

PENNSYLVANIA-AMERICAN WATER COMPANY

**2022 GENERAL BASE RATE CASE
R-2022-3031672 (WATER)
R-2022-3031673 (WASTEWATER)**

**EXHIBITS NO. 11-D, 11-E, 11-F
DEPRECIATION STUDY**

**WASTEWATER SSS GENERAL OPERATIONS
AS OF DECEMBER 31, 2021, 2022, 2023**

EXHIBIT NO. 11-D - DEPRECIATION STUDY

WASTEWATER SSS GENERAL OPERATIONS

AS OF DECEMBER 31, 2021

Exhibit No. 11-D
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

WASTEWATER SSS GENERAL OPERATIONS

2021 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF DECEMBER 31, 2021

Prepared by:



GANNETT FLEMING

Excellence Delivered As Promised

Exhibit No. 11-D
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WASTEWATER SSS GENERAL OPERATIONS

2021 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF DECEMBER 31, 2021

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania



Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | F 717.763.8150

gannettfleming.com

April 20, 2022

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to wastewater plant as of December 31, 2021. Summaries of the original cost, annual accruals and the book depreciation reserve are presented in Tables 1 through 3, beginning on page I-3 of the attached report.

A description of the methods and procedures upon which the study was based, as well as support for the service life estimates, is set forth in a companion report "2022 Depreciation Study - Calculated Annual Depreciation Accruals Related to Wastewater Plant as of December 31, 2022".

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

A handwritten signature in black ink that reads "John J. Spanos".

JOHN J. SPANOS
President

JJS:mle

070800.100

TABLE OF CONTENTS

PART I. RESULTS OF STUDY	I-1
Description of Summary Tabulations.....	I-2
Description of Detailed Tabulations.....	I-2
Table 1. Development of Net Original Cost as of December 31, 2021.....	I-3
Table 2. Summary of Estimated Survivor Curve, Original Cost, Book Depreciation Reserve and Calculated Annual Depreciation Accruals Related to Wastewater Plant as of December 31, 2021.....	I-4
Table 3. Amortization of Experienced Net Salvage.....	I-5
PART II. DETAILED DEPRECIATION CALCULATIONS	II-1
Cumulative Depreciated Original Cost.....	II-2
Net Utility Plant in Service.....	II-5
PART III. EXPERIENCED NET SALVAGE	III-1

PART I. RESULTS OF STUDY

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

DEPRECIATION STUDY

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Table 1 presents the development of net original cost used in the study. The net original cost is the original cost of wastewater plant less advances and contributions. The results of the depreciation study are summarized in Table 2, which sets forth the book reserve and the calculated annual depreciation related to net original cost as of December 31, 2021, and the annual amortization of net negative salvage. Table 3 presents the calculation of the amortization of experienced net salvage, by account, based on the five-year period, 2017-2021.

DESCRIPTION OF DETAILED TABULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-6. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage, and cost of removal are set forth by account for the years 2017 through 2021, on pages III-2 through III-5.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF DECEMBER 31, 2021

DEPRECIABLE GROUP (1)	ORIGINAL COST AS OF DECEMBER 31, 2021 (2)	CUSTOMER ADVANCES (3)	CONTRIBUTIONS IN AID OF CONSTRUCTION (4)	EXCLUDED PROPERTY (5)	NET ORIGINAL COST AS OF DECEMBER 31, 2021 (6)
DEPRECIABLE PLANT					
354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION	2,922,659.17				2,922,659.17
354.30 STRUCTURES AND IMPROVEMENTS - SPP	19,929,094.21		2,734,528.70		17,194,565.51
354.40 STRUCTURES AND IMPROVEMENTS - TDP	150,943,604.96		1,853,012.73		149,090,592.23
354.70 STRUCTURES AND IMPROVEMENTS - GENERAL	3,507,072.89				3,507,072.89
355.00 POWER GENERATION EQUIPMENT	4,465,252.07		144,517.16		4,320,734.91
360.10 COLLECTION SEWERS - FORCE MAINS	47,525,258.65	259,700.45	11,251,126.61		36,014,431.59
361.10 COLLECTION SEWERS - GRAVITY MAINS	179,487,705.34	133,423.53	12,980,925.09		166,373,356.72
361.20 MANHOLES	32,650,962.20		4,387,312.76		28,263,649.44
363.00 SERVICES	49,413,155.77	87,755.05	5,915,694.52		43,409,706.20
364.00 FLOW MEASURING DEVICES	544,931.43		14,726.81		530,204.62
365.00 FLOW MEASURING INSTALLATIONS	272,564.04				272,564.04
370.00 RECEIVING WELLS	143,419.77				143,419.77
371.00 PUMPING EQUIPMENT	14,808,568.54		66,626.22		14,741,942.32
380.00 TREATMENT EQUIPMENT	70,703,797.02		2,200,080.47		68,503,716.55
381.00 PLANT SEWERS	6,214,181.87		30,192.33		6,183,989.54
382.00 OUTFALL SEWER LINES	604,388.91				604,388.91
389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	598,404.70				598,404.70
390.00 OFFICE FURNITURE AND EQUIPMENT	682,596.03				682,596.03
391.00 TRANSPORTATION EQUIPMENT	1,627,652.53				1,627,652.53
392.00 STORES EQUIPMENT	107,351.44				107,351.44
393.00 TOOLS, SHOP AND GARAGE EQUIPMENT	872,282.74				872,282.74
394.00 LABORATORY EQUIPMENT	536,027.98				536,027.98
395.00 POWER OPERATED EQUIPMENT	552,370.71		10,000.00		542,370.71
396.00 COMMUNICATION EQUIPMENT	2,195,942.61				2,195,942.61
397.00 MISCELLANEOUS EQUIPMENT	561,484.69		29,000.00		532,484.69
398.00 OTHER TANGIBLE PLANT	14,231.50				14,231.50
TOTAL DEPRECIABLE PLANT	591,884,961.77	480,879.03	41,617,743.40		549,786,339.34
NONDEPRECIABLE PLANT					
352.10 FRANCHISES	221,139.78				221,139.78
353.20 LAND AND LAND RIGHTS - COLLECTION	1,857,555.19				1,857,555.19
353.30 LAND AND LAND RIGHTS - SPP	203,839.26				203,839.26
353.40 LAND AND LAND RIGHTS - TDP	3,978,717.18		125,000.00		3,853,717.18
TOTAL NONDEPRECIABLE PLANT	6,261,251.41		125,000.00		6,136,251.41
TOTAL PLANT	598,146,213.18		41,742,743.40		555,922,590.75

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF DECEMBER 31, 2021

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF DECEMBER 31, 2021 (3)	BOOK DEPRECIATION RESERVE (4)	FUTURE ACCRUALS (5)	CALCULATED ANNUAL ACCRUAL AMOUNT (6)	CALCULATED ANNUAL ACCRUAL RATE (7)=(6)/(3)	COMPOSITE REMAINING LIFE (8)
DEPRECIABLE PLANT							
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	2,922,659.17	43,314	2,879,345	80,477	2.75	35.8
354.30	STRUCTURES AND IMPROVEMENTS - SPP	17,194,565.51	6,891,894	10,302,671	321,814	1.87	32.0
354.40	STRUCTURES AND IMPROVEMENTS - TDP	149,090,592.23	74,070,070	75,020,523	2,677,431	1.80	28.0
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	3,507,072.89	1,711,335	1,795,738	73,186	2.09	24.5
355.00	POWER GENERATION EQUIPMENT	4,320,734.91	2,800,154	1,520,581	75,954	1.76	20.0
360.10	COLLECTION SEWERS - FORCE MAINS	36,014,431.59	3,428,555	32,585,876	626,509	1.74	52.0
361.10	COLLECTION SEWERS - GRAVITY MAINS	166,373,356.72	40,726,772	125,646,585	2,533,631	1.52	49.6
361.20	MANHOLES	28,263,649.44	9,514,794	18,748,856	794,879	2.81	23.6
363.00	SERVICES	43,409,706.20	22,659,038	20,750,668	984,742	2.27	21.1
364.00	FLOW MEASURING DEVICES	530,204.62	164,880	365,325	69,899	13.18	5.2
365.00	FLOW MEASURING INSTALLATIONS	272,564.04	201,351	71,213	16,042	5.89	4.4
370.00	RECEIVING WELLS	143,419.77	31,139	112,281	3,257	2.27	34.5
371.00	PUMPING EQUIPMENT	14,741,942.32	1,275,582	13,466,360	747,751	5.07	18.0
380.00	TREATMENT EQUIPMENT	68,503,716.55	14,693,290	53,810,427	2,636,120	3.85	20.4
381.00	PLANT SEWERS	6,183,989.54	1,411,590	4,772,399	142,569	2.31	33.5
382.00	OUTFALL SEWER LINES	604,388.91	229,597	374,792	12,957	2.14	28.9
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	598,404.70	195,658	402,747	33,563	5.61	12.0
390.00	OFFICE FURNITURE AND EQUIPMENT	682,596.03	59,782	622,814	39,455	5.78	15.8
391.00	TRANSPORTATION EQUIPMENT	1,627,652.53	497,748	1,129,905	137,073	8.42	8.2
392.00	STORES EQUIPMENT	107,351.44	29,033	78,319	4,299	4.00	18.2
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	872,282.74	291,410	580,873	39,167	4.49	14.8
394.00	LABORATORY EQUIPMENT	536,027.98	262,433	273,595	39,746	7.41	6.9
395.00	POWER OPERATED EQUIPMENT	542,370.71	407,298	135,072	11,672	2.15	11.6
396.00	COMMUNICATION EQUIPMENT	2,195,942.61	1,187,094	1,008,849	116,994	5.33	8.6
397.00	MISCELLANEOUS EQUIPMENT	532,484.69	194,183	338,301	24,985	4.69	13.5
398.00	OTHER TANGIBLE PLANT	14,231.50	513	13,719	610	4.29	22.5
	TOTAL DEPRECIABLE PLANT	549,786,339.34	182,978,506	366,807,834	12,244,782	2.23	
NONDEPRECIABLE PLANT							
352.10	FRANCHISES	221,139.78					
353.20	LAND AND LAND RIGHTS - COLLECTION	1,857,555.19					
353.30	LAND AND LAND RIGHTS - SPP	203,839.26					
353.40	LAND AND LAND RIGHTS - TDP	3,853,717.18					
	TOTAL NONDEPRECIABLE PLANT	6,136,251.41					
AMORTIZATION OF NET SALVAGE							
	TOTAL UTILITY PLANT	555,922,590.75	182,978,506	366,807,834	1,122,278		
					13,367,060		

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 3. AMORTIZATION OF EXPERIENCED NET SALVAGE

ACCOUNT (1)	2017		2018		2019		2020		2021		NET SALVAGE (12)*	SALVAGE ACCRUAL (13)=(12)/5
	GROSS SALVAGE (2)	COST OF REMOVAL (3)	GROSS SALVAGE (4)	COST OF REMOVAL (5)	GROSS SALVAGE (6)	COST OF REMOVAL (7)	GROSS SALVAGE (8)	COST OF REMOVAL (9)	GROSS SALVAGE (10)	COST OF REMOVAL (11)		
354.20		304		2,367		27,531		122,316			(152,518)	(30,504)
354.30		36,849		87		61,135				20,176	(118,248)	(23,650)
354.40		35,585		(18,539)		1,986				28,995	(48,027)	(9,605)
354.70		2,146		36,100		18,075		247		11,678	(68,246)	(13,649)
355.00		930		4,539		9,730		23,921		1,253	(40,373)	(8,075)
360.10		1,809		85,350		245,202		186,669		147,596	(666,627)	(133,325)
361.10		53,984		345,943		1,038,559		323,715		245,041	(2,007,242)	(401,448)
361.20						109,567		34,152		20,316	(164,034)	(32,807)
363.00		69,276		48,455		150,830		76,223		105,837	(450,463)	(90,093)
364.00						240				206,560	(240)	(48)
371.00		5,054		(18,885)		141,438		273,771		269,030	(607,939)	(121,588)
380.00		6,892		12,304		214,843		652,150		289,030	(1,155,220)	(231,044)
381.00										90	(90)	(18)
382.00		604		981		5,682					(1,585)	(317)
389.10		763		(3,678)						3,619	(2,003)	(401)
390.00				94							(4,476)	(895)
391.00		328		9,708		6,029		10			(15,748)	(3,150)
393.00		60				1,931		5,644			(7,903)	(1,581)
394.00				118		5,593		1,075		1,113	(7,969)	(1,592)
395.00						2,048					(2,048)	(410)
396.00		5,474		6,019		5,513		52,578		4,528	(64,479)	(12,896)
397.00						1,898		9,910		4,677	(24,662)	(4,932)
398.00						1,251				87	(1,251)	(250)
TOTAL	0	220,061	0	510,964	0	2,049,082	1,369	1,762,381	246	1,070,510	(5,611,382)	(1,122,278)

* Column (12) equals the summation of Columns (2) through (11).

PART II. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST		CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
			AMOUNT (2) - (3) (4)			
1915	84,270	64,122	20,148		20,148	0.0
1920	122,709	92,096	30,613		50,761	0.0
1929	18,987	14,056	4,931		55,692	0.0
1930	192,993	139,363	53,630		109,322	0.0
1932	602	561	41		109,363	0.0
1935	15,424	10,862	4,562		113,925	0.0
1939	89,572	66,303	23,269		137,194	0.0
1945	36,269	24,202	12,067		149,261	0.0
1946	102,100	67,661	34,439		183,700	0.1
1955	44,618	28,454	16,164		199,864	0.1
1957	1,542,805	1,010,544	532,261		732,125	0.2
1961	358,315	278,553	79,762		811,887	0.2
1962	33,707	20,138	13,569		825,456	0.2
1965	806,694	503,310	303,384		1,128,840	0.3
1966	35,807,562	22,999,800	12,807,762		13,936,602	3.8
1967	24,166,138	17,969,981	6,196,157		20,132,759	5.5
1968	82,177	51,540	30,637		20,163,396	5.5
1969	502,650	275,823	226,827		20,390,223	5.6
1970	1,341,100	848,266	492,834		20,883,057	5.7
1971	554	466	88		20,883,145	5.7
1972	8,145,340	4,364,623	3,780,717		24,663,862	6.7
1973	167,586	66,777	100,809		24,764,671	6.8
1974	1,644,841	512,889	1,131,952		25,896,623	7.1
1975	7,619,924	4,183,163	3,436,761		29,333,384	8.0
1976	1,321,036	470,639	850,397		30,183,781	8.2
1977	719,935	270,371	449,564		30,633,345	8.4
1978	20,907,605	13,685,645	7,221,960		37,855,305	10.3
1979	148,571	66,356	82,215		37,937,520	10.3
1980	1,394,297	805,503	588,794		38,526,314	10.5
1981	237,764	97,744	140,020		38,666,334	10.5
1982	184,146	97,197	86,949		38,753,283	10.6
1983	881,052	416,205	464,847		39,218,130	10.7
1984	4,267,954	2,044,661	2,223,293		41,441,423	11.3
1985	6,980,592	3,444,777	3,535,815		44,977,238	12.3
1986	2,216,874	1,126,303	1,090,571		46,067,809	12.6
1987	2,455,667	1,188,410	1,267,257		47,335,066	12.9
1988	5,185,808	2,251,513	2,934,295		50,269,361	13.7
1989	3,811,509	1,641,452	2,170,057		52,439,418	14.3
1990	11,204,960	5,094,978	6,109,982		58,549,400	16.0
1991	676,063	434,907	241,156		58,790,556	16.0
1992	55,428,444	28,734,006	26,694,438		85,484,994	23.3
1993	14,321,532	6,348,272	7,973,260		93,458,254	25.5
1994	1,547,213	595,165	952,048		94,410,302	25.7
1995	19,388,220	7,492,270	11,895,950		106,306,252	29.0
1996	1,203,089	480,917	722,172		107,028,424	29.2

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST		PCT OF COL 4 TOTAL (6)
			AMOUNT (2) - (3) (4)	CUMULATIVE AMOUNT (5)	
1997	6,844,317	2,033,452	4,810,865	111,839,289	30.5
1998	3,715,699	1,243,623	2,472,076	114,311,365	31.2
1999	3,776,307	1,149,270	2,627,037	116,938,402	31.9
2000	11,213,918	4,131,339	7,082,579	124,020,981	33.8
2001	3,117,381	907,832	2,209,549	126,230,530	34.4
2002	3,578,064	1,124,172	2,453,892	128,684,422	35.1
2003	2,002,999	587,702	1,415,297	130,099,719	35.5
2004	7,038,696	1,879,550	5,159,146	135,258,865	36.9
2005	15,623,709	4,238,549	11,385,160	146,644,025	40.0
2006	7,231,344	1,839,770	5,391,574	152,035,599	41.4
2007	8,375,957	1,724,050	6,651,907	158,687,506	43.3
2008	10,825,818	2,401,581	8,424,237	167,111,743	45.6
2009	56,358,647	15,862,491	40,496,156	207,607,899	56.6
2010	29,369,604	7,279,233	22,090,371	229,698,270	62.6
2011	1,927,315	575,367	1,351,948	231,050,218	63.0
2012	3,513,081	636,640	2,876,441	233,926,659	63.8
2013	9,798,902	1,619,040	8,179,862	242,106,521	66.0
2014	45,472,490	7,036,780	38,435,710	280,542,231	76.5
2015	17,530,570	2,393,062	15,137,508	295,679,739	80.6
2016	12,346,395	1,030,810	11,315,585	306,995,324	83.7
2017	24,083,610	1,625,498	22,458,112	329,453,436	89.8
2018	12,494,834	1,110,967	11,383,867	340,837,303	92.9
2019	22,214,437	906,133	21,308,304	362,145,607	98.7
2020	18,118,649	599,798	17,518,851	379,664,458	103.5
2021	17,902,950	195,230	17,707,720	397,372,178	108.3
9999	42,098,622-	11,534,275-	30,564,347-	366,807,831	100.0
SUBTOTAL	549,786,339	182,978,506	366,807,834		
NONDEPRECIABLE	6,136,251		6,136,251		
TOTAL	555,922,590	182,978,506	372,944,085		

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2007	13,899.29	4,817	923	12,976	27.34	475
2008	113,755.87	36,857	7,060	106,696	28.17	3,788
2009	173,079.24	52,131	9,986	163,093	29.00	5,624
2011	8,586.64	2,200	421	8,166	30.48	268
2013	101,201.33	21,161	4,054	97,147	32.15	3,022
2014	14,766.25	2,747	526	14,240	32.82	434
2015	41,897.14	6,779	1,299	40,598	33.66	1,206
2016	36,654.91	5,040	965	35,690	34.50	1,034
2017	197,636.56	22,412	4,293	193,344	35.18	5,496
2018	185,763.69	16,459	3,153	182,611	36.02	5,070
2019	320,888.95	20,473	3,922	316,967	36.71	8,634
2020	493,127.70	19,035	3,647	489,481	37.41	13,084
2021	1,221,401.60	16,000	3,065	1,218,337	37.67	32,342
	2,922,659.17	226,111	43,314	2,879,345		80,477
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						35.8 2.75

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1965	48,230.07	36,240	48,230			
1976	26,258.22	17,561	23,675	2,583	22.53	115
1978	11,146.44	7,273	9,805	1,341	23.17	58
1980	3,250.10	2,064	2,783	467	23.86	20
1982	25,250.93	15,560	20,977	4,274	24.60	174
1983	86,589.73	52,673	71,011	15,579	24.79	628
1984	30,555.49	18,333	24,716	5,839	25.00	234
1985	109,617.31	64,411	86,836	22,781	25.61	890
1986	68,084.13	39,393	53,108	14,976	25.85	579
1987	29,681.60	16,895	22,777	6,905	26.11	264
1988	230,203.27	128,776	173,610	56,593	26.38	2,145
1989	90,435.83	49,667	66,959	23,477	26.67	880
1990	129,783.22	69,901	94,237	35,546	26.98	1,317
1991	285,470.50	150,614	203,051	82,420	27.31	3,018
1992	76,688.69	39,587	53,369	23,320	27.65	843
1993	2,172,966.53	1,096,044	1,477,634	695,333	28.00	24,833
1994	49,085.00	24,297	32,756	16,329	28.06	582
1996	24,175.73	11,343	15,292	8,884	28.85	308
1997	208,448.09	95,511	128,763	79,685	28.97	2,751
1998	224,083.37	99,538	134,192	89,891	29.41	3,056
1999	305,065.23	131,788	177,670	127,395	29.58	4,307
2000	7,035.93	2,949	3,976	3,060	29.78	103
2001	179,000.00	72,280	97,444	81,556	30.26	2,695
2002	9,723.14	3,792	5,112	4,611	30.50	151
2003	271,071.10	101,814	137,261	133,810	30.76	4,350
2004	1,148,737.10	414,120	558,297	590,440	31.04	19,022
2005	466,139.99	160,725	216,682	249,458	31.35	7,957
2006	928,740.33	306,670	413,438	515,302	31.45	16,385
2007	516,608.48	161,802	218,134	298,474	31.80	9,386
2008	544,180.50	161,622	217,891	326,290	31.95	10,213
2009	2,933,040.76	821,251	1,107,171	1,825,870	32.14	56,810
2010	1,290,300.82	338,317	456,102	834,199	32.36	25,779
2011	14,574.94	3,550	4,786	9,789	32.60	300
2013	181,693.78	37,211	50,166	131,528	33.00	3,986
2014	4,042,798.93	745,896	1,005,581	3,037,218	33.15	91,620
2015	1,545,002.12	252,144	339,928	1,205,074	33.34	36,145
2016	544,942.14	76,728	103,441	441,501	33.56	13,156
2017	463,399.48	54,635	73,656	389,743	33.67	11,575
2018	388,079.03	36,557	49,285	338,794	33.67	10,062
2019	10,221.64	705	950	9,272	33.73	275

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
2020	80,193.45	3,432	4,627	75,566	33.59	2,250
2021	128,541.07	1,902	2,564	125,977	33.40	3,772
9999	2,734,528.70-	813,065-	1,096,049-	1,638,480-		51,180-
	17,194,565.51	5,112,506	6,891,894	10,302,671		321,814
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						32.0 1.87

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1932	602.40	555	561	41	7.59	5
1946	500.00	430	435	65	12.22	5
1957	137,083.79	109,640	110,918	26,166	16.15	1,620
1961	346,385.67	268,241	271,368	75,018	17.62	4,258
1965	53,961.55	40,547	41,020	12,942	18.69	692
1967	24,003,838.66	17,662,024	17,867,914	6,135,925	19.57	313,537
1973	38,481.00	26,690	27,001	11,480	21.43	536
1975	419,410.21	284,738	288,057	131,353	21.99	5,973
1976	17,438.45	11,663	11,799	5,639	22.53	250
1978	20,513,093.95	13,384,794	13,540,823	6,972,271	23.17	300,918
1984	693,417.71	416,051	420,901	272,517	25.00	10,901
1985	133,860.33	78,656	79,573	54,287	25.61	2,120
1986	416,595.46	241,042	243,852	172,743	25.85	6,683
1988	1,122,692.96	628,034	635,355	487,338	26.38	18,474
1989	99,798.07	54,809	55,448	44,350	26.67	1,663
1992	52,555,742.37	27,129,274	27,445,525	25,110,217	27.65	908,145
1993	243,904.93	123,026	124,460	119,445	28.00	4,266
1994	16,680.06	8,257	8,353	8,327	28.06	297
1996	598,358.32	280,750	284,023	314,335	28.85	10,895
1997	69,732.72	31,952	32,324	37,409	28.97	1,291
1998	599,628.40	266,355	269,460	330,168	29.41	11,226
2000	6,483,934.82	2,718,065	2,749,750	3,734,185	29.78	125,392
2001	407,381.75	164,501	166,419	240,963	30.26	7,963
2002	785,687.35	306,418	309,990	475,697	30.50	15,597
2003	12,839.78	4,823	4,879	7,961	30.76	259
2004	15,555.13	5,608	5,673	9,882	31.04	318
2005	533,626.71	183,994	186,139	347,488	31.35	11,084
2006	441,648.57	145,832	147,532	294,117	31.45	9,352
2007	3,283.45	1,028	1,040	2,243	31.80	71
2009	16,283,229.18	4,559,304	4,612,453	11,670,776	32.14	363,123
2010	11,057,656.77	2,899,318	2,933,116	8,124,541	32.36	251,067
2011	87,404.92	21,292	21,540	65,865	32.60	2,020
2012	9,700.00	2,175	2,200	7,500	32.87	228
2013	216,561.21	44,352	44,869	171,692	33.00	5,203
2014	10,059,586.73	1,855,994	1,877,630	8,181,957	33.15	246,816
2015	33,068.16	5,397	5,460	27,608	33.34	828
2016	116,138.86	16,352	16,543	99,596	33.56	2,968
2017	803,398.97	94,721	95,825	707,574	33.67	21,015
2018	205,516.20	19,360	19,586	185,930	33.67	5,522

