,340	86,158	78,920	91,703	92,833	88,988	73,533	85,323	88,691	72,657
Non-TAP	PHA Discount	115,251	107,073	112,715	172,455	123,093	136,708	132,293	123,397	128,474	120,913	125,720	113,887
Non-TAP	Non-PHA Discount (Other discount)	325,075	324,474	369,471	369,369	349,598	468,605	367,991	380,655	429,531	364,305	330,476	228,033
Non-TAP	No Additional Discount	4,049,227	3,846,053	4,102,004	4,317,966	4,080,301	4,701,098	4,609,834	4,416,729	4,102,786	4,278,702	4,466,022	3,876,306
PWD (not subject to reconciliation)	PWD	186,404	200,420	268,316	182,689	215,499	286,187	447,341	411,358	141,727	220,593	271,031	130,108

Water Billed Volume Subtotals, by Customer Group

Customer Group	March 2019 Water Billed Volume (CCF)	April 2019 Water Billed Volume (CCF)	May 2019 Water Billed Volume (CCF)	June 2019 Water Billed Volume (CCF)	July 2019 Water Billed Volume (CCF)	August 2019 Water Billed Volume (CCF)	September 2019 Water Billed Volume (CCF)	October 2019 Water Billed Volume (CCF)	November 2019 Water Billed Volume (CCF)	December 2019 Water Billed Volume (CCF)	January 2020 Water Billed Volume (CCF)	February 2020 Water Billed Volume (CCF)
TAP	112,511	104,488	113,669	122,924	116,438	122,239	126,658	123,645	107,145	120,669	126,488	101,034
Non-TAP	4,577,125	4,356,424	4,669,530	4,945,948	4,631,912	5,398,114	5,202,951	5,009,769	4,734,324	4,849,243	5,010,909	4,290,883
PWD (not subject to reconciliation)	186,404	200,420	268,316	182,689	215,499	286,187	447,341	411,358	141,727	220,593	271,031	130,108

*Senior Citizen Discount figures represent only those Senior Citizen Discount customers not enrolled in TAP. Senior Citizen Discount customers enrolled in TAP are included in the TAP Customer Group.

DR-2: Sewer Billed Volume (March 1, 2019-February 29, 2020)													
Customer Group	Discount Group	March 2019 Sewer Billed Volume (CCF)	April 2019 Sewer Billed Volume (CCF)	May 2019 Sewer Billed Volume (CCF)	June 2019 Sewer Billed Volume (CCF)	July 2019 Sewer Billed Volume (CCF)	August 2019 Sewer Billed Volume (CCF)	September 2019 Sewer Billed Volume (CCF)	October 2019 Sewer Billed Volume (CCF)	November 2019 Sewer Billed Volume (CCF)	December 2019 Sewer Billed Volume (CCF)	January 2020 Sewer Billed Volume (CCF)	February 2020 Sewer Billed Volume (CCF)
TAP	All Groups	112,507	104,483	113,650	122,903	116,379	122,207	126,622	123,617	107,112	120,637	126,447	100,997
Non-TAP	Senior Discount*	87,476	78,727	85,250	86,065	78,842	91,543	92,688	88,900	73,446	85,239	88,618	72,583
Non-TAP	PHA Discount	115,251	107,073	112,655	172,310	122,990	136,580	132,158	123,257	128,426	120,913	125,720	113,887
Non-TAP	Non-PHA Discount (Other discount)	297,628	294,832	337,151	335,121	316,655	423,378	350,254	360,520	363,121	337,640	300,907	220,778
Non-TAP	No Additional Discount	3,792,975	3,625,673	3,843,867	4,055,188	3,857,918	4,391,534	4,315,789	4,135,042	3,886,776	4,056,960	4,187,116	3,655,210
PWD (not subject to reconciliation)	PWD	186,404	200,420	268,316	182,689	215,499	286,187	437,253	411,358	141,727	220,593	271,031	130,108

Sewer Billed Volume Subtotals, by Customer Group													
Customer Group	March 2019 Sewer Billed Volume (CCF)	April 2019 Sewer Billed Volume (CCF)	May 2019 Sewer Billed Volume (CCF)	June 2019 Sewer Billed Volume (CCF)	July 2019 Sewer Billed Volume (CCF)	August 2019 Sewer Billed Volume (CCF)	September 2019 Sewer Billed Volume (CCF)	October 2019 Sewer Billed Volume (CCF)	November 2019 Sewer Billed Volume (CCF)	December 2019 Sewer Billed Volume (CCF)	January 2020 Sewer Billed Volume (CCF)	February 2020 Sewer Billed Volume (CCF)	
TAP	112,507	104,483	113,650	122,903	116,379	122,207	126,622	123,617	107,112	120,637	126,447	100,997	
Non-TAP	4,293,330	4,106,305	4,378,923	4,648,684	4,376,405	5,043,035	4,890,889	4,707,719	4,451,769	4,600,752	4,702,361	4,062,458	
PWD (not subject to reconciliation)	186,404	200,420	268,316	182,689	215,499	286,187	437,253	411,358	141,727	220,593	271,031	130,108	

*Senior Citizen Discount figures represent only those Senior Citizen Discount customers not enrolled in TAP. Senior Citizen Discount customers enrolled in TAP are included in the TAP Customer Group.

Customer Type	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020
Senior Discount*	3,367	3,502	3,607	3,705	3,743	3,630	3,663	3,741	3,370	3,815	3,945	3,783
PHA	-	-	-	-	-	-	-	-	-	-	-	-
Non-PHA	-	-	-	-	-	-	-	-	-	-	-	-
No Discount	11,320	11,523	11,779	11,947	11,922	11,427	11,387	11,596	10,163	11,436	11,235	10,469
All	14,687	15,025	15,386	15,652	15,665	15,057	15,050	15,337	13,533	15,251	15,180	14,252

*Senior Citizen Discount figures represent only those Senior Citizen Discount customers enrolled in TAP. Senior Citizen Discount customers not enrolled in TAP are not counted.

ted among TAP Participants

Customer Type	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020
Senior Discount*	\$ 108,639.36	\$ 103,245.39	\$ 114,841.11	\$ 118,640.69	\$ 115,115.38	\$ 122,009.77	\$ 134,395.07	\$ 130,946.48	\$ 111,986.64	\$ 128,446.38	\$ 139,931.60	\$ 110,303.44
PHA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Non-PHA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
No Discount	\$ 624,740.03	\$ 572,901.54	\$ 619,379.82	\$ 675,089.13	\$ 630,999.62	\$ 663,349.52	\$ 682,603.43	\$ 667,246.35	\$ 580,800.42	\$ 649,762.66	\$ 672,728.16	\$ 531,713.30
All	\$ 733,379.39	\$ 676,146.93	\$ 734,220.93	\$ 793,729.82	\$ 746,115.00	\$ 785,359.29	\$ 816,998.50	\$ 798,192.83	\$ 692,787.06	\$ 778,209.04	\$ 812,659.76	\$ 642,016.74

*Senior Citizen Discount figures represent only those Senior Citizen Discount customers enrolled in TAP. Senior Citizen Discount customers not enrolled in TAP are not counted among TAP Participants