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
2019	206,079.04	14,219	14,385	191,694	33.73	5,683
2021	1,100,100.35	16,281	16,470	1,083,630	33.40	32,444
9999	1,853,012.73-	909,992-	920,600-	932,413-		33,277-
	149,090,592.23	73,216,570	74,070,070	75,020,523		2,677,431
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						28.0 1.80

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1						
NET SALVAGE PERCENT.. 0						
1939	3,519.17	3,519	3,519			
1972	450.26	406	450			
1984	11,260.27	9,036	11,260			
1992	14,967.00	10,642	14,967			
1993	16,986.00	11,860	16,986			
1994	29,220.00	20,010	29,220			
1997	5,855.00	3,744	5,855			
2002	1,066.29	591	1,066			
2003	39,169.15	20,869	39,169			
2007	1,139.15	509	1,139			
2008	359,649.78	151,988	359,650			
2009	51,447.64	20,450	51,392	56	18.95	3
2010	38,934.54	14,460	36,339	2,596	19.46	133
2011	7,105.08	2,447	6,149	956	19.99	48
2012	28,465.52	8,978	22,562	5,904	20.62	286
2013	25,257.86	7,234	18,179	7,079	21.18	334
2014	413,665.01	106,105	266,648	147,017	21.74	6,763
2015	1,021,769.08	229,796	577,490	444,279	22.40	19,834
2016	9,177.69	1,767	4,441	4,737	23.07	205
2017	131,543.68	20,955	52,661	78,883	23.75	3,321
2018	372,536.26	46,567	117,025	255,511	24.51	10,425
2019	84,483.65	7,604	19,109	65,375	25.28	2,586
2020	194,736.99	10,574	26,573	168,164	26.12	6,438
2021	644,667.82	11,733	29,486	615,182	26.97	22,810
	3,507,072.89	721,844	1,711,335	1,795,738		73,186

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.5 2.09

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 355.00 POWER GENERATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
NET SALVAGE PERCENT.. 0						
1983	14,573.73	11,558	14,574			
1987	19,246.40	14,475	19,246			
1989	49,338.78	36,077	49,339			
1990	26,650.73	19,141	26,651			
1992	59,866.38	41,499	59,866			
1993	267,544.17	182,251	267,544			
1994	20,325.00	13,581	20,325			
1997	30,447.00	19,023	30,447			
1998	12,580.62	7,657	12,581			
1999	54,144.46	32,162	53,521	623	15.38	41
2001	38,477.83	21,532	35,832	2,646	16.13	164
2002	62,407.82	33,831	56,299	6,109	16.47	371
2005	68,295.28	33,014	54,939	13,356	17.63	758
2007	12,208.69	5,382	8,956	3,253	18.39	177
2008	183,720.69	76,887	127,949	55,772	18.76	2,973
2009	2,557,175.52	1,010,084	1,680,894	876,282	19.15	45,759
2010	20,681.36	7,658	12,744	7,937	19.56	406
2011	14,376.97	4,951	8,239	6,138	19.99	307
2012	27,649.83	8,798	14,641	13,009	20.35	639
2013	26,762.41	7,780	12,947	13,815	20.74	666
2014	609,803.14	159,646	265,668	344,135	21.15	16,271
2015	90,933.42	21,042	35,016	55,917	21.59	2,590
2016	10,498.31	2,102	3,498	7,000	21.97	319
2017	13,046.73	2,184	3,635	9,412	22.38	421
2018	4,307.88	573	954	3,354	22.82	147
2019	9,195.02	894	1,488	7,707	23.21	332
2020	160,993.90	9,627	16,020	144,974	23.56	6,153
9999	144,517.16-	57,720-	93,659-	50,859-		2,540-
	4,320,734.91	1,725,689	2,800,154	1,520,581		75,954

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.0 1.76

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1957	11,376.37	8,805	4,131	7,245	18.83	385
1965	13,337.78	9,419	4,419	8,919	23.50	380
1972	82,114.26	52,438	24,599	57,515	28.02	2,053
1973	125,694.50	79,250	37,177	88,518	28.42	3,115
1974	1,503,776.46	935,650	438,926	1,064,850	28.84	36,923
1975	849,779.52	517,686	242,853	606,927	29.83	20,346
1976	971,420.09	583,435	273,697	697,723	30.26	23,058
1977	458,850.00	269,528	126,439	332,411	31.26	10,634
1978	270,355.19	156,428	73,382	196,973	31.68	6,218
1979	73,749.33	42,000	19,703	54,046	32.13	1,682
1980	75,105.93	41,766	19,593	55,513	33.13	1,676
1981	160,944.25	88,004	41,284	119,660	33.57	3,564
1982	53,478.41	28,515	13,377	40,101	34.58	1,160
1983	192,381.70	100,731	47,254	145,128	35.03	4,143
1985	309,939.29	154,970	72,699	237,240	36.50	6,500
1986	32,833.22	15,970	7,492	25,341	37.49	676
1987	225,949.78	107,575	50,465	175,485	37.96	4,623
1988	494,437.58	228,578	107,229	387,209	38.96	9,939
1989	92,110.83	41,616	19,523	72,588	39.44	1,840
1990	69,408.53	30,609	14,359	55,050	39.93	1,379
1991	75,459.60	32,221	15,115	60,345	40.93	1,474
1992	34,682.29	14,428	6,768	27,914	41.42	674
1993	585,692.44	235,331	110,397	475,295	42.43	11,202
1994	287,028.44	112,085	52,581	234,447	42.92	5,462
1995	933,686.32	351,346	164,821	768,865	43.92	17,506
1996	132,298.94	48,236	22,628	109,671	44.43	2,468
1997	1,678,151.28	588,024	275,850	1,402,301	45.43	30,867
1998	430,007.75	145,515	68,263	361,745	45.94	7,874
1999	402,468.56	130,400	61,172	341,297	46.94	7,271
2000	489,230.36	151,466	71,055	418,175	47.94	8,723
2001	874,316.29	259,847	121,898	752,418	48.47	15,523
2002	556,204.52	157,295	73,789	482,416	49.46	9,754
2003	410,588.41	110,900	52,025	358,563	49.99	7,173
2004	2,412,532.77	616,402	289,162	2,123,371	50.99	41,643
2005	655,886.88	159,118	74,644	581,243	51.52	11,282
2006	1,981,527.29	451,392	211,754	1,769,773	52.53	33,691
2007	1,189,543.99	255,276	119,753	1,069,791	53.07	20,158
2008	3,027,500.23	604,895	283,765	2,743,735	54.07	50,744
2009	535,945.98	99,793	46,814	489,132	54.62	8,955
2010	263,792.88	45,214	21,211	242,582	55.61	4,362
2013	306,727.66	39,108	18,346	288,382	58.17	4,958

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
2014	4,406,345.77	498,798	233,993	4,172,353	58.73	71,043
2015	2,390,999.91	234,796	110,146	2,280,854	59.72	38,192
2016	3,139,575.24	262,468	123,127	3,016,448	60.29	50,032
2017	3,391,493.75	233,335	109,461	3,282,033	60.86	53,928
2018	1,164,959.12	62,442	29,292	1,135,667	61.86	18,359
2019	4,224,894.50	162,658	76,305	4,148,590	62.44	66,441
2020	2,935,797.59	68,698	32,227	2,903,571	62.60	46,383
2021	2,540,876.87	20,073	9,417	2,531,460	62.79	40,316
9999	11,510,827.06-	2,335,948-	1,095,825-	10,415,002-		200,243-
	36,014,431.59	7,308,585	3,428,555	32,585,876		626,509
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						52.0 1.74

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1915	84,269.72	77,183	64,122	20,148	9.78	2,060
1920	122,709.20	110,855	92,096	30,613	10.85	2,821
1929	18,270.37	16,056	13,339	4,931	12.76	386
1930	192,992.96	167,749	139,363	53,630	13.77	3,895
1935	15,424.01	13,075	10,862	4,562	15.54	294
1939	37,817.47	31,510	26,178	11,639	16.51	705
1945	36,269.45	29,132	24,202	12,067	18.74	644
1946	95,232.90	75,501	62,725	32,508	19.73	1,648
1955	36,077.71	26,633	22,126	13,952	23.59	591
1957	1,198,720.27	865,956	719,419	479,301	24.79	19,334
1961	11,023.25	7,670	6,372	4,651	26.45	176
1962	30,703.85	21,008	17,453	13,251	27.46	483
1965	501,350.88	331,393	275,315	226,036	28.97	7,802
1966	21,613,440.57	14,035,768	11,660,635	9,952,806	29.97	332,092
1968	34,420.00	21,912	18,204	16,216	30.54	531
1969	402,370.12	251,401	208,859	193,511	31.53	6,137
1970	781,349.79	482,874	401,162	380,188	31.83	11,944
1972	6,428,516.66	3,850,681	3,199,069	3,229,448	33.14	97,449
1974	113,000.91	65,484	54,403	58,598	34.47	1,700
1975	4,065,574.72	2,325,509	1,931,986	2,133,589	34.80	61,310
1976	248,103.94	138,839	115,345	132,759	35.80	3,708
1977	161,526.21	89,130	74,047	87,479	36.15	2,420
1978	79,828.73	43,060	35,773	44,056	37.15	1,186
1979	32,791.52	17,419	14,471	18,321	37.50	489
1980	587,324.04	307,112	255,143	332,181	37.87	8,772
1982	45,891.00	23,019	19,124	26,767	39.24	682
1983	444,855.74	217,534	180,723	264,133	40.24	6,564
1984	2,604,467.47	1,250,144	1,038,595	1,565,872	40.62	38,549
1985	3,490,753.96	1,643,447	1,365,343	2,125,411	41.02	51,814
1986	625,592.73	286,521	238,036	387,557	42.02	9,223
1987	1,006,756.01	451,530	375,122	631,634	42.42	14,890
1988	2,769,456.57	1,206,098	1,002,002	1,767,455	43.42	40,706
1989	2,347,848.24	999,714	830,542	1,517,306	43.83	34,618
1990	5,924,851.23	2,463,553	2,046,671	3,878,180	44.26	87,623
1992	1,075,520.97	422,034	350,617	724,904	45.68	15,869
1993	6,230,895.28	2,361,509	1,961,894	4,269,001	46.69	91,433
1994	576,932.04	212,599	176,623	400,309	47.13	8,494
1995	9,542,329.37	3,414,245	2,836,487	6,705,842	47.57	140,968
1996	231,644.02	79,732	66,240	165,404	48.58	3,405
1997	3,306,844.33	1,101,841	915,387	2,391,457	49.03	48,775
1998	1,837,921.11	587,400	488,000	1,349,921	50.03	26,982

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1999	1,850,586.75	570,351	473,836	1,376,751	50.50	27,262
2000	2,703,176.38	802,032	666,312	2,036,864	50.96	39,970
2001	937,675.28	265,268	220,379	717,296	51.96	13,805
2002	1,215,703.58	329,456	273,705	941,999	52.45	17,960
2003	614,361.29	159,120	132,194	482,167	52.93	9,110
2004	1,159,407.69	284,055	235,987	923,421	53.93	17,123
2005	7,239,110.51	1,683,817	1,398,882	5,840,229	54.43	107,298
2006	1,921,244.91	422,866	351,309	1,569,936	54.92	28,586
2007	4,109,680.09	852,348	708,114	3,401,566	55.43	61,367
2008	3,445,028.54	664,891	552,378	2,892,651	56.43	51,261
2009	6,967,336.42	1,254,121	1,041,899	5,925,437	56.94	104,065
2010	4,010,106.60	668,886	555,697	3,454,410	57.46	60,119
2011	877,180.68	134,472	111,717	765,464	57.99	13,200
2012	2,049,295.02	286,082	237,671	1,811,624	58.53	30,952
2013	3,791,024.51	476,911	396,208	3,394,817	59.07	57,471
2014	11,207,893.58	1,253,043	1,041,003	10,166,891	59.61	170,557
2015	4,612,327.22	449,702	373,603	4,238,724	60.17	70,446
2016	5,955,206.64	497,855	413,608	5,541,599	60.29	91,916
2017	15,258,966.26	1,057,446	878,505	14,380,461	60.44	237,930
2018	2,793,766.25	151,422	125,798	2,667,968	61.02	43,723
2019	9,518,552.95	375,983	312,360	9,206,193	60.79	151,443
2020	3,282,032.95	79,753	66,257	3,215,776	60.23	53,392
2021	4,976,371.92	42,797	35,555	4,940,817	57.98	85,216
9999	13,114,348.62-	3,864,176-	3,210,280-	9,904,069-		199,713-
	166,373,356.72	49,022,331	40,726,772	125,646,585		2,533,631
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						49.6 1.52

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
1939	41,979.71	40,519	30,351	11,629	2.97	3,915
1946	6,367.14	6,009	4,501	1,866	4.50	415
1955	6,600.80	6,058	4,538	2,063	5.96	346
1965	52,191.86	45,412	34,017	18,175	8.44	2,153
1966	4,622,443.35	4,002,111	2,997,844	1,624,599	8.60	188,907
1968	35,388.05	30,292	22,691	12,697	9.00	1,411
1969	84,594.90	71,500	53,558	31,037	9.61	3,230
1970	147,368.99	123,702	92,661	54,708	9.85	5,554
1972	1,036,881.95	857,087	642,014	394,868	10.38	38,041
1974	15,998.40	12,994	9,733	6,265	10.98	571
1975	599,973.89	482,619	361,513	238,461	11.31	21,084
1977	42,780.69	33,506	25,098	17,683	12.32	1,435
1980	119,038.71	89,910	67,348	51,691	13.45	3,843
1984	95,924.37	68,346	51,196	44,728	15.13	2,956
1985	763,863.56	535,316	400,987	362,877	15.58	23,291
1986	107,241.42	73,482	55,043	52,198	16.31	3,200
1987	217,069.40	146,044	109,397	107,672	16.78	6,417
1988	245,417.54	161,976	121,331	124,087	17.26	7,189
1990	1,608,829.45	1,013,563	759,225	849,604	18.50	45,925
1992	255,497.91	152,992	114,601	140,897	19.76	7,130
1993	252,460.60	147,487	110,477	141,984	20.28	7,001
1994	240,277.70	136,117	101,961	138,317	21.04	6,574
1995	2,707,114.82	1,492,162	1,117,727	1,589,388	21.58	73,651
1996	39,652.87	21,135	15,832	23,821	22.34	1,066
1997	1,036,369.93	533,212	399,411	636,959	23.12	27,550
1998	249,037.55	123,473	92,489	156,549	23.90	6,550
1999	391,834.07	186,905	140,004	251,830	24.67	10,208
2000	521,839.66	239,003	179,029	342,811	25.45	13,470
2001	317,425.27	139,254	104,310	213,115	26.23	8,125
2002	230,622.89	96,677	72,417	158,206	27.01	5,857
2003	214,696.06	85,793	64,265	150,431	27.80	5,411
2004	561,307.83	213,185	159,690	401,618	28.58	14,052
2005	2,195,844.90	786,112	588,849	1,606,996	29.59	54,309
2006	171,037.75	57,794	43,292	127,746	30.37	4,206
2007	1,856,182.54	589,524	441,592	1,414,591	31.16	45,398
2008	879,793.94	260,067	194,807	684,987	32.16	21,299
2009	179,547.77	49,160	36,824	142,724	33.16	4,304
2010	303,634.19	76,819	57,542	246,092	33.95	7,249
2011	118,801.32	27,443	20,557	98,244	34.95	2,811
2012	96,983.02	20,269	15,183	81,800	35.95	2,275
2013	1,061,818.39	198,560	148,734	913,084	36.95	24,711

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
2014	2,194,357.17	363,824	272,528	1,921,829	37.75	50,909
2015	5,490,230.53	788,397	590,562	4,899,669	38.75	126,443
2016	283,133.88	34,429	25,789	257,345	39.75	6,474
2017	372,836.52	37,060	27,760	345,077	40.75	8,468
2018	19,204.03	1,486	1,113	18,091	41.75	433
2019	42,873.80	2,367	1,773	41,101	42.75	961
2020	320,886.29	10,653	7,980	312,906	43.75	7,152
2021	195,704.82	2,153	1,613	194,092	44.75	4,337
9999	4,387,312.76-	1,971,741-	1,476,963-	2,910,350-		123,388-
	28,263,649.44	12,702,217	9,514,794	18,748,856		794,879
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						23.6 2.81

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1929	717.00	717	717			
1939	6,255.19	6,255	6,255			
1955	1,939.83	1,858	1,790	150	2.94	51
1957	173,445.10	164,461	158,436	15,009	3.52	4,264
1961	905.88	844	813	93	4.44	21
1962	3,003.00	2,787	2,685	318	4.60	69
1965	54,222.80	49,321	47,514	6,709	5.61	1,196
1966	9,571,678.06	8,658,540	8,341,321	1,230,357	5.85	210,317
1968	12,368.97	11,050	10,645	1,724	6.38	270
1969	15,685.09	13,916	13,406	2,279	6.67	342
1970	382,020.04	336,407	324,082	57,938	6.98	8,301
1971	554.24	484	466	88	7.31	12
1972	597,377.25	517,448	498,491	98,886	7.65	12,926
1973	2,464.62	2,104	2,027	438	8.32	53
1974	12,064.87	10,201	9,827	2,238	8.68	258
1975	1,680,201.42	1,406,329	1,354,806	325,395	9.06	35,916
1976	57,815.01	47,877	46,123	11,692	9.45	1,237
1977	56,778.47	46,490	44,787	11,991	9.85	1,217
1978	33,180.60	26,846	25,862	7,319	10.26	713
1979	42,030.26	33,406	32,182	9,848	10.97	898
1980	609,578.66	478,154	460,636	148,943	11.41	13,054
1981	72,360.52	55,978	53,927	18,434	11.85	1,556
1982	59,525.72	45,382	43,719	15,807	12.31	1,284
1983	142,651.31	106,546	102,643	40,008	13.05	3,066
1984	250,999.93	184,485	177,726	73,274	13.52	5,420
1985	1,693,355.21	1,223,788	1,178,953	514,402	14.01	36,717
1986	175,607.24	124,049	119,504	56,103	14.75	3,804
1987	755,194.69	523,652	504,467	250,728	15.25	16,441
1988	323,599.88	220,048	211,986	111,614	15.76	7,082
1989	309,308.81	205,072	197,559	111,750	16.52	6,765
1990	3,445,436.35	2,235,744	2,153,835	1,291,601	17.04	75,798
1991	79,126.91	49,961	48,131	30,996	17.81	1,740
1992	413,445.91	254,931	245,591	167,855	18.34	9,152
1993	721,144.35	431,605	415,793	305,351	19.12	15,970
1994	250,014.08	145,758	140,418	109,596	19.67	5,572
1995	6,197,753.90	3,498,012	3,369,857	2,827,897	20.45	138,283
1996	94,520.19	51,816	49,918	44,602	21.01	2,123
1997	437,673.46	231,617	223,131	214,542	21.80	9,841
1998	358,768.83	183,797	177,063	181,706	22.37	8,123
1999	151,713.07	74,764	72,025	79,688	23.16	3,441
2000	1,005,795.12	475,741	458,312	547,483	23.95	22,859

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
2001	259,782.00	118,227	113,896	145,886	24.55	5,942
2002	327,824.76	142,538	137,316	190,509	25.35	7,515
2003	303,238.40	125,662	121,058	182,180	26.14	6,969
2004	1,239,460.30	490,207	472,248	767,212	26.75	28,681
2005	2,715,759.82	1,017,324	980,053	1,735,707	27.55	63,002
2006	1,024,086.05	361,912	348,653	675,433	28.36	23,816
2007	616,045.08	204,527	197,034	419,011	29.17	14,364
2008	741,061.07	230,099	221,669	519,392	29.98	17,325
2009	2,569,211.93	745,071	717,774	1,851,438	30.60	60,505
2010	656,480.17	175,937	169,491	486,989	31.42	15,499
2011	212,347.23	52,174	50,262	162,085	32.24	5,027
2012	246,490.27	55,017	53,001	193,489	33.06	5,853
2013	562,112.50	112,760	108,629	453,484	33.87	13,389
2014	980,906.93	174,405	168,015	812,892	34.69	23,433
2015	1,160,200.05	180,295	173,690	986,510	35.34	27,915
2016	681,869.76	90,007	86,710	595,160	36.17	16,455
2017	2,222,890.86	240,961	232,133	1,990,758	37.00	53,804
2018	739,860.60	62,888	60,584	679,277	37.65	18,042
2019	367,253.67	22,402	21,581	345,673	38.48	8,983
2020	550,148.64	20,300	19,556	530,593	39.15	13,553
2021	983,843.84	12,396	11,942	971,902	39.34	24,705
9999	6,003,449.57-	3,252,827-	3,133,686-	2,869,764-		136,187-
	43,409,706.20	23,520,523	22,659,038	20,750,668		984,742

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.1 2.27

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 364.00 FLOW MEASURING DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-L2.5						
NET SALVAGE PERCENT.. 0						
1989	5,317.10	5,063	2,497	2,820	1.63	1,730
1991	8,740.98	8,211	4,049	4,692	1.97	2,382
1992	6,784.52	6,345	3,129	3,656	2.04	1,792
1999	51,368.90	44,958	22,170	29,199	3.21	9,096
2005	8,722.16	6,937	3,421	5,301	4.25	1,247
2006	15,631.29	12,211	6,021	9,610	4.34	2,214
2007	9,030.61	6,914	3,409	5,622	4.44	1,266
2008	29,418.95	22,002	10,850	18,569	4.55	4,081
2009	92,082.61	66,870	32,975	59,108	4.71	12,549
2010	29,477.55	20,646	10,181	19,297	4.92	3,922
2011	8,760.43	5,850	2,885	5,875	5.22	1,125
2013	26,874.75	15,695	7,739	19,136	6.06	3,158
2014	152,434.49	81,065	39,974	112,460	6.60	17,039
2015	79,721.51	37,724	18,602	61,120	7.24	8,442
2016	5,515.89	2,263	1,116	4,400	7.90	557
2018	1,269.20	344	170	1,099	9.42	117
2021	13,780.49	551	272	13,508	12.02	1,124
9999	14,726.81-	9,287-	4,580-	10,147-		1,942-
	530,204.62	334,362	164,880	365,325		69,899
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						5.2 13.18

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-S2						
NET SALVAGE PERCENT.. 0						
1970	30,360.76	30,361	30,361			
1991	227,265.28	200,312	164,561	62,704	4.10	15,294
2009	14,938.00	7,825	6,429	8,509	11.37	748
	272,564.04	238,498	201,351	71,213		16,042
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						4.4 5.89

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 370.00 RECEIVING WELLS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2007	6,261.10	1,961	1,782	4,479	31.80	141
2009	92,112.20	25,220	22,922	69,190	33.16	2,087
2013	33,467.05	6,345	5,767	27,700	36.34	762
2017	1,547.02	158	144	1,403	39.55	35
2019	10,032.40	577	524	9,508	40.98	232
	143,419.77	34,261	31,139	112,281		3,257
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						34.5 2.27

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0.5						
NET SALVAGE PERCENT.. 0						
1985	508.69	422	164	345	7.55	46
1986	83,246.62	68,262	26,538	56,709	7.79	7,280
1989	4,752.26	3,738	1,453	3,299	8.82	374
1992	115,530.12	86,902	33,784	81,746	9.72	8,410
1993	204,730.19	151,132	58,754	145,976	10.11	14,439
1994	19,130.99	13,889	5,399	13,732	10.38	1,323
1996	56,678.77	39,601	15,395	41,284	11.00	3,753
1997	50,751.07	34,693	13,487	37,264	11.34	3,286
1999	548,987.12	356,951	138,768	410,219	12.10	33,902
2001	15,000.00	9,255	3,598	11,402	12.72	896
2003	129,284.98	74,856	29,101	100,184	13.45	7,449
2004	163,146.82	91,069	35,404	127,743	13.85	9,223
2005	76,833.59	41,329	16,067	60,767	14.17	4,288
2006	91,103.28	46,882	18,226	72,877	14.62	4,985
2007	6,031.45	2,965	1,153	4,878	15.00	325
2008	317,090.80	148,525	57,741	259,350	15.32	16,929
2009	624,200.33	276,209	107,379	516,821	15.75	32,814
2010	280,613.49	116,819	45,414	235,199	16.12	14,591
2011	39,056.90	15,174	5,899	33,158	16.53	2,006
2012	51,866.03	18,672	7,259	44,607	16.89	2,641
2013	60,261.59	19,874	7,726	52,536	17.27	3,042
2014	1,857,746.98	553,237	215,076	1,642,671	17.69	92,859
2015	231,880.48	61,193	23,789	208,091	18.13	11,478
2016	617,701.66	141,330	54,944	562,758	18.54	30,354
2017	401,974.62	77,260	30,036	371,939	18.92	19,659
2018	396,992.16	60,859	23,660	373,332	19.33	19,314
2019	5,479,728.12	616,469	239,658	5,240,070	19.72	265,724
2020	2,185,289.72	151,659	58,959	2,126,331	20.10	105,788
2021	698,449.71	16,763	6,516	691,934	20.38	33,952
9999	66,626.22-	14,829-	5,765-	60,862-		3,379-
	14,741,942.32	3,281,160	1,275,582	13,466,360		747,751

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.0 5.07

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
1957	10,040.14	9,843	6,603	3,437	1.29	2,664
1965	83,399.24	78,696	52,795	30,604	3.38	9,054
1967	162,299.51	152,140	102,067	60,233	3.64	16,548
1973	946.11	853	572	374	5.26	71
1981	4,459.50	3,775	2,533	1,926	7.35	262
1984	581,328.63	477,387	320,267	261,062	8.16	31,993
1985	478,693.67	387,885	260,222	218,472	8.55	25,552
1986	700,147.70	559,278	375,205	324,943	8.94	36,347
1987	201,769.29	159,398	106,936	94,833	9.17	10,342
1989	812,599.29	623,264	418,132	394,467	9.87	39,966
1992	809,717.79	589,960	395,789	413,929	10.99	37,664
1993	3,329,198.52	2,381,709	1,597,828	1,731,371	11.34	152,678
1994	58,519.34	41,034	27,529	30,990	11.72	2,644
1995	7,336.00	5,035	3,378	3,958	12.11	327
1996	25,760.46	17,275	11,589	14,171	12.52	1,132
1997	20,044.11	13,113	8,797	11,247	12.95	868
1998	3,671.26	2,347	1,575	2,096	13.26	158
1999	17,201.00	10,682	7,166	10,035	13.73	731
2001	65,430.51	38,094	25,556	39,875	14.71	2,711
2002	311,832.69	175,125	117,487	194,346	15.22	12,769
2004	328,541.47	170,184	114,172	214,369	16.28	13,168
2005	1,404,541.87	695,248	466,424	938,118	16.83	55,741
2006	281,602.66	132,691	89,019	192,584	17.39	11,074
2007	18,460.23	8,244	5,531	12,929	17.97	719
2008	811,464.19	341,789	229,298	582,166	18.55	31,384
2009	18,201,744.17	7,189,689	4,823,380	13,378,364	19.15	698,609
2010	9,680,221.79	3,550,705	2,382,078	7,298,144	19.85	367,665
2011	16,548.01	5,613	3,766	12,782	20.46	625
2012	749,024.12	231,973	155,625	593,399	21.17	28,030
2013	2,967,039.09	829,584	556,547	2,410,492	21.90	110,068
2014	8,998,784.03	2,240,697	1,503,227	7,495,557	22.62	331,369
2015	731,233.52	158,751	106,502	624,732	23.44	26,652
2016	521,927.79	96,765	64,917	457,011	24.17	18,908
2017	669,679.63	102,193	68,559	601,121	25.00	24,045
2018	5,001,027.17	597,123	400,595	4,600,432	25.82	178,173
2019	1,136,066.80	97,134	65,165	1,070,902	26.74	40,049

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
2020	6,783,353.30	348,664	233,909	6,549,444	27.66	236,784
2021	4,718,142.42	81,152	54,443	4,663,699	28.57	163,238
9999	2,200,080.47-	703,400-	471,893-	1,728,187-		84,662-
	68,503,716.55	21,901,692	14,693,290	53,810,427		2,636,120
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						20.4 3.85

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 381.00 PLANT SEWERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2008	294,411.86	86,645	74,512	219,900	32.37	6,793
2009	4,434,866.70	1,214,267	1,044,237	3,390,630	33.16	102,251
2010	1,187,964.50	300,555	258,469	929,496	33.95	27,378
2011	6,597.06	1,531	1,317	5,280	34.75	152
2012	1,684.33	355	305	1,379	35.55	39
2014	234,318.33	39,365	33,853	200,465	37.14	5,398
2015	7,458.23	1,090	937	6,521	37.95	172
2016	45,239.43	5,623	4,836	40,403	38.75	1,043
2021	1,641.43	19	16	1,625	41.87	39
9999	30,192.33-	8,014-	6,892-	23,301-		696-
	6,183,989.54	1,641,436	1,411,590	4,772,399		142,569
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						33.5 2.31

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1957	12,139.53	11,275	11,037	1,103	4.94	223
1975	4,984.00	4,033	3,948	1,036	10.97	94
1993	202,475.94	115,411	112,972	89,504	21.50	4,163
2004	1,695.94	632	619	1,077	29.45	37
2005	9,240.93	3,263	3,194	6,047	30.23	200
2006	201,117.58	67,012	65,595	135,523	31.01	4,370
2009	26,051.26	7,133	6,982	19,069	33.16	575
2010	27,827.93	7,040	6,891	20,937	33.95	617
2014	100,422.48	16,871	16,515	83,907	37.14	2,259
2017	18,433.32	1,884	1,844	16,590	39.55	419
	604,388.91	234,554	229,597	374,792		12,957

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 28.9 2.14

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-S2.5						
NET SALVAGE PERCENT.. 0						
2010	273,149.74	160,503	148,957	124,193	8.07	15,389
2013	8,814.50	4,001	3,713	5,102	10.23	499
2018	48,374.95	9,327	8,656	39,719	14.65	2,711
2019	268,065.51	36,993	34,332	233,733	15.62	14,964
	598,404.70	210,824	195,658	402,747		33,563
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						12.0 5.61

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2008	3,529.23	2,382	1,231	2,298	6.50	354
2009	52,251.63	32,657	16,883	35,369	7.50	4,716
2010	7,240.80	4,163	2,152	5,089	8.50	599
2011	2,249.52	1,181	611	1,639	9.50	173
2012	30,582.71	14,527	7,510	23,073	10.50	2,197
2013	52,070.05	22,130	11,441	40,629	11.50	3,533
2014	3,709.04	1,391	719	2,990	12.50	239
2015	8,933.71	2,903	1,501	7,433	13.50	551
2016	33,090.02	9,100	4,705	28,385	14.50	1,958
2017	28,119.56	6,327	3,271	24,849	15.50	1,603
2018	10,405.16	1,821	941	9,464	16.50	574
2019	20,626.43	2,578	1,333	19,293	17.50	1,102
2020	74,595.48	5,595	2,893	71,702	18.50	3,876
2021	355,192.69	8,880	4,591	350,602	19.50	17,980
	682,596.03	115,635	59,782	622,814		39,455

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.8 5.78

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L4						
NET SALVAGE PERCENT.. 0						
2001	22,361.85	20,949	17,970	4,392	1.38	3,183
2006	73,113.90	63,799	54,728	18,386	2.26	8,135
2011	128,391.92	94,638	81,182	47,210	3.75	12,589
2012	73,865.31	50,384	43,220	30,645	4.43	6,918
2013	62,726.96	39,029	33,480	29,247	5.16	5,668
2014	3,075.33	1,714	1,470	1,605	5.96	269
2016	2,423.80	1,006	863	1,561	7.75	201
2017	8,526.46	2,904	2,491	6,035	8.71	693
2018	927,895.26	246,171	211,171	716,724	9.69	73,965
2019	299,081.56	56,676	48,618	250,464	10.69	23,430
2020	26,190.18	2,978	2,555	23,635	11.69	2,022
	1,627,652.53	580,248	497,748	1,129,905		137,073
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						8.2 8.42

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 392.00 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2012	58,391.33	22,189	22,114	36,277	15.50	2,340
2017	2,199.71	396	395	1,805	20.50	88
2018	46,760.40	6,546	6,524	40,237	21.50	1,871
	107,351.44	29,131	29,033	78,319		4,299
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						18.2 4.00

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 393.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2004	2,003.72	1,753	1,991	13	2.50	5
2005	7,132.96	5,885	6,682	451	3.50	129
2006	85,717.68	66,431	75,431	10,287	4.50	2,286
2007	5,060.13	3,669	4,166	894	5.50	163
2008	2,776.47	1,874	2,128	648	6.50	100
2009	378.54	237	269	110	7.50	15
2010	61,467.53	35,344	40,133	21,335	8.50	2,510
2012	58,472.38	27,774	31,537	26,935	10.50	2,565
2013	28,453.57	12,093	13,731	14,723	11.50	1,280
2014	40,133.99	15,050	17,089	23,045	12.50	1,844
2015	62,657.78	20,364	23,123	39,535	13.50	2,929
2016	105,803.20	29,096	33,038	72,765	14.50	5,018
2017	7,458.66	1,678	1,905	5,554	15.50	358
2018	94,551.82	16,547	18,789	75,763	16.50	4,592
2019	14,014.13	1,752	1,989	12,025	17.50	687
2020	193,729.12	14,530	16,500	177,229	18.50	9,580
2021	102,471.06	2,562	2,909	99,562	19.50	5,106
	872,282.74	256,639	291,410	580,873		39,167

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.8 4.49

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 394.00 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
1999	2,938.00	2,938	2,938			
2000	2,905.46	2,905	2,905			
2001	529.90	530	530			
2002	4,205.61	4,206	4,206			
2003	7,749.55	7,750	7,750			
2004	6,307.46	6,307	6,307			
2005	8,362.15	8,362	8,362			
2006	11,516.01	11,516	11,516			
2007	10,072.83	9,737	8,874	1,199	0.50	1,199
2008	62,682.15	56,414	51,413	11,269	1.50	7,513
2009	41,773.44	34,811	31,725	10,048	2.50	4,019
2010	31,269.93	23,974	21,849	9,421	3.50	2,692
2011	16,841.59	11,789	10,744	6,098	4.50	1,355
2012	13,442.75	8,514	7,759	5,684	5.50	1,033
2013	5,917.50	3,353	3,056	2,862	6.50	440
2014	51,523.14	25,762	23,478	28,045	7.50	3,739
2015	14,895.30	6,455	5,883	9,012	8.50	1,060
2016	65,493.26	24,014	21,885	43,608	9.50	4,590
2017	48,566.17	14,570	13,278	35,288	10.50	3,361
2018	28,248.23	6,591	6,006	22,242	11.50	1,934
2019	57,097.59	9,516	8,672	48,426	12.50	3,874
2020	32,405.64	3,241	2,954	29,452	13.50	2,182
2021	11,284.32	376	343	10,942	14.50	755
	536,027.98	283,631	262,433	273,595		39,746

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.9 7.41

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 22-R2						
NET SALVAGE PERCENT.. 0						
1986	7,525.00	7,239	7,525			
1992	10,000.00	9,056	10,000			
1993	93,533.45	83,703	93,533			
2002	72,784.90	54,356	72,785			
2011	345,636.00	166,942	224,536	121,100	11.24	10,774
2015	3,257.24	1,061	1,427	1,830	13.46	136
2018	19,634.12	3,719	5,002	14,632	14.98	977
9999	10,000.00-	5,903-	7,510-	2,490-		215-
	542,370.71	320,173	407,298	135,072		11,672
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					11.6	2.15

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2005	234,211.01	234,211	234,211			
2006	3,256.29	3,256	3,256			
2007	2,450.35	2,369	2,450			
2008	9,753.43	8,778	9,239	514	1.50	343
2009	521,963.46	434,968	457,833	64,130	2.50	25,652
2010	144,621.29	110,877	116,705	27,916	3.50	7,976
2011	7,975.30	5,583	5,876	2,099	4.50	466
2012	3,344.78	2,118	2,229	1,116	5.50	203
2013	263,689.84	149,425	157,280	106,410	6.50	16,371
2014	98,016.16	49,008	51,584	46,432	7.50	6,191
2016	172,002.57	63,068	66,384	105,619	9.50	11,118
2017	13,811.63	4,143	4,361	9,451	10.50	900
2018	12,412.19	2,896	3,048	9,364	11.50	814
2019	7,055.35	1,176	1,238	5,817	12.50	465
2020	666,834.19	66,683	70,188	596,646	13.50	44,196
2021	34,544.77	1,151	1,212	33,333	14.50	2,299
	2,195,942.61	1,139,710	1,187,094	1,008,849		116,994
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						8.6 5.33

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 397.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2009	6,270.00	5,225	6,270			
2010	4,161.94	3,191	4,162			
2011	14,880.36	10,416	14,880			
2012	13,823.71	8,755	13,824			
2013	16,427.62	9,309	16,428			
2014	2,202.56	1,101	2,203			
2015	4,104.14	1,778	4,104			
2017	28,080.87	8,424	21,285	6,796	10.50	647
2018	33,269.93	7,763	19,615	13,655	11.50	1,187
2019	123,994.70	20,666	52,218	71,777	12.50	5,742
2020	138,334.00	13,833	34,953	103,381	13.50	7,658
2021	175,934.86	5,864	14,817	161,118	14.50	11,112
9999	29,000.00-	4,975-	10,576-	18,424-		1,361-
	532,484.69	91,350	194,183	338,301		24,985

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.5 4.69

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 398.00 OTHER TANGIBLE PLANT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	14,231.50	1,423	513	13,719	22.50	610
	14,231.50	1,423	513	13,719		610
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						22.5 4.29

PART III. EXPERIENCED NET SALVAGE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2017 TRANSACTION YEAR				
354.20	1,407.63	304.32		304.32-
354.30	166,438.60	36,849.10		36,849.10-
354.40	572,137.15	35,585.29		35,585.29-
354.70	12,302.62	2,146.21		2,146.21-
355.00	9,831.57	930.05		930.05-
360.10	1,620.35	1,809.34		1,809.34-
361.10	115,058.32	53,983.89		53,983.89-
361.20	.06			
363.00	25,016.92	69,276.31		69,276.31-
364.00	31,435.54			
365.00	5,980.30			
371.00	369,649.35	5,054.34		5,054.34-
380.00	888,989.12	6,892.29		6,892.29-
381.00	30,192.33			
382.00		604.43		604.43-
390.00	16,791.12	763.18		763.18-
391.00	20,700.00			
392.00	5,858.64			
393.00	33,251.29	328.18		328.18-
394.00	8,779.18	60.05		60.05-
396.00	13,448.85	5,474.39		5,474.39-
397.00	190,794.50			
	2,519,683.44	220,061.37		220,061.37-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2018 TRANSACTION YEAR				
354.20	416.47	2,367.05		2,367.05-
354.30	573,594.97	87.11		87.11-
354.40	744,885.32	18,538.55-		18,538.55
354.70		36,099.53		36,099.53-
355.00	422,792.78	4,538.63		4,538.63-
360.10	276,235.14	85,350.18		85,350.18-
361.10	2,339,080.10	345,943.14		345,943.14-
361.20	13,749.21			
363.00	56,288.53	48,455.35		48,455.35-
364.00	31,450.72			
371.00	113,724.18	18,884.54-		18,884.54
380.00	1,203,983.11	12,304.03		12,304.03-
382.00	5.76	980.65		980.65-
389.10		3,678.20-		3,678.20
390.00	5,925.73	93.95		93.95-
391.00	79,247.81	9,708.42		9,708.42-
393.00	17,334.55			
394.00	28,673.47	117.59		117.59-
396.00	3,064.59			
397.00		6,019.17		6,019.17-
	5,910,452.44	510,963.51		510,963.51-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2019 TRANSACTION YEAR				
354.20	3,076.09	27,531.06		27,531.06-
354.30		61,135.00		61,135.00-
354.40	913,340.30	1,985.51		1,985.51-
354.70	3,125.06	18,075.18		18,075.18-
355.00		9,730.05		9,730.05-
360.10	55,943.69	245,202.29		245,202.29-
361.10	352,132.81	1,038,558.77		1,038,558.77-
361.20	1,170.55	109,567.01		109,567.01-
363.00	5,384.61	150,830.30		150,830.30-
364.00	3,202.68	239.58		239.58-
370.00	1,108.89			
371.00	5,188.39	141,438.05		141,438.05-
380.00	36,603.24	214,843.19		214,843.19-
381.00	2,120.40			
389.10		5,681.56		5,681.56-
390.00	67,403.59			
391.00		6,028.96		6,028.96-
393.00	60,983.28	1,931.40		1,931.40-
394.00	26,823.05	5,593.49		5,593.49-
395.00		2,048.24		2,048.24-
396.00	48,155.78	1,897.96		1,897.96-
397.00	141,002.08	5,512.61		5,512.61-
398.00		1,251.49		1,251.49-
	1,726,764.49	2,049,081.70		2,049,081.70-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
354.20	3,007.76	18,802.35		18,802.35-
354.30	39,414.10	73,614.29		73,614.29-
354.40	120,604.23	29,899.13		29,899.13-
354.70	6,910.37	246.65		246.65-
355.00		23,920.78		23,920.78-
360.10	40,213.82	186,669.20		186,669.20-
361.10	361,924.39	323,715.46		323,715.46-
361.20	22,020.95	34,151.69		34,151.69-
363.00	128,735.68	76,222.67		76,222.67-
371.00	144,361.10	273,771.37		273,771.37-
380.00	92,274.49	652,150.29		652,150.29-
391.00	31,332.59	10.19		10.19-
393.00		5,643.88		5,643.88-
394.00	10,122.79	1,075.22		1,075.22-
395.00	7,833.15			
396.00	234,211.01	52,578.21		52,578.21-
397.00		9,909.72	1,369.21	8,540.51-
	1,242,966.43	1,762,381.10	1,369.21	1,761,011.89-
2021 TRANSACTION YEAR				
354.30	7,989.66	20,176.30		20,176.30-
354.40	11,481.83	28,995.08		28,995.08-
354.70	2,875.51	11,677.96		11,677.96-
355.00		1,253.37		1,253.37-
360.10	11,013.00	147,595.80		147,595.80-
361.10	796,849.84	245,041.20		245,041.20-
361.20	83,125.55	20,315.71		20,315.71-
363.00	414,022.10	105,836.92	159.00	105,677.92-
364.00	6,151.40			
371.00	16,177.71	206,559.57		206,559.57-
380.00	231,513.16	269,030.45		269,030.45-
381.00		90.22		90.22-
390.00		3,619.09		3,619.09-
394.00	1,401.00	1,113.04		1,113.04-
396.00		4,528.34		4,528.34-
397.00	20,048.36	4,676.57	87.00	4,589.57-
	1,602,649.12	1,070,509.62	246.00	1,070,263.62-
TOTAL	13,002,515.92	5,612,997.30	1,615.21	5,611,382.09-

EXHIBIT NO. 11-E - DEPRECIATION STUDY

WASTEWATER SSS GENERAL OPERATIONS

AS OF DECEMBER 31, 2022

Exhibit No. 11-E
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

WASTEWATER SSS GENERAL OPERATIONS

2022 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS

RELATED TO WASTEWATER PLANT

AS OF DECEMBER 31, 2022

Prepared by:



GANNETT FLEMING

Excellence Delivered As Promised

Exhibit No. 11-E
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WASTEWATER SSS GENERAL OPERATIONS

2022 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF DECEMBER 31, 2022

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC
Camp Hill, Pennsylvania



Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | F 717.763.8150

gannettfleming.com

April 20, 2022

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to wastewater plant. The results of our study as of December 31, 2022, are presented in the attached report. The results of our study as of December 31, 2011, are presented in our report, "2021 Depreciation Study - Calculated Annual Depreciation Accruals Related to Wastewater Plant as of December 31, 2021." The same methods, procedures and estimates are used in both studies.

The attached report sets forth a description of the methods and procedures upon which the studies were based, the estimates of survivor curves, and the calculated annual depreciation as of December 31, 2022.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

A handwritten signature in black ink that reads "John J. Spanos".

JOHN J. SPANOS
President

JJS:mle

070800.100

TABLE OF CONTENTS

PART I. INTRODUCTION	I-1
Scope	I-2
Basis of the Study	I-3
Development of Net Original Cost.....	I-3
 PART II. ESTIMATION OF SURVIVOR CURVES.....	 II-1
Survivor Curves.....	II-2
Iowa Type Curves.....	II-3
Retirement Rate Method of Analysis	II-9
Schedules of Annual Transactions in Plant Records	II-10
Schedule of Plant Exposed to Retirement	II-13
Original Life Table	II-15
Smoothing the Original Survivor Curve	II-17
 PART III. SERVICE LIFE CONSIDERATIONS.....	 III-1
Field Trips	III-2
Judgments.....	III-3
 PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION.....	 IV-1
Book Reserve.....	IV-2
Group Depreciation Procedures	IV-2
Single Unit of Property.....	IV-3
Remaining Life Annual Accruals.....	IV-3
Equal Life Group Procedure	IV-3
Amortization of General Plant Accounts.....	IV-5
Net Salvage.....	IV-6
 PART V. RESULTS OF STUDY	 V-1
Description of Summary Tabulations.....	V-2
Description of Detailed Tabulations.....	V-2
Table 1. Development of Net Original Cost as of December 31, 2022.....	V-4
Table 2. Summary of Estimated Survivor Curve, Original Cost, Book Depreciation Reserve and Calculated Annual Depreciation Accruals Related to Wastewater Plant as of December 31, 2022	V-5
Table 3. Bringforward to December 31, 2022 of Book Reserve as of December 31, 2021	V-6
Table 4. Calculation of Depreciation Accruals for the Twelve Months Ended December 31, 2022	V-7
Table 5. Amortization of Experienced and Estimated Net Salvage	V-8
 PART VI. SERVICE LIFE STATISTICS.....	 VI-1

TABLE OF CONTENTS, cont

PART VII. DETAILED DEPRECIATION CALCULATIONS	VII-1
Cumulative Depreciated Original Cost.....	VII-2
Net Utility Plant in Service	VII-5
PART VIII. EXPERIENCED AND ESTIMATED NET SALVAGE.....	VIII-1

PART I. INTRODUCTION

PENNSYLVANIA-AMERICAN WATER COMPANY

WASTEWATER SSS GENERAL OPERATIONS

DEPRECIATION STUDY

PART I. INTRODUCTION

SCOPE

This report sets forth the results of the depreciation study for Pennsylvania-American Water Company to determine the annual depreciation accrual rates and amounts applicable to the original cost of wastewater plant as of December 31, 2022. The rates and amounts are based on the straight line remaining life method of depreciation. This report also describes the concepts, methods and judgments which underlie the recommended annual depreciation accrual rates related to wastewater plant in service as of December 31, 2022.

Part I, Introduction, contains statements with respect to the basis of the study and the development of net original cost. Part II, Estimation of Survivor Curves, presents descriptions of the considerations and methods used in the service life study. Part III, Service Life Considerations, presents the results of the average service life analysis. Part IV, Calculation of Annual and Accrued Depreciation, describes the procedures used in the calculation of group depreciation. Part V, Results of Study, presents summaries by depreciable group of annual depreciation accrual rates and amounts, as well as composite remaining lives. Part VI, Service Life Statistics presents the statistical analysis of service life estimates, Part VII, Detailed Depreciation Calculations presents the detailed tabulations of annual depreciation and Part VIII, Experienced and Estimated Net Salvage presents the cost of removal and gross salvage recorded for the period 2018-2022.

BASIS OF THE STUDY

The purpose of the depreciation study was to determine the annual depreciation accruals applicable to the original cost of wastewater plant in service as of December 31, 2022. For most accounts, the straight line remaining life method using attained ages, the book depreciation reserve and estimated survivor curves, was the basis for the calculation of annual depreciation. For certain accounts, the annual and accrued amortization amounts were based on the age of the property and the selected amortization period.

The survivor curve estimates were based on judgment which incorporated (1) analyses of historical data related to wastewater property for all Pennsylvania-American Water Company Wastewater Operations; (2) consideration of the character, use and location of the property; (3) probable future events and management plans; and (4) a general knowledge of wastewater property lives. The use of lowa type survivor curves is a generally-accepted method of estimating average service life when the actual lives of individual property units are dispersed.

DEVELOPMENT OF NET ORIGINAL COST

The original cost data used in this study were obtained from the Company's continuing property records and work order system which show in detail the original cost of the property including descriptions, locations and years of installation of property units. The net original cost was developed from the original cost data by deducting contributions in aid of construction. The development of net original cost by plant account is set forth in Table 1 on page V-4.

PART II. ESTIMATION OF SURVIVOR CURVES

PART II. ESTIMATION OF SURVIVOR CURVES

The calculation of annual depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. The estimation of survivor curves is discussed below and the development of net salvage is discussed in later sections of this report.

SURVIVOR CURVES

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units or by constructing a survivor curve by plotting the number of units which survive at successive ages.

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life, and the frequency curve can be calculated. In Figure 1, a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1, the remaining life at age 30 is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30. The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units retired in each age interval. It is derived by obtaining the differences between the amount of property surviving at the beginning and at the end of each interval.

This study has incorporated the use of Iowa curves developed from a retirement rate analysis of historical retirement history. A discussion of the concepts of survivor curves and of the development of survivor curves using the retirement rate method is presented below.

Iowa Type Curves

The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the Iowa type curves. There are four families in the Iowa system, labeled in accordance with the location of the modes of the retirements (or the portion of the frequency curve with the highest level of retirements) in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves, presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numbers represent the relative heights of the modes of the frequency curves within each family. A higher number designates a higher mode curve.

The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125.

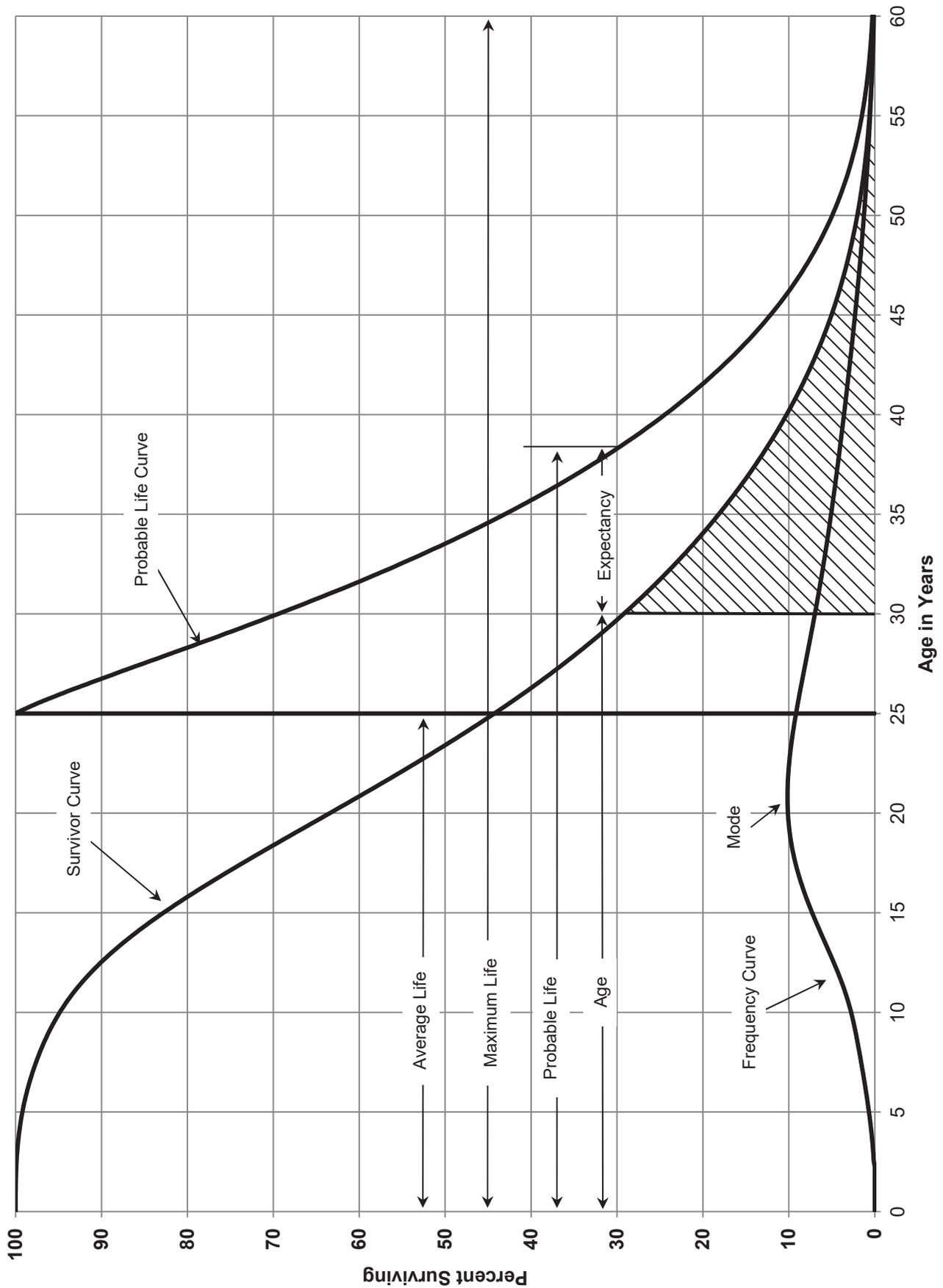


FIGURE 1. TYPICAL SURVIVOR CURVE AND DERIVED CURVES

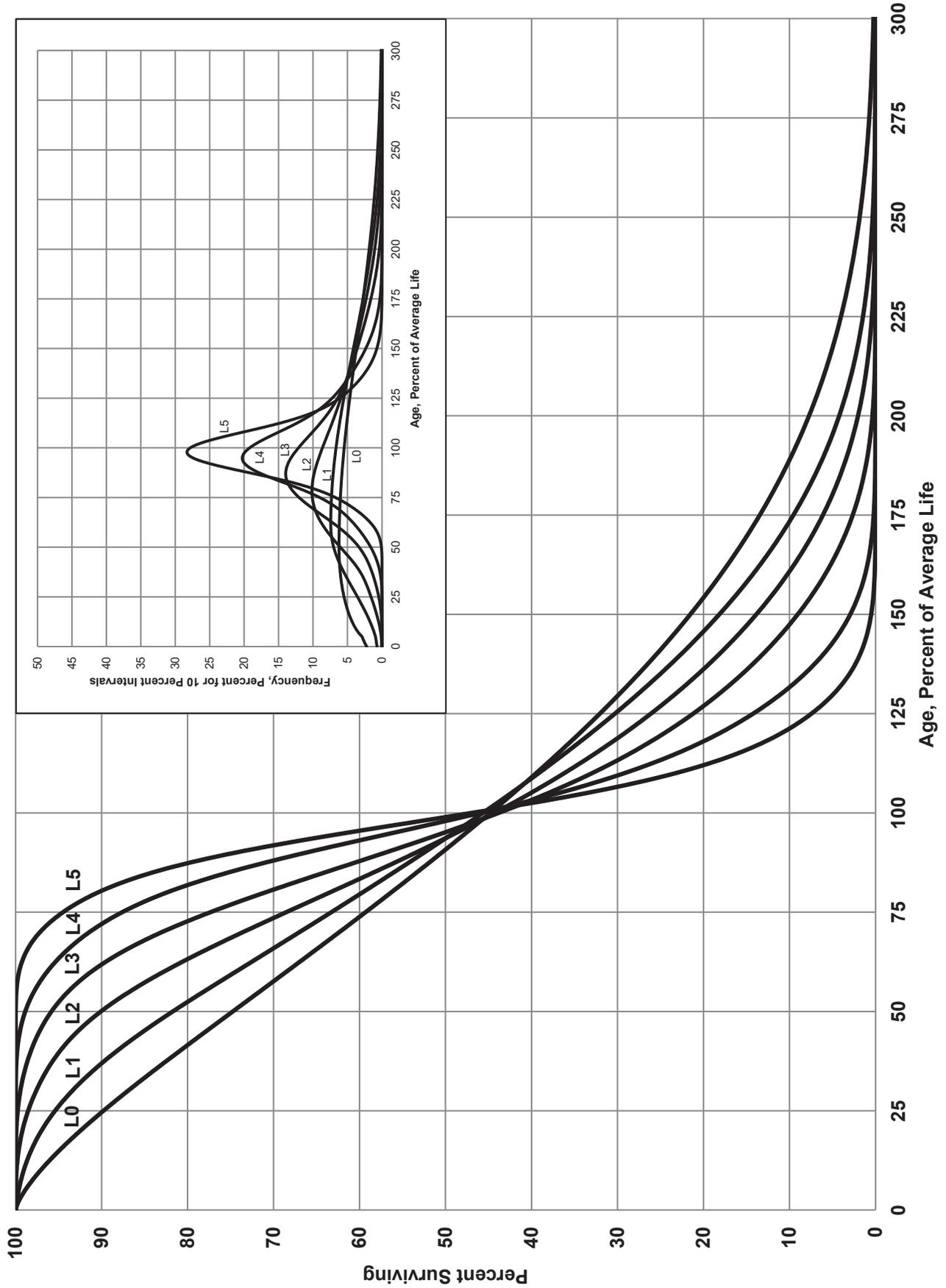


FIGURE 2. LEFT MODAL OR "L" IOWA TYPE SURVIVOR CURVES

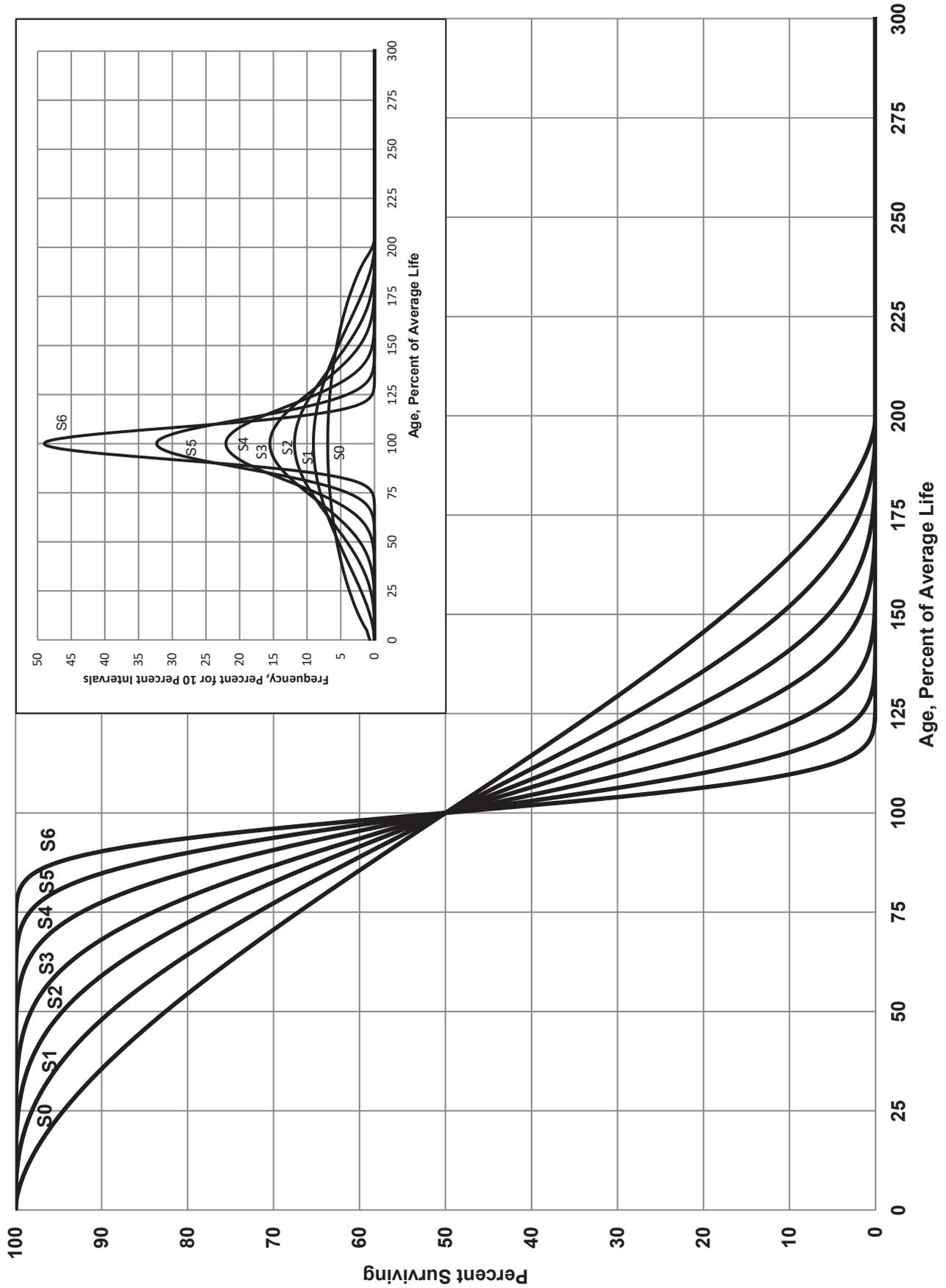


FIGURE 3. SYMMETRICAL OR "S" IOWA TYPE SURVIVOR CURVES

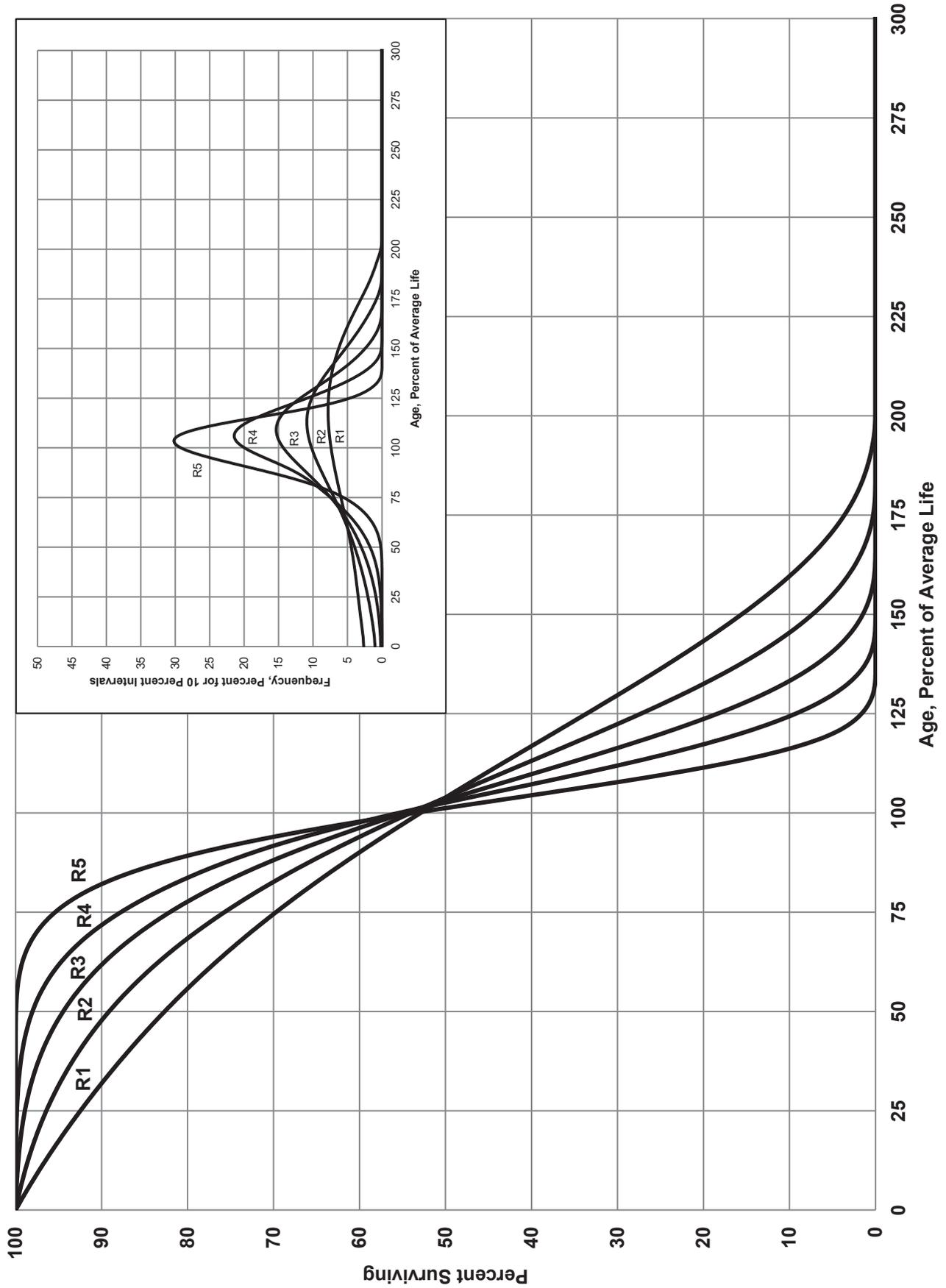


FIGURE 4. RIGHT MODAL OR "R" IOWA TYPE SURVIVOR CURVES

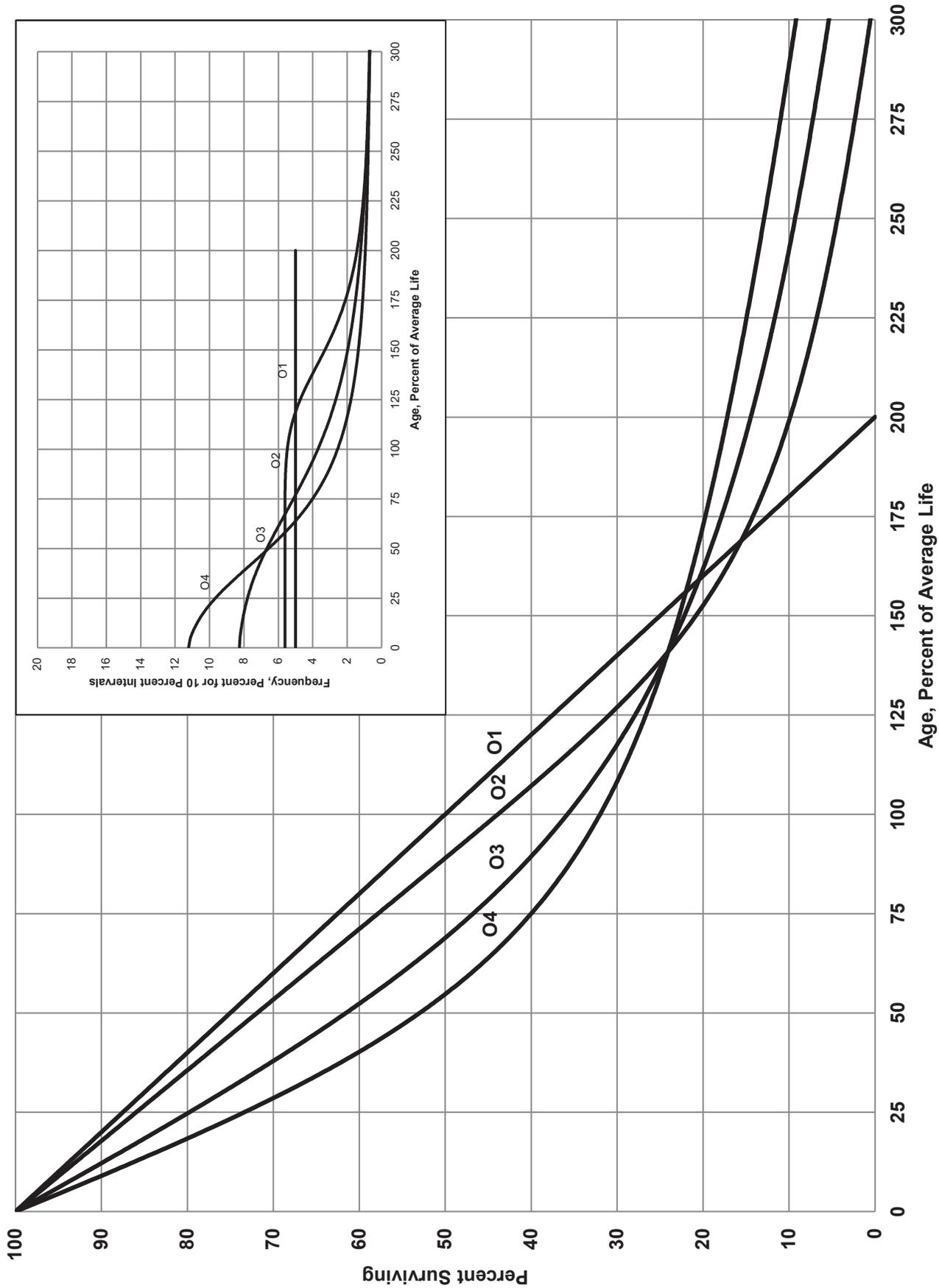


FIGURE 5. ORIGIN MODAL OR "O" IOWA TYPE SURVIVOR CURVES

These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."¹ In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student, submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

Retirement Rate Method of Analysis

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text and is also explained in several publications including "Statistical Analyses of Industrial Property Retirements,"² "Engineering Valuation and Depreciation,"³ and "Depreciation Systems."⁴

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginning of the age intervals during the same period. The period of observation is referred to as the experience band. The band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the placement band. An example of the calculations used in the development of a life table follows. The example includes schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

¹Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

²Winfrey, Robley, Statistical Analyses of Industrial Property Retirements. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.

³Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 1.

⁴Wolf, Frank K. and W. Chester Fitch. Depreciation Systems. Iowa State University Press. 1994.

Schedules of Annual Transactions in Plant Records

The property group used to illustrate the retirement rate method is observed for the experience band 2012-2021 for which there were placements during the years 2007-2021. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-11 and II-12. In Schedule 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, \$10,000 of the dollars invested in 2007 were retired in 2012. The \$10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of \$143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Schedule 1 immediately above the stair step line drawn on the table beginning with the 2012 retirements of 2007 installations and ending with the 2021 retirements of the 2016 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

$$10 + 12 + 13 + 11 + 13 + 13 + 15 + 17 + 19 + 20.$$

SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2012-2021
SUMMARIZED BY AGE INTERVAL

Experience Band 2012-2021 Placement Band 2007-2021

Year	Retirements, Thousands of Dollars											Total During Age Interval (12)	Age Interval (13)
	During Year												
Placed (1)	2012 (2)	2013 (3)	2014 (4)	2015 (5)	2016 (6)	2017 (7)	2018 (8)	2019 (9)	2020 (10)	2021 (11)			
2007	10	11	12	13	14	16	23	24	25	26	26	26	13½-14½
2008	11	12	13	15	16	18	20	21	22	19	19	44	12½-13½
2009	11	12	13	14	16	17	19	21	22	18	18	64	11½-12½
2010	8	9	10	11	11	13	14	15	16	17	17	83	10½-11½
2011	9	10	11	12	13	14	16	17	19	20	20	93	9½-10½
2012	4	9	10	11	12	13	14	15	16	20	20	105	8½-9½
2013		5	11	12	13	14	15	16	18	20	20	113	7½-8½
2014			6	12	13	15	16	17	19	19	19	124	6½-7½
2015				6	13	15	16	17	19	19	19	131	5½-6½
2016					13	15	16	17	19	20	20	143	4½-5½
2017					7	14	16	17	22	23	23	146	3½-4½
2018						8	18	20	22	25	25	150	2½-3½
2019							9	11	23	25	25	151	1½-2½
2020								11	11	24	24	153	½-1½
2021										13	13	80	0-½
Total	53	68	86	106	128	157	196	231	273	308	1,606		

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2012-2021
SUMMARIZED BY AGE INTERVAL

Placement Band 2007-2021

Experience Band 2012-2021

Acquisitions, Transfers and Sales, Thousands of Dollars

Year Placed (1)	During Year											Total During Age Interval (12)	Age Interval (13)	
	2012 (2)	2013 (3)	2014 (4)	2015 (5)	2016 (6)	2017 (7)	2018 (8)	2019 (9)	2020 (10)	2021 (11)				
2007	-	-	-	-	-	-	60 ^a	-	-	-	-	-	-	13½-14½
2008	-	-	-	-	-	-	-	-	-	-	-	-	-	12½-13½
2009	-	-	-	-	-	-	-	-	-	-	-	-	-	11½-12½
2010	-	-	-	-	-	-	-	(5) ^b	-	-	60	-	-	10½-11½
2011	-	-	-	-	-	-	-	6 ^a	-	-	-	-	-	9½-10½
2012	-	-	-	-	-	-	-	-	-	-	(5)	-	-	8½-9½
2013	-	-	-	-	-	-	-	-	-	-	6	-	-	7½-8½
2014	-	-	-	-	-	-	-	-	-	-	-	-	-	6½-7½
2015	-	-	-	-	-	-	-	(12) ^b	-	-	-	-	-	5½-6½
2016	-	-	-	-	-	-	-	-	22 ^a	-	-	-	-	4½-5½
2017	-	-	-	-	-	-	-	(19) ^b	-	-	10	-	-	3½-4½
2018	-	-	-	-	-	-	-	-	-	-	-	-	-	2½-3½
2019	-	-	-	-	-	-	-	-	-	(102) ^c	(121)	-	-	1½-2½
2020	-	-	-	-	-	-	-	-	-	-	-	-	-	½-1½
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	0-½
Total	-	-	-	-	-	-	60	(30)	22	(102)	(50)	-	-	

^a Transfer Affecting Exposures at Beginning of Year

^b Transfer Affecting Exposures at End of Year

^c Sale with Continued Use

Parentheses Denote Credit Amount.

In Schedule 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are not totaled with the retirements, but are used in developing the exposures at the beginning of each age interval.

Schedule of Plant Exposed to Retirement

The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Schedule 3 on page II-14. The surviving plant at the beginning of each year from 2012 through 2021 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2017 are calculated in the following manner:

Exposures at age 0	= amount of addition	= \$750,000
Exposures at age ½	= \$750,000 - \$ 8,000	= \$742,000
Exposures at age 1½	= \$742,000 - \$18,000	= \$724,000
Exposures at age 2½	= \$724,000 - \$20,000 - \$19,000	= \$685,000
Exposures at age 3½	= \$685,000 - \$22,000	= \$663,000

SCHEDULE 3. PLANT EXPOSED TO RETIREMENT
JANUARY 1 OF EACH YEAR 2012-2021
SUMMARIZED BY AGE INTERVAL

Year Placed (1)	Experience Band 2012-2021										Placement Band 2007-2021		
	Exposures, Thousands of Dollars										Total at		
	Annual Survivors at the Beginning of the Year										Beginning of		
	<u>2012</u> (2)	<u>2013</u> (3)	<u>2014</u> (4)	<u>2015</u> (5)	<u>2016</u> (6)	<u>2017</u> (7)	<u>2018</u> (8)	<u>2019</u> (9)	<u>2020</u> (10)	<u>2021</u> (11)	<u>Age Interval</u> (12)	<u>Age Interval</u> (13)	
2007	255	245	234	222	209	195	239	216	192	167	167	13½-14½	
2008	279	268	256	243	228	212	194	174	153	131	323	12½-13½	
2009	307	296	284	271	257	241	224	205	184	162	531	11½-12½	
2010	338	330	321	311	300	289	276	262	242	226	823	10½-11½	
2011	376	367	357	346	334	321	307	297	280	261	1,097	9½-10½	
2012	420 ^a	416	407	397	386	374	361	347	332	316	1,503	8½-9½	
2013		460 ^a	455	444	432	419	405	390	374	356	1,952	7½-8½	
2014			510 ^a	504	492	479	464	448	431	412	2,463	6½-7½	
2015				580 ^a	574	561	546	530	501	482	3,057	5½-6½	
2016					660 ^a	653	639	623	628	609	3,789	4½-5½	
2017						750 ^a	742	724	685	663	4,332	3½-4½	
2018							850 ^a	841	821	799	4,955	2½-3½	
2019								960 ^a	949	926	5,719	1½-2½	
2020									1,080 ^a	1,069	6,579	½-1½	
2021										1,220 ^a	7,490	0-½	
Total	1,975	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780		

^aAdditions during the year

For the entire experience band 2012-2021, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

$$255 + 268 + 284 + 311 + 334 + 374 + 405 + 448 + 501 + 609.$$

Original Life Table

The original life table, illustrated in Schedule 4 on page II-16, is developed from the totals shown on the schedules of retirements and exposures, Schedules 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age 5½ are as follows:

Percent surviving at age 4½	=	88.15	
Exposures at age 4½	=	3,789,000	
Retirements from age 4½ to 5½	=	143,000	
Retirement Ratio	=	143,000 ÷ 3,789,000	= 0.0377
Survivor Ratio	=	1.000 - 0.0377	= 0.9623
Percent surviving at age 5½	=	(88.15) x (0.9623)	= 84.83

The totals of the exposures and retirements (columns 2 and 3) are shown for the purpose of checking with the respective totals in Schedules 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

SCHEDULE 4. ORIGINAL LIFE TABLE
CALCULATED BY THE RETIREMENT RATE METHOD

Experience Band 2012-2021

Placement Band 2007-2021

(Exposure and Retirement Amounts are in Thousands of Dollars)

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	Percent Surviving at Beginning of Age Interval
(1)	(2)	(3)	(4)	(5)	(6)
0.0	7,490	80	0.0107	0.9893	100.00
0.5	6,579	153	0.0233	0.9767	98.93
1.5	5,719	151	0.0264	0.9736	96.62
2.5	4,955	150	0.0303	0.9697	94.07
3.5	4,332	146	0.0337	0.9663	91.22
4.5	3,789	143	0.0377	0.9623	88.15
5.5	3,057	131	0.0429	0.9571	84.83
6.5	2,463	124	0.0503	0.9497	81.19
7.5	1,952	113	0.0579	0.9421	77.11
8.5	1,503	105	0.0699	0.9301	72.65
9.5	1,097	93	0.0848	0.9152	67.57
10.5	823	83	0.1009	0.8991	61.84
11.5	531	64	0.1205	0.8795	55.60
12.5	323	44	0.1362	0.8638	48.90
13.5	<u>167</u>	<u>26</u>	0.1557	0.8443	42.24
Total	<u>44,780</u>	<u>1,606</u>			35.66

Column 2 from Schedule 3, Column 12, Plant Exposed to Retirement.

Column 3 from Schedule 1, Column 12, Retirements for Each Year.

Column 4 = Column 3 Divided by Column 2.

Column 5 = 1.0000 Minus Column 4.

Column 6 = Column 5 Multiplied by Column 6 as of the Preceding Age Interval.

The original survivor curve is plotted from the original life table (column 6, Schedule 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

Smoothing the Original Survivor Curve

The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities, as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

The Iowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the Iowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Schedule 4 is compared with the L, S, and R Iowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0.

In Figure 9, the three fittings, 12-L1, 12-S0 and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 Iowa curve would be selected as the most representative of the plotted survivor characteristics of the group.

FIGURE 6. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1 IOWA TYPE CURVE ORIGINAL AND SMOOTH SURVIVOR CURVES

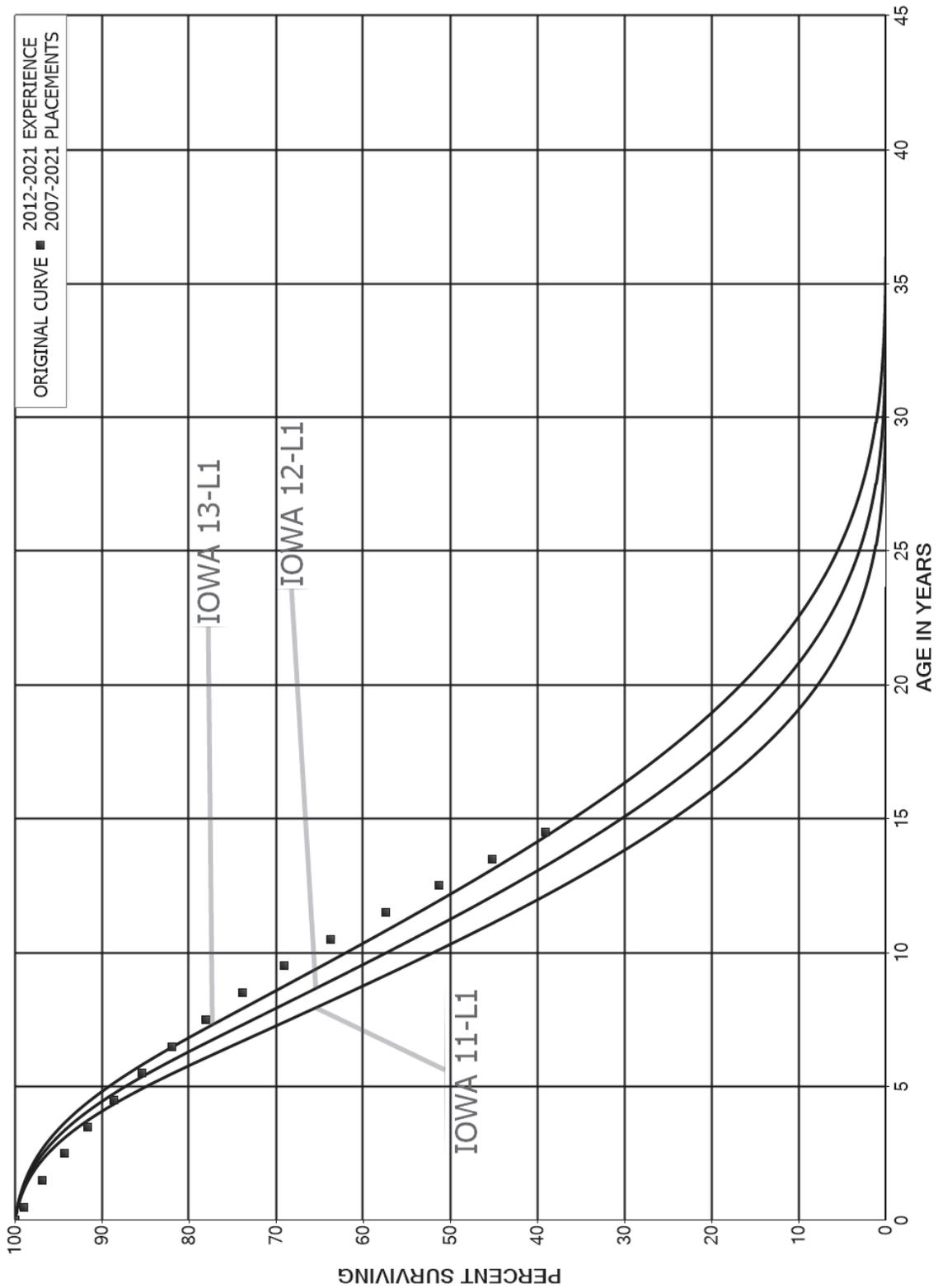


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE ORIGINAL AND SMOOTH SURVIVOR CURVES

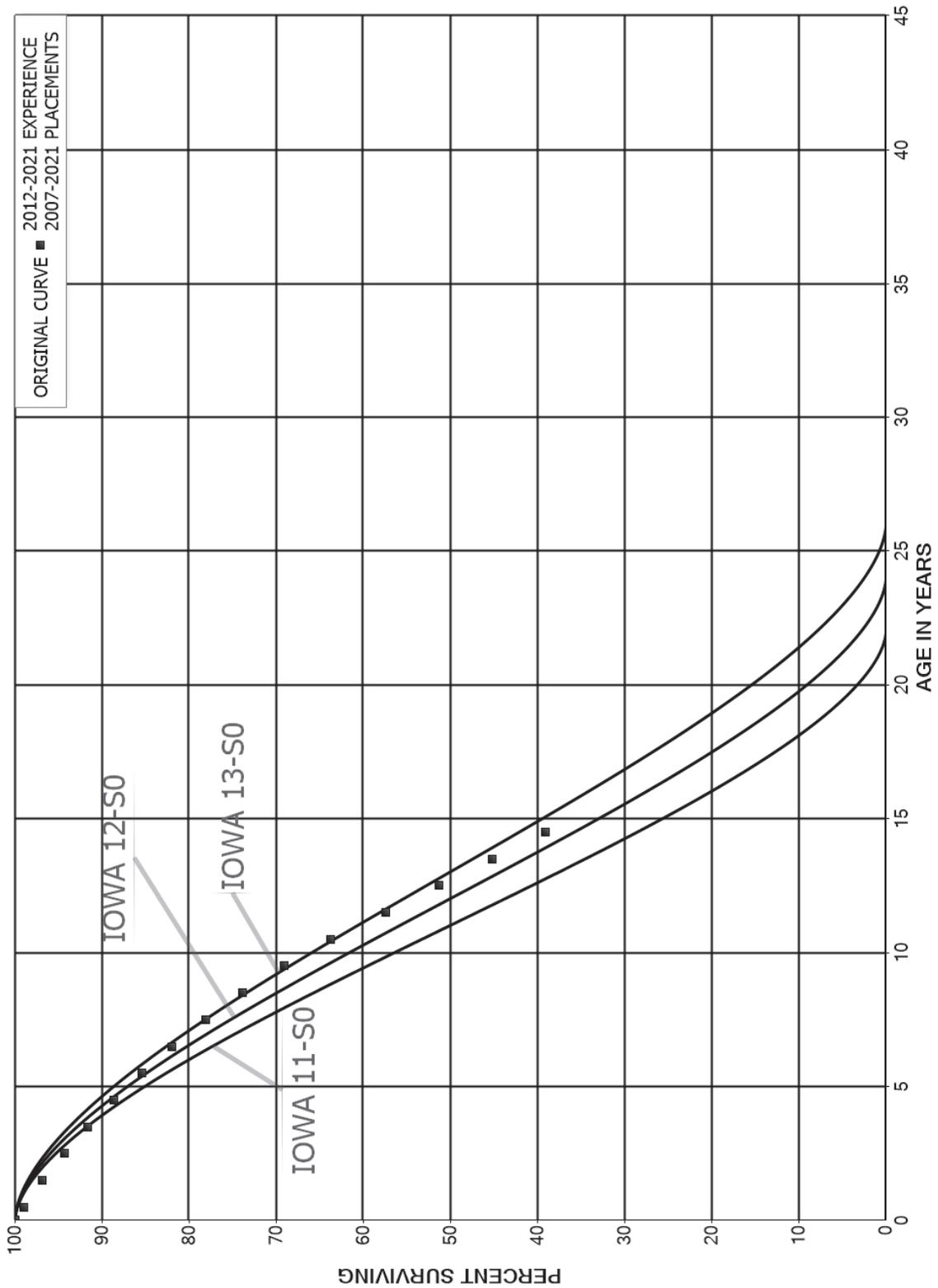


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE ORIGINAL AND SMOOTH SURVIVOR CURVES

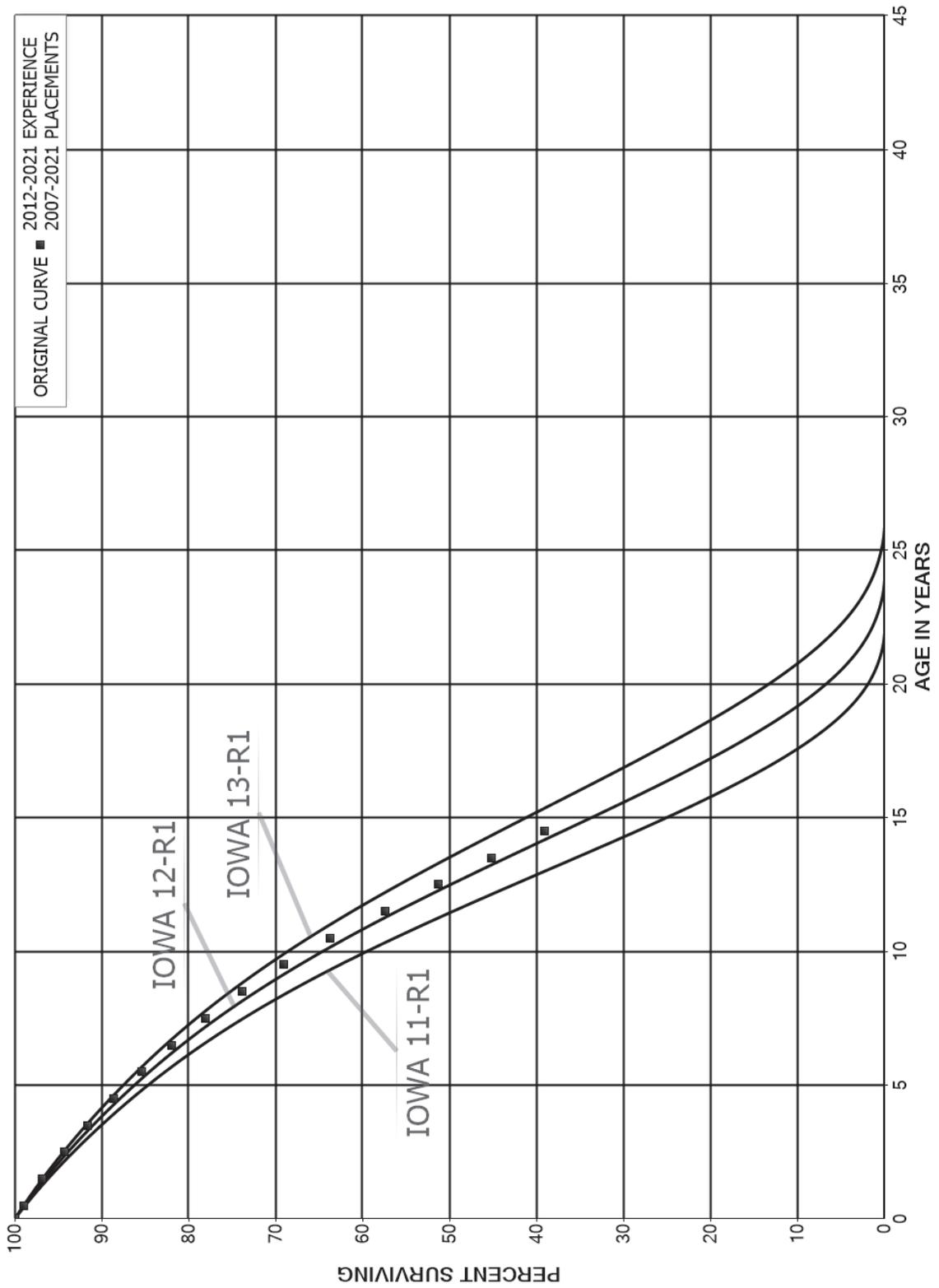
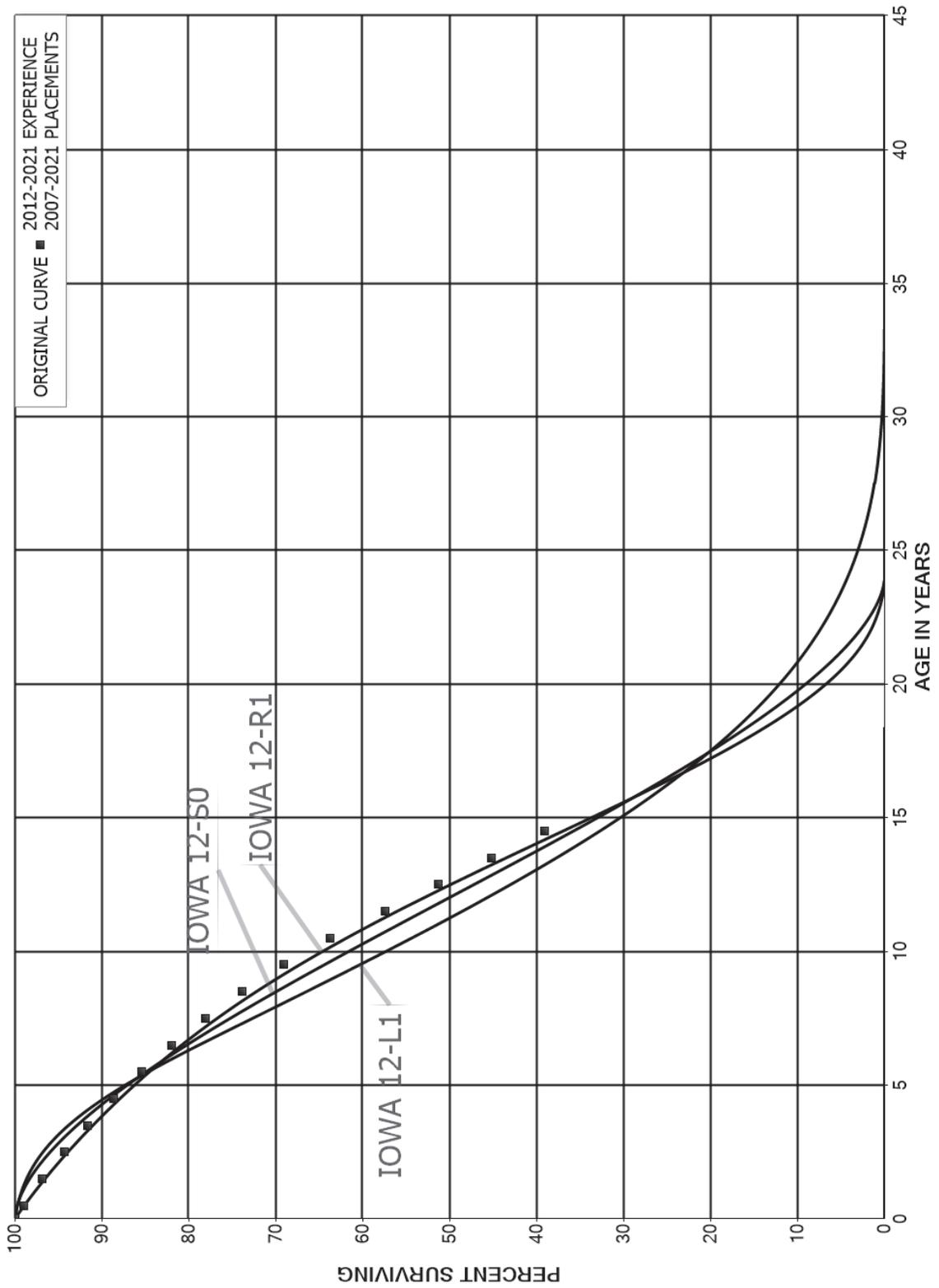


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE ORIGINAL AND SMOOTH SURVIVOR CURVES



PART III. SERVICE LIFE CONSIDERATIONS

PART III. SERVICE LIFE CONSIDERATIONS

FIELD TRIPS

In order to be familiar with the operation of the Company and observe representative portions of the plant, field trips are conducted for each study. A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements are obtained during field trips. This knowledge and information were incorporated in the interpretation and extrapolation of the statistical analyses.

The following is a list of the locations visited during the most recent field trips.

September 14, 2016

Blue Mountain Lake Wastewater Plant
Winona Lake Lift Station
Saw Creek Wastewater Plant
Marcel Lake Wastewater Plant
Pocono Wastewater Plant

September 6, 2016

Clarion Wastewater Plant
Paint Elk Wastewater Plant
Shippensville Wastewater Plant

September 1, 2016

Franklin Wastewater Plant
Hamilton Ban Pump Station
Franklin Sand Mound Facility
Fairview North Wastewater Plant
South Fairview Wastewater Plant

March 16, 2010

Coatesville Wastewater Plant
Lehman Pike Wastewater Plant
Winona Lake Lift Station

July 28, 2008

Claysville Treatment Plant

Judgments. The survivor curve estimates were based on judgment which considered factors including statistical analyses of retirements, Company policies and outlook as determined during discussions with management, and survivor curve estimates from previous studies of the predecessor wastewater systems, as well as other wastewater companies. For depreciable groups which consist of numerous similar items of property, the distribution of the lives of the units in the group was judged on the basis of an average survival pattern for the entire group.

Account 363, Services, is used to illustrate the manner in which the study was conducted for the accounts in the preceding list. Aged plant accounting data have been compiled for the years through 2019. These data have been coded according to account or property group, type of transaction, year in which the transaction took place, and year in which the utility plant was placed in service. The retirements, other plant transactions and plant additions were analyzed by the retirement rate method.

The survivor curve estimate for this account is the 47-R3 and is based on the statistical indication for the period 1999-2019. The 47-R3 is a good fit of the significant portion of the original survivor curve as set forth on page VI-25, is consistent with management outlook for a continuation of the historical experience and is within the typical service life range of 40 to 55 years for services.

The amortization periods selected for general plant Accounts 390, 392, 393, 394, 396, 397 and 398 are discussed in the section, "Amortization of General Plant Accounts."

**PART IV. CALCULATION OF ANNUAL AND
ACCRUED DEPRECIATION**

PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

BOOK RESERVE

The book reserve as of December 31, 2021, is the result of a bringforward of the book reserves established by the Commission for all Wastewater SSS Operations systems. The projected book reserve as of December 31, 2022, is a bringforward of the December 31, 2021 book reserve based on projected accruals, retirements, cost of removal, salvage and other credits.

GROUP DEPRECIATION PROCEDURES

A group procedure for depreciation is appropriate when considering more than a single item of property. Normally the items within a group do not have identical service lives, but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group. In the average service life procedure, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

Single Unit of Property

The calculation of straight line depreciation for a single unit of property is straightforward. For example, if a \$1,000 unit of property attains an age of four years and has a life expectancy of six years, the annual accrual over the total life is:

$$\frac{\$1,000}{(4 + 6)} = \$100 \text{ per year.}$$

The accrued depreciation is:

$$\$1,000 \left(1 - \frac{6}{10}\right) = \$400.$$

Remaining Life Annual Accruals

For the purpose of calculating remaining life accruals as of December 31, 2022, the depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation follow. The detailed calculations as of December 31, 2022, are set forth in the Results of Study section of the report.

Equal Life Group Procedure

In the equal life group procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the composite remaining life for the surviving original cost of that vintage. The composite remaining life is derived by compositing the individual equal life group remaining lives in accordance with the following equation:

$$\text{Composite Remaining Life} = \frac{\sum \left(\frac{\text{Book Cost}}{\text{Life}} \times \text{Remaining Life} \right)}{\sum \frac{\text{Book Cost}}{\text{Life}}}$$

The book costs and lives of the several equal life groups which are summed in the foregoing equation are defined by the estimated survivor curve.

Inasmuch as book cost divided by life equals the whole life annual accrual, the foregoing equation reduces to the following form:

$$\text{Composite Remaining Life} = \frac{\sum \text{Whole Life Future Accruals}}{\sum \text{Whole Life Annual Accruals}}$$

or

$$\text{Composite Remaining Life} = \frac{\sum \text{Book Cost} - \text{Calc. Reserve}}{\sum \text{Whole Life Annual Accrual}}$$

The annual accrual rate for each account is equal to the sum of the remaining life annual accruals for all vintages divided by the account's total original cost. The account's "composite remaining life" is calculated by dividing the sum of the future book accruals for all vintages by the sum of the remaining life annual accruals for all vintages.

The calculated accrued depreciation in the equal life group procedure also represents that portion of depreciable cost which will not be allocated to expense through future accruals. However, the calculation is based at the equal life group level rather than the vintage group level, and does not require the use of averages. The equal life group accrued depreciation ratio is calculated as follows:

$$\text{Ratio} = 1 - \left(\frac{\text{Remaining Life}}{\text{Service Life}} \right)$$

Inasmuch as service life minus remaining life equals age, when averages are not employed, the foregoing equation reduces to:

$$\text{Ratio} = \left(\frac{\text{Age}}{\text{Service Life}} \right)$$

AMORTIZATION OF GENERAL PLANT ACCOUNTS

In order to use a more efficient and cost effective accounting process for equipment recorded in general plant Accounts 390, 392, 393, 394, 396, 397 and 398; amounts capitalized in these accounts are amortized rather than depreciated. Amortization as defined in the Uniform System of Accounts is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized.

The primary reasons for the amortization of certain general plant accounts is that the effort required to unitize additions, periodically inventory equipment and determine amounts to be retired for equipment recorded in these accounts is disproportionate to the original cost of the equipment when compared to other wastewater plant accounts.

Accounting for such equipment using an amortization concept consists of capitalization of amounts to these accounts based on the same criteria as used previously under depreciation accounting, amortization of the asset over a fixed period, retirement of the equipment at the end of the amortization period and recognition of any net salvage related to disposition of equipment in these accounts as a gain or loss. For equipment in these accounts that was placed in service prior to implementation of amortization accounting, the net book value by vintage amortized over the remaining amortization period specified for each account and the original cost will be retired at the end of this period.

The amortization periods selected for each account or subaccount are based on a review of the existing depreciation rates for the accounts, typical service lives used for each type of equipment and a consideration of the period during which it is anticipated

that most of the benefit of the equipment will be realized. The amortization periods are as follows:

<u>Account Number</u>	<u>Description</u>	<u>Amortization Period, Years</u>
390	Office Furniture and Equipment	20
392	Stores Equipment	25
393	Tools, Shop and Garage Equipment	20
394	Laboratory Equipment	15
396	Communication Equipment	15
397	Miscellaneous Equipment	15
398	Other Tangible Plant	25

NET SALVAGE

Experienced net salvage is incorporated in the results of the study as it was reported on the Company's books and records for the period January 1, 2018 through December 31, 2021, and estimated for the period January 1, 2022 through December 31, 2022. The calculation of the amortization is shown in Table 5 on page V-8. The amounts of salvage and removal cost by account for each year are set forth in the section beginning on page VIII-2.

Net salvage is presented in this manner to determine the amount of net salvage to be amortized to the cost of service for ratemaking purposes. In order to be consistent with this manner of recognizing net salvage, no adjustments for net salvage were made to the annual depreciation calculated for the individual accounts.

PART V. RESULTS OF STUDY

PART V. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Table 1 presents the development of the net original cost used in the study. The results of the depreciation study are summarized in Table 2 which sets forth, by depreciable group, the estimated survivor curve, calculated annual accruals and book reserve related to net original cost and the annual amortization of net salvage. Table 3 presents the bringforward to December 31, 2022 of the book reserve as of December 31, 2021. Table 4 sets forth the calculation of estimated depreciation accruals for the twelve months ended December 31, 2022. Table 5 presents the amortization of experienced and estimated net salvage, by account, based on the five-year period, 2018-2022. The total amortization amount is incorporated in the total annual accrual in Table 2.

DESCRIPTION OF DETAILED TABULATIONS

Supporting statistical data for the estimates of average service lives and survivor curves, the annual depreciation calculations, and gross salvage and cost of removal for the years 2018-2022 are presented in three sections.

The section beginning on page VI-2 sets forth, for each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves followed by a tabular presentation of the original life table plotted on the chart. A cumulative summary, by year installed, for utility plant and the supporting data for the original cost depreciation calculations are presented in the section beginning on page VII-3. The tabulations of experienced and estimated net salvage, by year and account for the five-year period 2018-2022, are presented in the section beginning on page VIII-2.

In the first section, the survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the type curve designation. The numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. In cases where only a segment of the estimated curve is used in the depreciation calculation, the numeral used for identification purposes is not a designation of the average life of the group. The titles of the charts indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which were plotted. The experience band indicates the range of years for which the retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The tables of the calculated annual depreciation related to net original cost are presented in account sequence in the second section and indicate the estimated average survivor curves used in the calculations. The tables set forth, for each installation year, the original cost, calculated accrued depreciation, allocated book reserve, remaining life expectancy, and the calculated annual accrual.

Detailed tabulations setting forth the cost of removal, gross salvage and net salvage amounts, by account and year, are presented in the third section. The net salvage amounts, by account and year, are carried forward to Table 5, which presents the five-year amortization of net salvage.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF DECEMBER 31, 2022

DEPRECIABLE GROUP (1)	ORIGINAL COST AS OF DECEMBER 31, 2022 (2)	CUSTOMER ADVANCES (3)	CONTRIBUTIONS IN AID OF CONSTRUCTION (4)	EXCLUDED PROPERTY (5)	NET ORIGINAL COST AS OF DECEMBER 31, 2022 (6)
DEPRECIABLE PLANT					
354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION	3,402,620.40		57,755.00		3,344,865.40
354.30 STRUCTURES AND IMPROVEMENTS - SPP	20,594,347.38		2,802,735.70		17,791,611.68
354.40 STRUCTURES AND IMPROVEMENTS - TDP	154,142,872.18		2,010,277.73		152,132,594.45
354.70 STRUCTURES AND IMPROVEMENTS - GENERAL	3,846,816.75				3,846,816.75
355.00 POWER GENERATION EQUIPMENT	5,952,465.74		207,469.16		5,744,996.58
360.10 COLLECTION SEWERS - FORCE MAINS	52,229,247.65	259,700.45	11,404,488.61		40,565,058.59
361.10 COLLECTION SEWERS - GRAVITY MAINS	191,129,771.46	133,423.53	14,704,973.09		176,291,374.84
361.20 MANHOLES	34,329,466.80		4,677,145.76		29,652,321.04
363.00 SERVICES	51,691,577.68	87,755.05	6,164,719.52		45,439,103.11
364.00 FLOW MEASURING DEVICES	579,689.32		14,726.81		564,962.51
365.00 FLOW MEASURING INSTALLATIONS	272,564.04				272,564.04
370.00 RECEIVING WELLS	143,419.77				143,419.77
371.00 PUMPING EQUIPMENT	17,313,305.87		112,738.22		17,200,567.65
380.00 TREATMENT EQUIPMENT	78,546,377.41		2,239,396.47		76,306,980.94
381.00 PLANT SEWERS	6,214,181.87		30,192.33		6,183,989.54
382.00 OUTFALL SEWER LINES	604,388.91				604,388.91
389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	1,198,404.70				1,198,404.70
390.00 OFFICE FURNITURE AND EQUIPMENT	718,389.99				718,389.99
391.00 TRANSPORTATION EQUIPMENT	1,627,652.53				1,627,652.53
392.00 STORES EQUIPMENT	107,351.44				107,351.44
393.00 TOOLS, SHOP AND GARAGE EQUIPMENT	1,034,519.57				1,034,519.57
394.00 LABORATORY EQUIPMENT	481,441.01				481,441.01
395.00 POWER OPERATED EQUIPMENT	552,370.71		10,000.00		542,370.71
396.00 COMMUNICATION EQUIPMENT	3,272,595.36				3,272,595.36
397.00 MISCELLANEOUS EQUIPMENT	910,510.69		29,000.00		881,510.69
398.00 OTHER TANGIBLE PLANT	14,231.50				14,231.50
TOTAL DEPRECIABLE PLANT	630,910,580.73	480,879.03	44,465,618.40		585,964,083.40
NONDEPRECIABLE PLANT					
352.10 FRANCHISES	221,139.78				221,139.78
353.20 LAND AND LAND RIGHTS - COLLECTION	1,857,560.19				1,857,560.19
353.30 LAND AND LAND RIGHTS - SPP	203,839.26				203,839.26
353.40 LAND AND LAND RIGHTS - TDP	3,978,717.18		125,000.00		3,853,717.18
TOTAL NONDEPRECIABLE PLANT	6,261,256.41		125,000.00		6,136,256.41
TOTAL PLANT	637,171,837.14		44,590,618.40		592,100,339.71

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF DECEMBER 31, 2022

(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF DECEMBER 31, 2022	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
DEPRECIABLE PLANT							
354.20	45-R3	3,344,865.40	225,041	3,119,824	89,765	2.68	34.8
354.30	55-S0	17,791,611.38	7,310,370	10,481,241	329,089	1.85	31.8
354.40	55-S0	152,132,594.45	76,792,614	75,339,980	2,693,442	1.77	28.0
354.70	35-S1	3,846,816.75	1,926,787	1,920,030	78,724	2.05	24.4
355.00	35-S0.5	5,744,996.58	2,925,899	2,819,098	133,625	2.33	21.1
360.10	75-R3	40,565,058.59	4,353,791	36,211,268	689,482	1.70	52.5
361.10	80-R2.5	176,291,375.14	43,086,387	133,204,988	2,678,047	1.52	49.7
361.20	50-S2.5	29,652,321.04	10,655,289	18,997,032	795,462	2.68	23.9
363.00	47-R3	45,439,103.11	23,651,609	21,787,494	1,027,912	2.26	21.2
364.00	15-L2.5	564,982.51	228,085	336,878	62,072	10.99	5.4
365.00	25-S2	272,564.04	217,405	55,159	13,096	4.80	4.2
370.00	50-R3	143,419.77	34,395	109,025	3,235	2.26	33.7
371.00	30-S0.5	17,200,567.65	1,925,109	15,275,459	845,290	4.91	18.1
380.00	35-S1.5	76,306,980.94	16,853,533	59,453,448	2,865,004	3.75	20.8
381.00	50-R3	6,183,989.54	1,554,458	4,629,532	141,595	2.29	32.7
382.00	50-R3	604,388.91	242,848	361,541	12,817	2.12	28.2
389.10	20-S2.5	1,198,404.70	246,460	951,945	65,723	5.48	14.5
390.00	20-SQ	718,389.99	101,165	617,225	40,787	5.68	15.1
391.00	14-L4	1,627,652.53	637,946	989,707	130,725	8.03	7.6
392.00	25-SQ	107,351.44	33,327	74,024	4,301	4.01	17.2
393.00	20-SQ	1,034,519.57	318,284	716,236	48,018	4.64	14.9
394.00	15-SQ	481,441.01	241,130	240,311	39,012	8.10	6.2
395.00	22-R2	542,370.71	419,369	123,002	11,171	2.06	11.0
396.00	15-SQ	3,272,595.36	1,053,027	2,219,568	226,382	6.92	9.8
397.00	15-SQ	881,510.69	139,211	742,300	54,946	6.23	13.5
398.00	25-SQ	14,231.50	1,374	12,858	598	4.20	21.5
		585,964,083.30	195,174,913	390,789,173	13,080,320	2.23	
TOTAL DEPRECIABLE PLANT							
NONDEPRECIABLE PLANT							
352.10		221,139.78					
353.20		1,857,560.19					
353.30		203,839.26					
353.40		3,853,717.18					
		6,136,256.41			1,323,361		
TOTAL NONDEPRECIABLE PLANT							
AMORTIZATION OF NET SALVAGE							
		592,100,339.71	195,174,913	390,789,173	14,403,681		
TOTAL UTILITY PLANT							

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 3. BRINGFORWARD TO DECEMBER 31, 2022, OF BOOK RESERVE AS OF DECEMBER 31, 2021

ACCOUNT	BOOK RESERVE BALANCE AS OF 12/31/2021	PROJECTED DEPRECIATION ACCRUALS	PROJECTED RETIREMENTS	PROJECTED COST OF REMOVAL	PROJECTED SALVAGE	ACQUISITIONS	PROJECTED BOOK RESERVE BALANCE AS OF 12/31/2022
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
354.20	43,314	116,682	15,702	1,884		82,632	225,041
354.30	6,891,894	350,771	26,680	3,202		97,586	7,310,370
354.40	74,070,070	2,720,614	199,173	23,901		225,004	76,792,614
354.70	1,711,335	90,497	28,082	3,370		156,407	1,926,787
355.00	2,800,154	96,653	96,802	8,712		134,606	2,925,899
360.10	3,428,555	799,567	325,168	198,352		649,189	4,353,791
361.10	40,726,772	3,005,700	599,714	365,825		319,454	43,086,387
361.20	9,514,794	846,526	26,444	36,229		356,642	10,655,289
363.00	22,659,038	1,098,527	61,603	44,354			23,651,609
364.00	164,880	72,220	9,015				228,085
365.00	201,351	16,054					217,405
370.00	31,139	3,256					34,395
371.00	1,275,582	931,331	187,896	176,622		82,713	1,925,109
380.00	14,693,290	3,018,650	631,925	297,005		70,523	16,853,533
381.00	1,411,590	142,868					1,554,458
382.00	229,597	13,251					242,848
389.10	195,658	50,802					246,460
390.00	59,782	41,383					101,165
391.00	497,748	140,198					637,946
392.00	29,033	4,294					33,327
393.00	291,410	44,389	16,369	1,146			318,284
394.00	262,433	39,289	54,587	6,005			241,130
395.00	407,298	12,071					419,369
396.00	1,187,094	158,633	239,918	52,782			1,053,027
397.00	194,183	38,090	86,974	6,088			139,211
398.00	513	861					1,374
TOTAL	182,978,506	13,853,177	2,606,051	1,225,477	0	2,174,757	195,174,913

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2022

ACCOUNT (1)	NET ORIGINAL COST AS OF 12/31/2021 (2)	NET ORIGINAL COST AS OF 12/31/2022 (3)	ACCRUAL RATE (4)	AVERAGE ACCRUALS (5)=[(2)+(3)]/2*(4)	AMORTIZATION OF NET SALVAGE (6)	PROJECTED DEPRECIATION ACCRUALS (7)=(5)+(6)
354.20	2,922,659.17	3,344,865.40	2.75	86,178	30,504	116,682
354.30	17,194,565.51	17,791,611.38	1.87	327,121	23,650	350,771
354.40	149,090,592.23	152,132,594.45	1.80	2,711,009	9,605	2,720,614
354.70	3,507,072.89	3,846,816.76	2.09	76,848	13,649	90,497
355.00	4,320,734.91	5,744,996.57	1.76	88,578	8,075	96,653
360.10	36,014,431.59	40,565,058.59	1.74	666,242	133,325	799,567
361.10	166,373,356.72	176,291,375.14	1.52	2,604,252	401,448	3,005,700
361.20	28,263,649.44	29,652,321.05	2.81	813,719	32,807	846,526
363.00	43,409,706.20	45,439,103.14	2.27	1,008,434	90,093	1,098,527
364.00	530,204.62	564,962.50	13.18	72,172	48	72,220
365.00	272,564.04	272,564.04	5.89	16,054	16,054	16,054
370.00	143,419.77	143,419.77	2.27	3,256	3,256	3,256
371.00	14,741,942.32	17,200,567.65	5.07	809,743	121,588	931,331
380.00	68,503,716.55	76,306,980.93	3.85	2,787,606	231,044	3,018,650
381.00	6,183,989.54	6,183,989.54	2.31	142,850	18	142,868
382.00	604,388.91	604,388.91	2.14	12,934	317	13,251
388.10	598,404.70	1,198,404.70	5.61	50,401	401	50,802
390.00	682,596.03	718,389.99	5.78	40,488	895	41,383
391.00	1,627,652.53	1,627,652.53	8.42	137,048	3,150	140,198
392.00	107,351.44	107,351.44	4.00	4,294	4,294	4,294
393.00	872,282.74	1,034,519.58	4.49	42,808	1,581	44,389
394.00	536,027.98	481,441.01	7.41	37,697	1,592	39,289
395.00	542,370.71	542,370.71	2.15	11,661	410	12,071
396.00	2,195,942.61	3,272,595.35	5.33	145,737	12,896	158,633
397.00	532,484.69	881,510.69	4.69	33,158	4,932	38,090
398.00	14,231.50	14,231.50	4.29	611	250	861
TOTAL	549,786,339.34	585,964,083.32		12,730,899	1,122,278	13,853,177

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

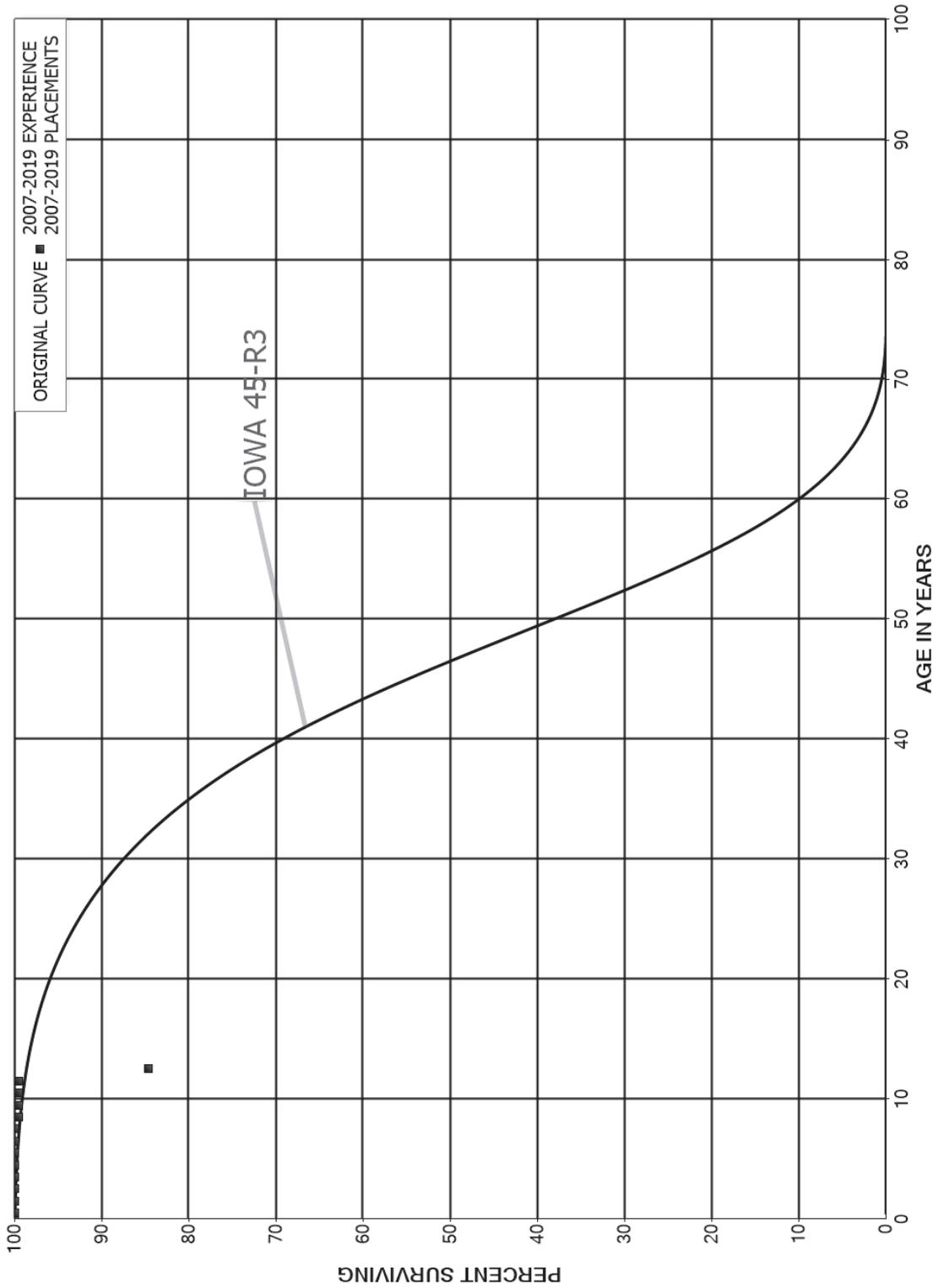
TABLE 5. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

ACCOUNT (1)	2018		2019		2020		2021		PROJECTED 2022		NET SALVAGE (12)*	SALVAGE ACCRUAL (13)=(12)/5
	GROSS SALVAGE (2)	COST OF REMOVAL (3)	GROSS SALVAGE (4)	COST OF REMOVAL (5)	GROSS SALVAGE (6)	COST OF REMOVAL (7)	GROSS SALVAGE (8)	COST OF REMOVAL (9)	GROSS SALVAGE (10)	COST OF REMOVAL (11)		
354.20		2,367	27,531	18,802		18,802				1,884	(50,585)	(10,117)
354.30		87	61,135	73,614		73,614		20,176		3,202	(158,214)	(31,643)
354.40		(18,539)	1,986	29,889		29,889		28,995		23,901	(66,242)	(13,248)
354.70		36,100	18,075	247		247		11,678		3,370	(69,469)	(13,894)
355.00		4,539	9,730	23,921		23,921		8,712		8,712	(48,155)	(9,631)
360.10		85,350	245,202	186,669		186,669		147,596		198,352	(863,170)	(172,634)
361.10		345,943	1,038,559	323,715		323,715		245,041		365,825	(2,319,084)	(463,817)
361.20			109,567	34,152		34,152		20,316		36,229	(200,263)	(40,053)
363.00		48,455	150,830	76,223		76,223		105,837		44,354	(425,540)	(85,108)
364.00			240								(240)	(48)
371.00		(18,885)	141,438	273,771		273,771		206,560		176,622	(779,507)	(155,901)
380.00		12,304	214,843	652,150		652,150		289,030		297,005	(1,445,333)	(289,067)
381.00								90			(90)	(18)
382.00		981									(981)	(196)
389.10		(3,678)	5,682								(2,003)	(401)
390.00		94									(3,713)	(743)
391.00		9,708						3,619			(15,748)	(3,150)
393.00			6,029	10		10					(8,721)	(1,744)
394.00		118	1,931	5,644		5,644				1,146	(13,904)	(2,781)
395.00			5,593	1,075		1,075		1,113		6,005	(2,048)	(410)
396.00			2,048								(111,786)	(22,357)
397.00		6,019	1,898	52,578		52,578		4,528		52,782	(30,750)	(6,150)
398.00			5,513	9,910		9,910		4,677		6,088	(1,251)	(250)
398.00			1,251								(1,251)	
TOTAL	0	510,964	2,049,082	1,762,381	1,369	1,762,381	246	1,070,510	0	1,225,477	(6,616,797)	(1,323,361)

* Column (12) equals the summation of Columns (2) through (11).

PART VI. SERVICE LIFE STATISTICS

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION
 ORIGINAL AND SMOOTH SURVIVOR CURVES



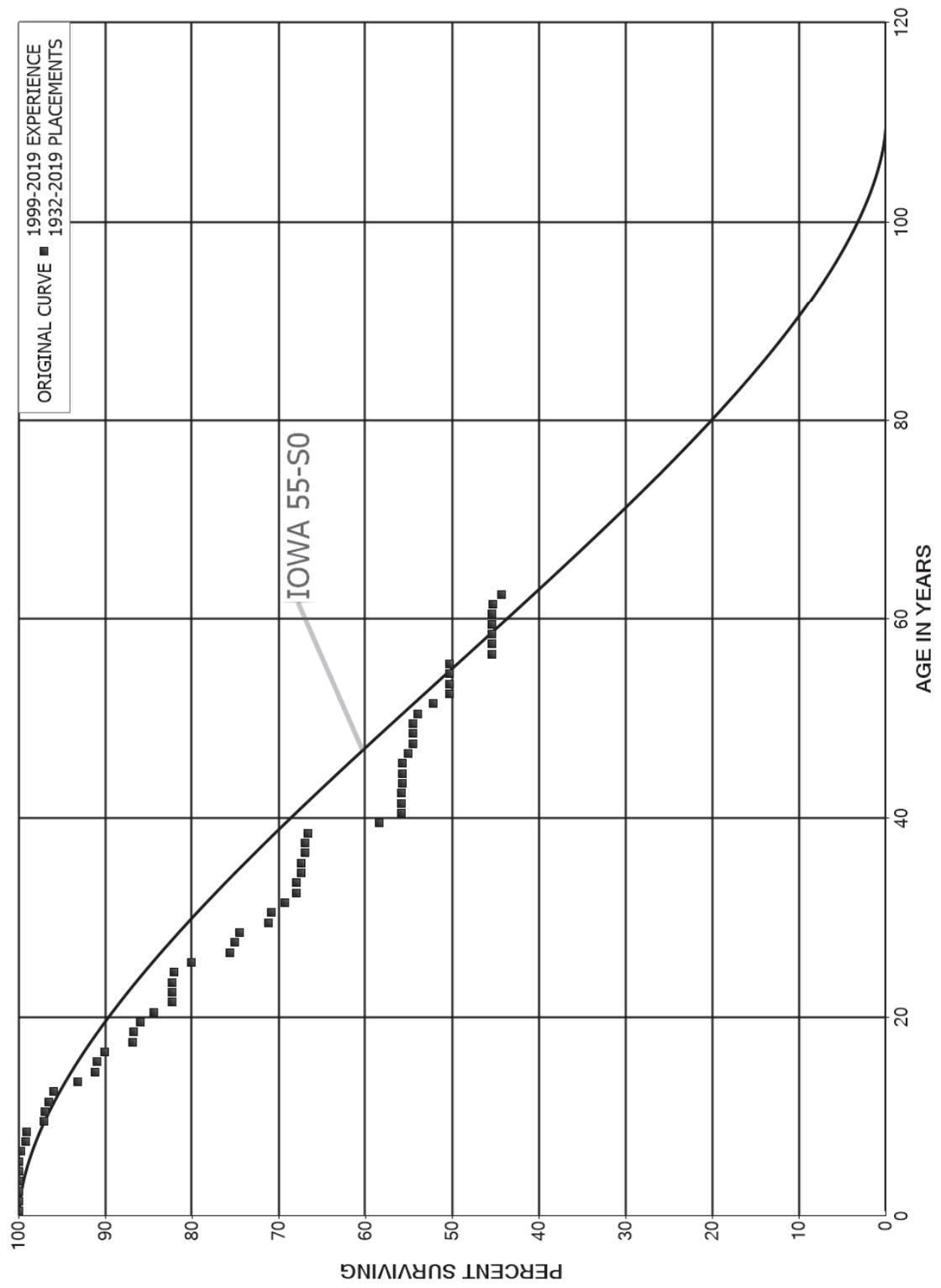
PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS

ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

ORIGINAL LIFE TABLE

PLACEMENT BAND 2007-2019			EXPERIENCE BAND 2007-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,844,636		0.0000	1.0000	100.00
0.5	3,478,774		0.0000	1.0000	100.00
1.5	1,864,154		0.0000	1.0000	100.00
2.5	516,452	0	0.0000	1.0000	100.00
3.5	479,797		0.0000	1.0000	100.00
4.5	437,900	416	0.0010	0.9990	100.00
5.5	422,717		0.0000	1.0000	99.90
6.5	321,516		0.0000	1.0000	99.90
7.5	321,516	1,408	0.0044	0.9956	99.90
8.5	311,522		0.0000	1.0000	99.47
9.5	311,522		0.0000	1.0000	99.47
10.5	134,415		0.0000	1.0000	99.47
11.5	20,659	3,076	0.1489	0.8511	99.47
12.5					84.66

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP
 ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP

ORIGINAL LIFE TABLE

PLACEMENT BAND 1932-2019

EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	70,500,767		0.0000	1.0000	100.00
0.5	76,131,665		0.0000	1.0000	100.00
1.5	80,233,751	6,642	0.0001	0.9999	100.00
2.5	105,447,960		0.0000	1.0000	99.99
3.5	85,605,007	28,836	0.0003	0.9997	99.99
4.5	79,002,174	4,425	0.0001	0.9999	99.96
5.5	46,624,214	105,422	0.0023	0.9977	99.95
6.5	51,444,895	277,564	0.0054	0.9946	99.73
7.5	50,906,335	75,090	0.0015	0.9985	99.19
8.5	50,793,050	1,027,715	0.0202	0.9798	99.04
9.5	34,780,266	28,544	0.0008	0.9992	97.04
10.5	15,695,508	65,025	0.0041	0.9959	96.96
11.5	15,618,899	88,716	0.0057	0.9943	96.56
12.5	20,002,643	601,564	0.0301	0.9699	96.01
13.5	17,169,269	353,428	0.0206	0.9794	93.12
14.5	16,203,968	41,247	0.0025	0.9975	91.20
15.5	16,204,082	163,309	0.0101	0.9899	90.97
16.5	13,585,539	481,677	0.0355	0.9645	90.06
17.5	12,995,837	17,548	0.0014	0.9986	86.86
18.5	12,210,208	114,143	0.0093	0.9907	86.74
19.5	7,393,964	134,551	0.0182	0.9818	85.93
20.5	6,513,761	157,405	0.0242	0.9758	84.37
21.5	6,711,244	2,801	0.0004	0.9996	82.33
22.5	7,374,817	1,543	0.0002	0.9998	82.30
23.5	6,783,698	15,823	0.0023	0.9977	82.28
24.5	6,921,413	166,617	0.0241	0.9759	82.09
25.5	6,763,696	380,532	0.0563	0.9437	80.11
26.5	5,899,041	38,147	0.0065	0.9935	75.60
27.5	4,281,769	34,820	0.0081	0.9919	75.12
28.5	3,967,252	175,318	0.0442	0.9558	74.50
29.5	4,051,668	21,732	0.0054	0.9946	71.21
30.5	5,300,696	114,682	0.0216	0.9784	70.83
31.5	4,027,463	76,382	0.0190	0.9810	69.30
32.5	2,813,504	2,190	0.0008	0.9992	67.98
33.5	2,649,698	20,846	0.0079	0.9921	67.93
34.5	1,122,954		0.0000	1.0000	67.40
35.5	398,615	2,457	0.0062	0.9938	67.40
36.5	369,394		0.0000	1.0000	66.98
37.5	339,885	1,942	0.0057	0.9943	66.98
38.5	249,055	30,753	0.1235	0.8765	66.60

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1932-2019			EXPERIENCE BAND 1999-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	877,505	37,754	0.0430	0.9570	58.37
40.5	1,351,121		0.0000	1.0000	55.86
41.5	19,298,436	4,893	0.0003	0.9997	55.86
42.5	19,293,543	30,808	0.0016	0.9984	55.85
43.5	32,745,779		0.0000	1.0000	55.76
44.5	14,343,608	10,968	0.0008	0.9992	55.76
45.5	14,332,640	153,806	0.0107	0.9893	55.72
46.5	14,199,715	156,087	0.0110	0.9890	55.12
47.5	552,598		0.0000	1.0000	54.51
48.5	1,223,925		0.0000	1.0000	54.51
49.5	1,265,936	12,500	0.0099	0.9901	54.51
50.5	1,284,936	43,517	0.0339	0.9661	53.98
51.5	570,093	20,853	0.0366	0.9634	52.15
52.5	524,823		0.0000	1.0000	50.24
53.5	524,823		0.0000	1.0000	50.24
54.5	447,474		0.0000	1.0000	50.24
55.5	447,474	42,843	0.0957	0.9043	50.24
56.5	13,313,486	1,903	0.0001	0.9999	45.43
57.5	13,311,583		0.0000	1.0000	45.42
58.5	13,049,341	13	0.0000	1.0000	45.42
59.5	140,486		0.0000	1.0000	45.42
60.5	140,486	363	0.0026	0.9974	45.42
61.5	140,123	3,040	0.0217	0.9783	45.31
62.5					44.32
63.5					
64.5					
65.5					
66.5					
67.5					
68.5	39,928		0.0000		
69.5	39,928		0.0000		
70.5	39,928		0.0000		
71.5	39,928		0.0000		
72.5	40,428		0.0000		
73.5	39,928		0.0000		
74.5	39,928		0.0000		
75.5	39,928		0.0000		
76.5	602		0.0000		
77.5	602		0.0000		
78.5	602		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS

ACCOUNTS 354.30 AND 354.40 STRUCTURES AND IMPROVEMENTS - SPP AND TDP

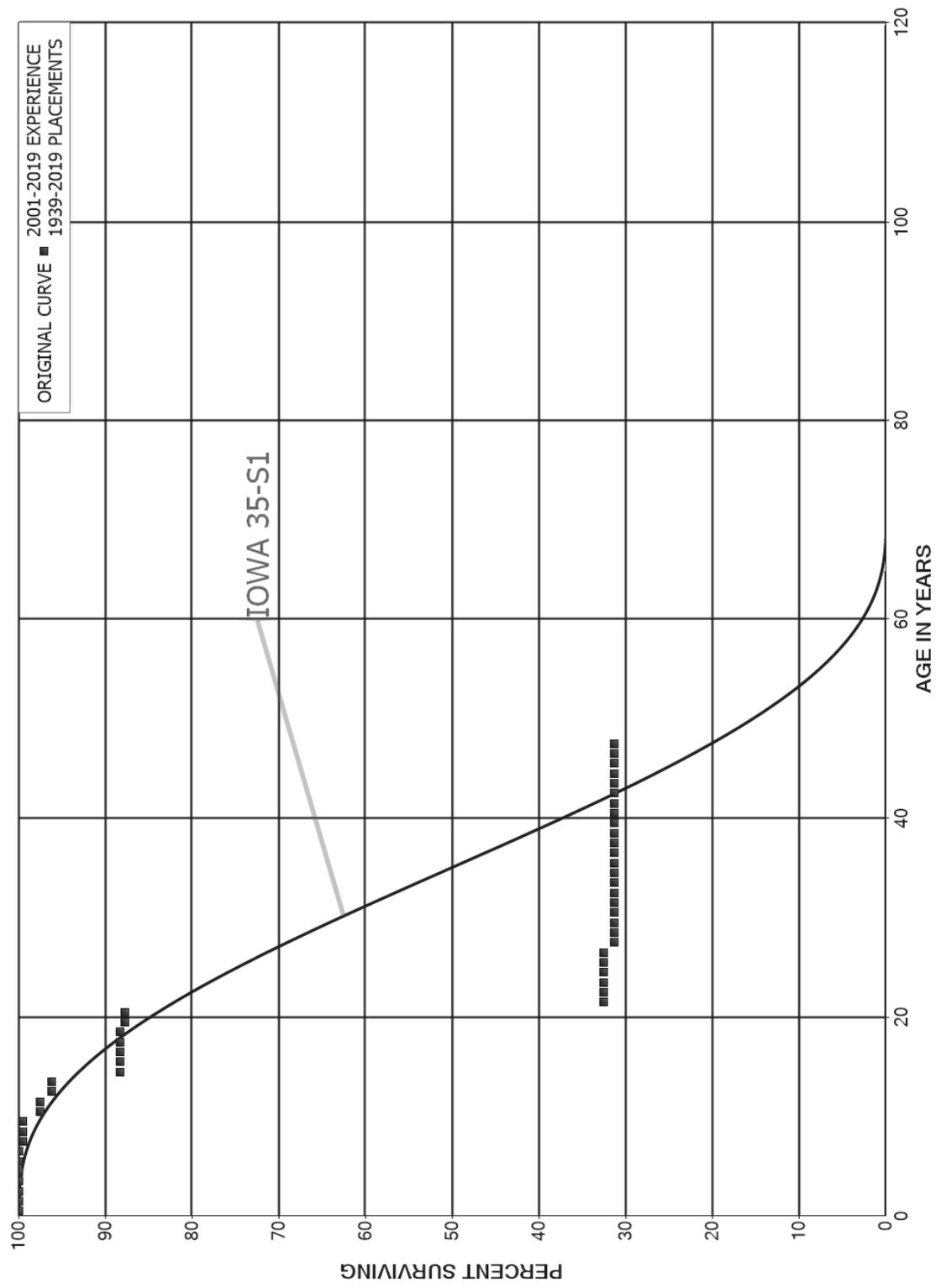
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1932-2019

EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	602		0.0000		
80.5	602		0.0000		
81.5	602		0.0000		
82.5	602		0.0000		
83.5	602		0.0000		
84.5	602		0.0000		
85.5	602		0.0000		
86.5	602		0.0000		
87.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL
 ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1939-2019			EXPERIENCE BAND 2001-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,331,347		0.0000	1.0000	100.00
0.5	2,248,872	400	0.0002	0.9998	100.00
1.5	2,139,519		0.0000	1.0000	99.98
2.5	2,007,976		0.0000	1.0000	99.98
3.5	1,998,798		0.0000	1.0000	99.98
4.5	978,189		0.0000	1.0000	99.98
5.5	566,034		0.0000	1.0000	99.98
6.5	540,776	2,524	0.0047	0.9953	99.98
7.5	668,631		0.0000	1.0000	99.52
8.5	661,526		0.0000	1.0000	99.52
9.5	622,592	12,303	0.0198	0.9802	99.52
10.5	529,371	373	0.0007	0.9993	97.55
11.5	209,362	2,752	0.0131	0.9869	97.48
12.5	204,311		0.0000	1.0000	96.20
13.5	220,425	18,073	0.0820	0.9180	96.20
14.5	208,207		0.0000	1.0000	88.31
15.5	208,207		0.0000	1.0000	88.31
16.5	165,317		0.0000	1.0000	88.31
17.5	193,471		0.0000	1.0000	88.31
18.5	210,457	1,510	0.0072	0.9928	88.31
19.5	223,914		0.0000	1.0000	87.68
20.5	223,914	140,772	0.6287	0.3713	87.68
21.5	67,028		0.0000	1.0000	32.56
22.5	73,481		0.0000	1.0000	32.56
23.5	73,481		0.0000	1.0000	32.56
24.5	73,481		0.0000	1.0000	32.56
25.5	44,261		0.0000	1.0000	32.56
26.5	27,275	1,047	0.0384	0.9616	32.56
27.5	11,260		0.0000	1.0000	31.31
28.5	11,260		0.0000	1.0000	31.31
29.5	11,260		0.0000	1.0000	31.31
30.5	11,260		0.0000	1.0000	31.31
31.5	11,260		0.0000	1.0000	31.31
32.5	11,260		0.0000	1.0000	31.31
33.5	11,260		0.0000	1.0000	31.31
34.5	11,260		0.0000	1.0000	31.31
35.5	450		0.0000	1.0000	31.31
36.5	450		0.0000	1.0000	31.31
37.5	450		0.0000	1.0000	31.31
38.5	450		0.0000	1.0000	31.31

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019			EXPERIENCE BAND 2001-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	450		0.0000	1.0000	31.31
40.5	450		0.0000	1.0000	31.31
41.5	450		0.0000	1.0000	31.31
42.5	450		0.0000	1.0000	31.31
43.5	450		0.0000	1.0000	31.31
44.5	450		0.0000	1.0000	31.31
45.5	450		0.0000	1.0000	31.31
46.5	450		0.0000	1.0000	31.31
47.5					31.31
48.5					
49.5					
50.5					
51.5					
52.5					
53.5					
54.5					
55.5					
56.5					
57.5					
58.5					
59.5					
60.5					
61.5					
62.5					
63.5					
64.5					
65.5					
66.5					
67.5					
68.5	3,802		0.0000		
69.5	3,802		0.0000		
70.5	3,802	283	0.0744		
71.5	3,519		0.0000		
72.5	3,519		0.0000		
73.5	3,519		0.0000		
74.5	3,519		0.0000		
75.5	3,519		0.0000		
76.5	3,519		0.0000		
77.5	3,519		0.0000		
78.5	3,519		0.0000		

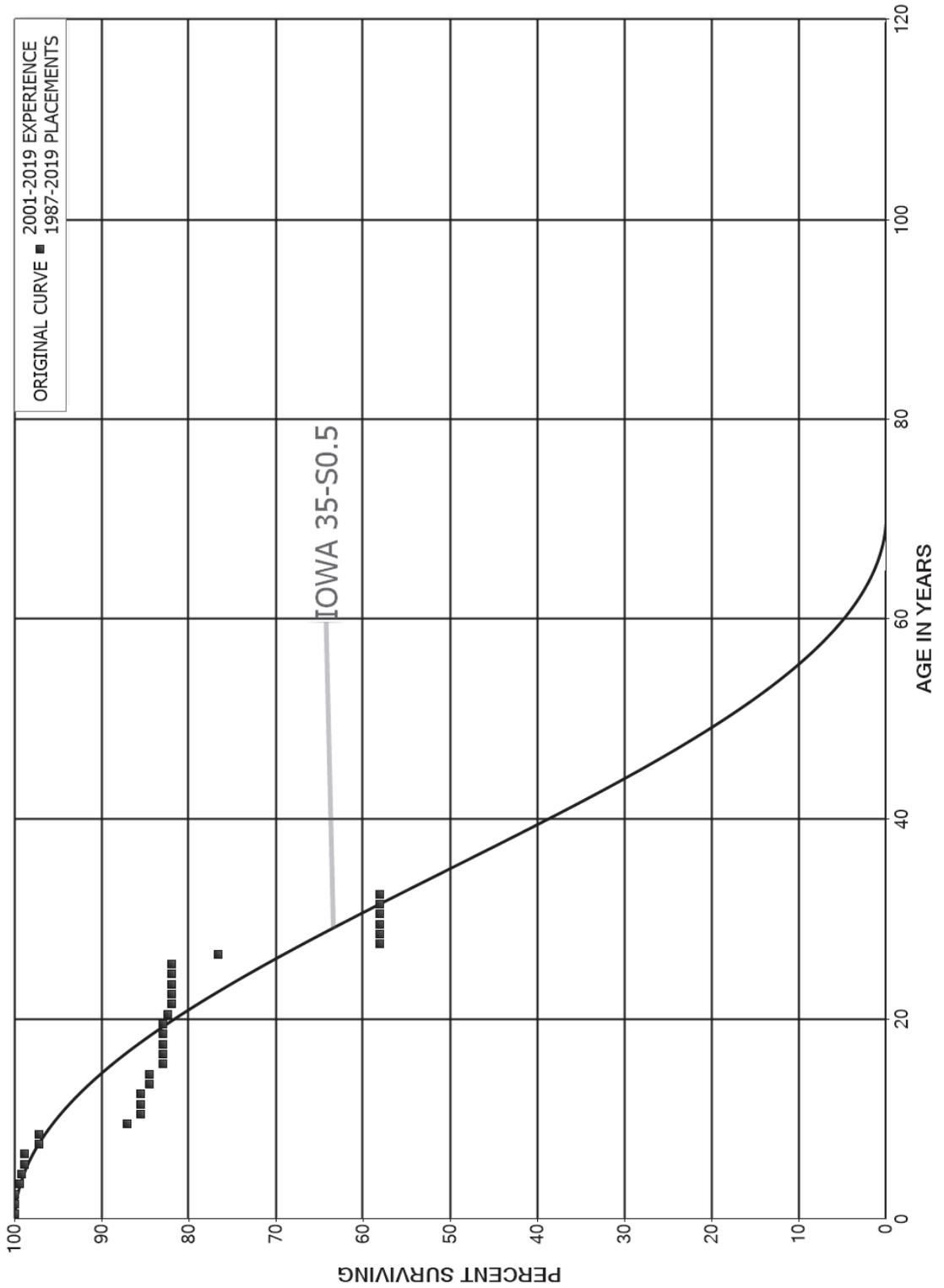
PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019			EXPERIENCE BAND 2001-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5 80.5	3,519		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 355.00 POWER GENERATION EQUIPMENT
 ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 355.00 POWER GENERATION EQUIPMENT

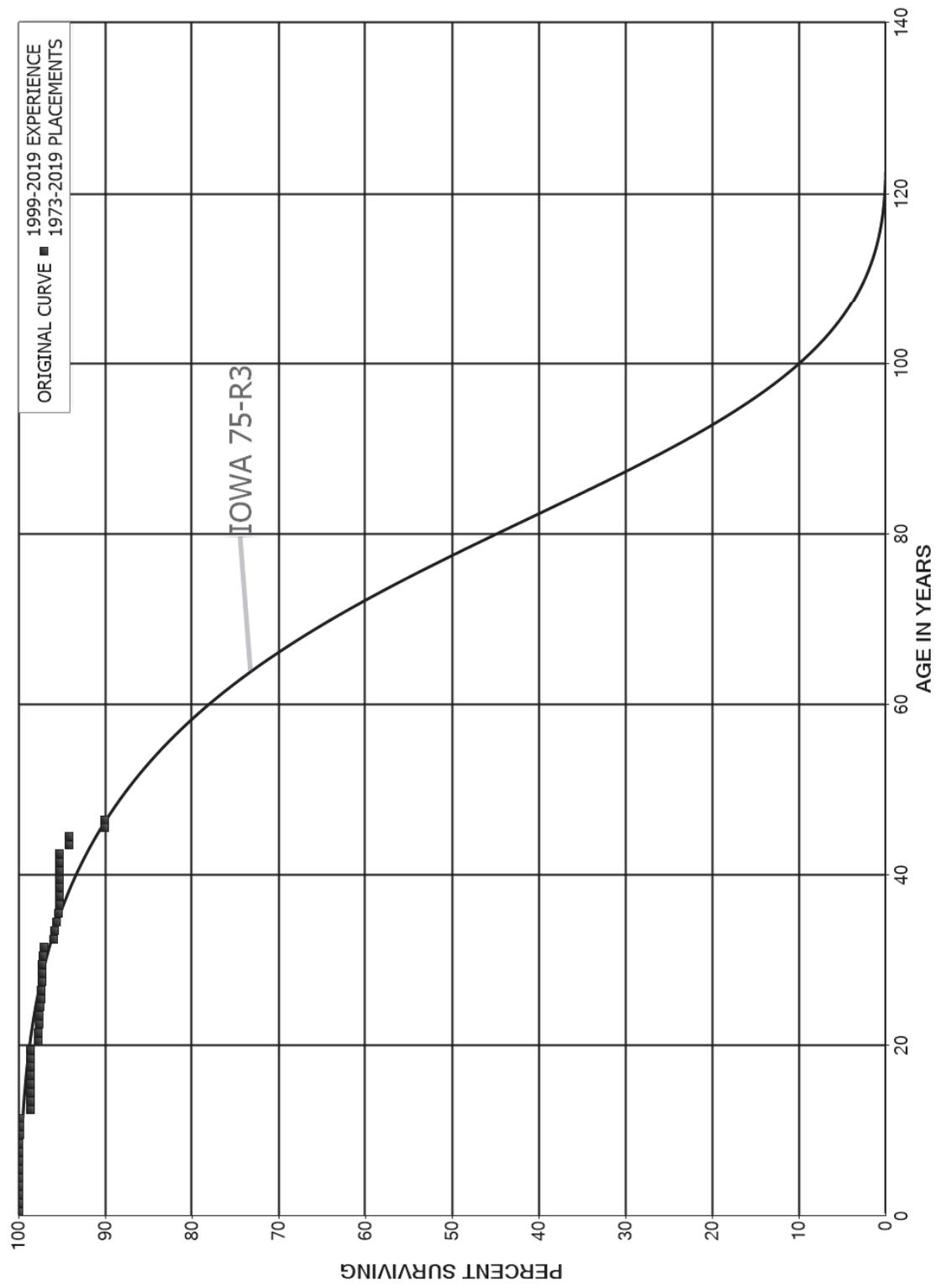
ORIGINAL LIFE TABLE

PLACEMENT BAND 1987-2019

EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	3,656,122		0.0000	1.0000	100.00
0.5	3,685,338		0.0000	1.0000	100.00
1.5	4,385,880		0.0000	1.0000	100.00
2.5	4,494,639	26,926	0.0060	0.9940	100.00
3.5	4,479,665	10,161	0.0023	0.9977	99.40
4.5	4,398,000	14,523	0.0033	0.9967	99.18
5.5	3,773,674	1,387	0.0004	0.9996	98.85
6.5	3,828,658	61,470	0.0161	0.9839	98.81
7.5	3,336,361		0.0000	1.0000	97.23
8.5	3,321,984	347,576	0.1046	0.8954	97.23
9.5	2,953,727	51,388	0.0174	0.9826	87.05
10.5	328,249		0.0000	1.0000	85.54
11.5	144,528		0.0000	1.0000	85.54
12.5	267,555	3,097	0.0116	0.9884	85.54
13.5	327,093		0.0000	1.0000	84.55
14.5	278,538	5,336	0.0192	0.9808	84.55
15.5	281,064		0.0000	1.0000	82.93
16.5	293,645		0.0000	1.0000	82.93
17.5	241,944		0.0000	1.0000	82.93
18.5	203,466		0.0000	1.0000	82.93
19.5	203,466	1,204	0.0059	0.9941	82.93
20.5	202,262	1,103	0.0055	0.9945	82.44
21.5	432,455		0.0000	1.0000	81.99
22.5	402,008		0.0000	1.0000	81.99
23.5	402,008		0.0000	1.0000	81.99
24.5	402,008		0.0000	1.0000	81.99
25.5	402,978	26,388	0.0655	0.9345	81.99
26.5	174,978	42,310	0.2418	0.7582	76.62
27.5	89,880		0.0000	1.0000	58.09
28.5	68,585		0.0000	1.0000	58.09
29.5	68,585		0.0000	1.0000	58.09
30.5	19,246		0.0000	1.0000	58.09
31.5	19,246		0.0000	1.0000	58.09
32.5					58.09

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS
 ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1973-2019

EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	31,766,704	19	0.0000	1.0000	100.00
0.5	28,215,316	26	0.0000	1.0000	100.00
1.5	35,558,986	33	0.0000	1.0000	100.00
2.5	23,783,577	70	0.0000	1.0000	100.00
3.5	21,373,939	350	0.0000	1.0000	100.00
4.5	18,774,036	315	0.0000	1.0000	100.00
5.5	14,425,014	397	0.0000	1.0000	100.00
6.5	14,188,090	1,611	0.0001	0.9999	99.99
7.5	14,122,868	1,747	0.0001	0.9999	99.98
8.5	13,850,582	16,747	0.0012	0.9988	99.97
9.5	13,465,099	64	0.0000	1.0000	99.85
10.5	13,318,392	82	0.0000	1.0000	99.85
11.5	10,748,868	127,626	0.0119	0.9881	99.85
12.5	9,661,386		0.0000	1.0000	98.66
13.5	7,868,737	3,291	0.0004	0.9996	98.66
14.5	7,779,655	99	0.0000	1.0000	98.62
15.5	5,905,707	9	0.0000	1.0000	98.62
16.5	5,774,986	949	0.0002	0.9998	98.62
17.5	5,344,267	1,253	0.0002	0.9998	98.60
18.5	4,614,847	826	0.0002	0.9998	98.58
19.5	4,197,905	37,017	0.0088	0.9912	98.56
20.5	3,986,776	70	0.0000	1.0000	97.69
21.5	4,475,797	1,897	0.0004	0.9996	97.69
22.5	3,907,599	569	0.0001	0.9999	97.65
23.5	4,900,347	3,932	0.0008	0.9992	97.64
24.5	6,419,851	13,411	0.0021	0.9979	97.56
25.5	6,580,720	788	0.0001	0.9999	97.35
26.5	6,033,834	1,095	0.0002	0.9998	97.34
27.5	6,011,515	2,049	0.0003	0.9997	97.32
28.5	5,991,855	3,135	0.0005	0.9995	97.29
29.5	6,011,945	3,365	0.0006	0.9994	97.24
30.5	5,911,879	4,784	0.0008	0.9992	97.19
31.5	5,517,306	65,876	0.0119	0.9881	97.11
32.5	5,225,480	4,106	0.0008	0.9992	95.95
33.5	5,192,765	13,636	0.0026	0.9974	95.87
34.5	4,869,190	12,733	0.0026	0.9974	95.62
35.5	4,856,457	2,869	0.0006	0.9994	95.37
36.5	4,661,206	15	0.0000	1.0000	95.31
37.5	4,607,713		0.0000	1.0000	95.31
38.5	4,446,768	1,883	0.0004	0.9996	95.31

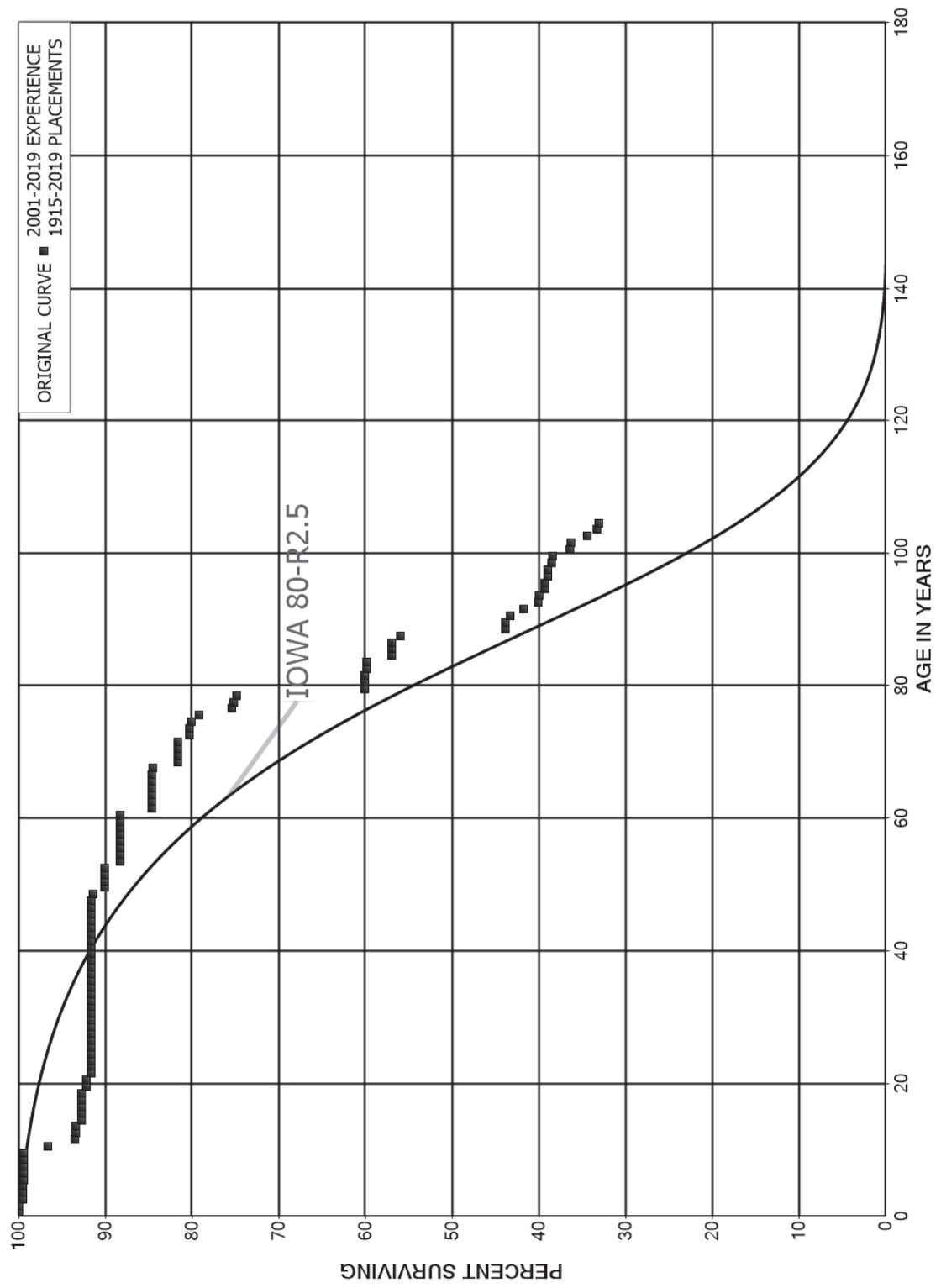
PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1973-2019			EXPERIENCE BAND 1999-2019			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	4,369,779	82	0.0000	1.0000	95.27	
40.5	4,295,948	6	0.0000	1.0000	95.27	
41.5	4,025,587	0	0.0000	1.0000	95.27	
42.5	3,566,737	42,283	0.0119	0.9881	95.27	
43.5	2,553,034		0.0000	1.0000	94.14	
44.5	1,703,254	73,783	0.0433	0.9567	94.14	
45.5	125,695		0.0000	1.0000	90.06	
46.5					90.06	

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS
 ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1915-2019			EXPERIENCE BAND 2001-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	123,698,865	1,489	0.0000	1.0000	100.00
0.5	80,968,134	1,744	0.0000	1.0000	100.00
1.5	71,427,735	349,743	0.0049	0.9951	100.00
2.5	61,491,291		0.0000	1.0000	99.51
3.5	47,985,505		0.0000	1.0000	99.51
4.5	43,496,282	26,093	0.0006	0.9994	99.51
5.5	34,622,702	11,064	0.0003	0.9997	99.45
6.5	36,236,717	10,556	0.0003	0.9997	99.42
7.5	44,473,440	0	0.0000	1.0000	99.39
8.5	44,403,805	13,334	0.0003	0.9997	99.39
9.5	42,579,956	1,180,167	0.0277	0.9723	99.36
10.5	27,257,562	886,763	0.0325	0.9675	96.60
11.5	23,041,413	10,064	0.0004	0.9996	93.46
12.5	15,696,984	13,300	0.0008	0.9992	93.42
13.5	13,197,516	82,522	0.0063	0.9937	93.34
14.5	9,898,866	187	0.0000	1.0000	92.76
15.5	8,175,329	367	0.0000	1.0000	92.75
16.5	11,005,722	1,374	0.0001	0.9999	92.75
17.5	22,668,123		0.0000	1.0000	92.74
18.5	22,367,436	144,378	0.0065	0.9935	92.74
19.5	21,841,271		0.0000	1.0000	92.14
20.5	10,429,000	56,430	0.0054	0.9946	92.14
21.5	13,494,984		0.0000	1.0000	91.64
22.5	12,095,717		0.0000	1.0000	91.64
23.5	13,846,891		0.0000	1.0000	91.64
24.5	14,182,481		0.0000	1.0000	91.64
25.5	19,071,002		0.0000	1.0000	91.64
26.5	16,170,692		0.0000	1.0000	91.64
27.5	36,060,280		0.0000	1.0000	91.64
28.5	35,923,542		0.0000	1.0000	91.64
29.5	33,683,971		0.0000	1.0000	91.64
30.5	8,391,683	866	0.0001	0.9999	91.64
31.5	8,167,272	21	0.0000	1.0000	91.63
32.5	8,027,418		0.0000	1.0000	91.63
33.5	7,266,714		0.0000	1.0000	91.63
34.5	5,540,059		0.0000	1.0000	91.63
35.5	3,406,034		0.0000	1.0000	91.63
36.5	3,951,146		0.0000	1.0000	91.63
37.5	4,287,296		0.0000	1.0000	91.63
38.5	4,273,219		0.0000	1.0000	91.63

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1915-2019			EXPERIENCE BAND 2001-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,243,666		0.0000	1.0000	91.63
40.5	41,503,891	5,447	0.0001	0.9999	91.63
41.5	41,043,016	49	0.0000	1.0000	91.62
42.5	41,341,828		0.0000	1.0000	91.62
43.5	20,516,395		0.0000	1.0000	91.62
44.5	17,262,745	4,573	0.0003	0.9997	91.62
45.5	17,447,879		0.0000	1.0000	91.60
46.5	16,922,111	1,617	0.0001	0.9999	91.60
47.5	1,493,981	2,878	0.0019	0.9981	91.59
48.5	1,491,103	21,283	0.0143	0.9857	91.41
49.5	995,707	187	0.0002	0.9998	90.11
50.5	1,249,631		0.0000	1.0000	90.09
51.5	1,214,773		0.0000	1.0000	90.09
52.5	1,253,366	24,618	0.0196	0.9804	90.09
53.5	28,374,663		0.0000	1.0000	88.32
54.5	38,998,170		0.0000	1.0000	88.32
55.5	39,986,553		0.0000	1.0000	88.32
56.5	13,005,874		0.0000	1.0000	88.32
57.5	59,432,346		0.0000	1.0000	88.32
58.5	60,820,282	557	0.0000	1.0000	88.32
59.5	59,761,303	747	0.0000	1.0000	88.32
60.5	2,094,297	87,761	0.0419	0.9581	88.32
61.5	22,663,762	8	0.0000	1.0000	84.62
62.5	21,213,491	61	0.0000	1.0000	84.62
63.5	21,215,934	289	0.0000	1.0000	84.62
64.5	46,353		0.0000	1.0000	84.62
65.5	1,102,303		0.0000	1.0000	84.62
66.5	1,102,303	1,673	0.0015	0.9985	84.62
67.5	1,100,630	37,140	0.0337	0.9663	84.49
68.5	1,259,440		0.0000	1.0000	81.64
69.5	290,689		0.0000	1.0000	81.64
70.5	962,463	168	0.0002	0.9998	81.64
71.5	962,295	15,230	0.0158	0.9842	81.62
72.5	1,042,298	993	0.0010	0.9990	80.33
73.5	946,072	2,053	0.0022	0.9978	80.25
74.5	683,176	7,508	0.0110	0.9890	80.08
75.5	675,668	32,767	0.0485	0.9515	79.20
76.5	642,901	1,310	0.0020	0.9980	75.36
77.5	1,531,686	8,017	0.0052	0.9948	75.20
78.5	1,523,669	299,242	0.1964	0.8036	74.81

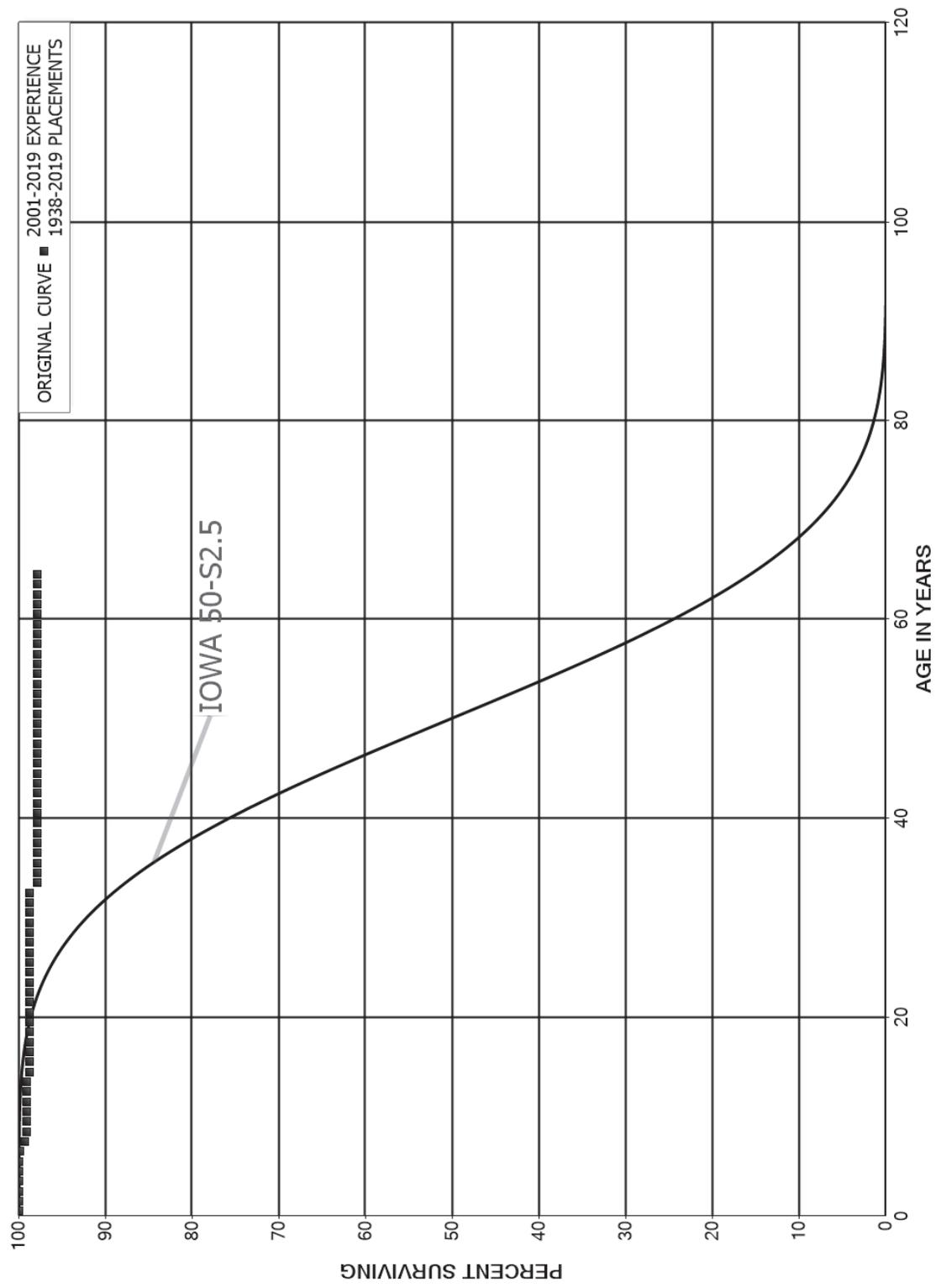
PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1915-2019			EXPERIENCE BAND 2001-2019			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	1,224,427	291	0.0002	0.9998	60.12	
80.5	1,522,508		0.0000	1.0000	60.10	
81.5	632,413	2,303	0.0036	0.9964	60.10	
82.5	648,868		0.0000	1.0000	59.89	
83.5	648,868	31,252	0.0482	0.9518	59.89	
84.5	601,981	10	0.0000	1.0000	57.00	
85.5	722,814		0.0000	1.0000	57.00	
86.5	722,814	13,485	0.0187	0.9813	57.00	
87.5	709,329	153,014	0.2157	0.7843	55.94	
88.5	556,315	264	0.0005	0.9995	43.87	
89.5	329,027	4,352	0.0132	0.9868	43.85	
90.5	306,175	11,276	0.0368	0.9632	43.27	
91.5	294,898	11,132	0.0377	0.9623	41.68	
92.5	283,767	1,273	0.0045	0.9955	40.10	
93.5	282,494	4,366	0.0155	0.9845	39.92	
94.5	278,128	221	0.0008	0.9992	39.31	
95.5	277,906	1,967	0.0071	0.9929	39.27	
96.5	275,939	42	0.0002	0.9998	39.00	
97.5	3,804,626	42,906	0.0113	0.9887	38.99	
98.5	3,761,720	15,091	0.0040	0.9960	38.55	
99.5	3,616,599	191,754	0.0530	0.9470	38.40	
100.5	3,424,846	6,012	0.0018	0.9982	36.36	
101.5	96,405	5,167	0.0536	0.9464	36.30	
102.5	91,238	2,967	0.0325	0.9675	34.35	
103.5	88,271	309	0.0035	0.9965	33.23	
104.5					33.12	

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 361.20 MANHOLES
 ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1938-2019

EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	14,379,651		0.0000	1.0000	100.00
0.5	10,176,887		0.0000	1.0000	100.00
1.5	10,661,285	0	0.0000	1.0000	100.00
2.5	11,952,425		0.0000	1.0000	100.00
3.5	12,083,028	911	0.0001	0.9999	100.00
4.5	7,585,455		0.0000	1.0000	99.99
5.5	5,573,639	6,667	0.0012	0.9988	99.99
6.5	4,589,383	27,566	0.0060	0.9940	99.87
7.5	4,569,090	10,961	0.0024	0.9976	99.27
8.5	5,066,097		0.0000	1.0000	99.03
9.5	5,304,644		0.0000	1.0000	99.03
10.5	5,838,060		0.0000	1.0000	99.03
11.5	5,353,439		0.0000	1.0000	99.03
12.5	4,555,554		0.0000	1.0000	99.03
13.5	4,114,028	12,188	0.0030	0.9970	99.03
14.5	2,635,311		0.0000	1.0000	98.74
15.5	2,105,291	0	0.0000	1.0000	98.74
16.5	2,247,105	472	0.0002	0.9998	98.74
17.5	2,934,821		0.0000	1.0000	98.72
18.5	2,849,242		0.0000	1.0000	98.72
19.5	2,782,656		0.0000	1.0000	98.72
20.5	2,425,509	0	0.0000	1.0000	98.72
21.5	1,772,096		0.0000	1.0000	98.72
22.5	970,343		0.0000	1.0000	98.72
23.5	1,299,611		0.0000	1.0000	98.72
24.5	1,741,110		0.0000	1.0000	98.72
25.5	2,636,710		0.0000	1.0000	98.72
26.5	3,361,749		0.0000	1.0000	98.72
27.5	3,450,899		0.0000	1.0000	98.72
28.5	3,240,536		0.0000	1.0000	98.72
29.5	2,574,979		0.0000	1.0000	98.72
30.5	1,538,799		0.0000	1.0000	98.72
31.5	1,635,548		0.0000	1.0000	98.72
32.5	1,551,747	13,277	0.0086	0.9914	98.72
33.5	1,328,056		0.0000	1.0000	97.88
34.5	1,038,030		0.0000	1.0000	97.88
35.5	1,093,592		0.0000	1.0000	97.88
36.5	1,326,879		0.0000	1.0000	97.88
37.5	1,450,927		0.0000	1.0000	97.88
38.5	1,304,196		0.0000	1.0000	97.88

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1938-2019			EXPERIENCE BAND 2001-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	994,944		0.0000	1.0000	97.88
40.5	2,263,935		0.0000	1.0000	97.88
41.5	2,043,826		0.0000	1.0000	97.88
42.5	2,216,232		0.0000	1.0000	97.88
43.5	2,406,018		0.0000	1.0000	97.88
44.5	2,040,304		0.0000	1.0000	97.88
45.5	2,008,665		0.0000	1.0000	97.88
46.5	1,708,150		0.0000	1.0000	97.88
47.5	301,817		0.0000	1.0000	97.88
48.5	301,817		0.0000	1.0000	97.88
49.5	170,327		0.0000	1.0000	97.88
50.5	201,568		0.0000	1.0000	97.88
51.5	166,180		0.0000	1.0000	97.88
52.5	172,781		0.0000	1.0000	97.88
53.5	1,995,623		0.0000	1.0000	97.88
54.5	1,827,036		0.0000	1.0000	97.88
55.5	1,951,871		0.0000	1.0000	97.88
56.5	131,436		0.0000	1.0000	97.88
57.5	10,950,272		0.0000	1.0000	97.88
58.5	10,950,272		0.0000	1.0000	97.88
59.5	10,825,437		0.0000	1.0000	97.88
60.5	89,564		0.0000	1.0000	97.88
61.5	89,564		0.0000	1.0000	97.88
62.5	89,564		0.0000	1.0000	97.88
63.5	89,564		0.0000	1.0000	97.88
64.5					97.88
65.5	100,437		0.0000		
66.5	100,437		0.0000		
67.5	123,426		0.0000		
68.5	167,059	22,989	0.1376		
69.5	43,633		0.0000		
70.5	84,331		0.0000		
71.5	84,331		0.0000		
72.5	90,699		0.0000		
73.5	84,331		0.0000		
74.5	43,633		0.0000		
75.5	43,633		0.0000		
76.5	43,633		0.0000		
77.5	306,691		0.0000		
78.5	306,691		0.0000		

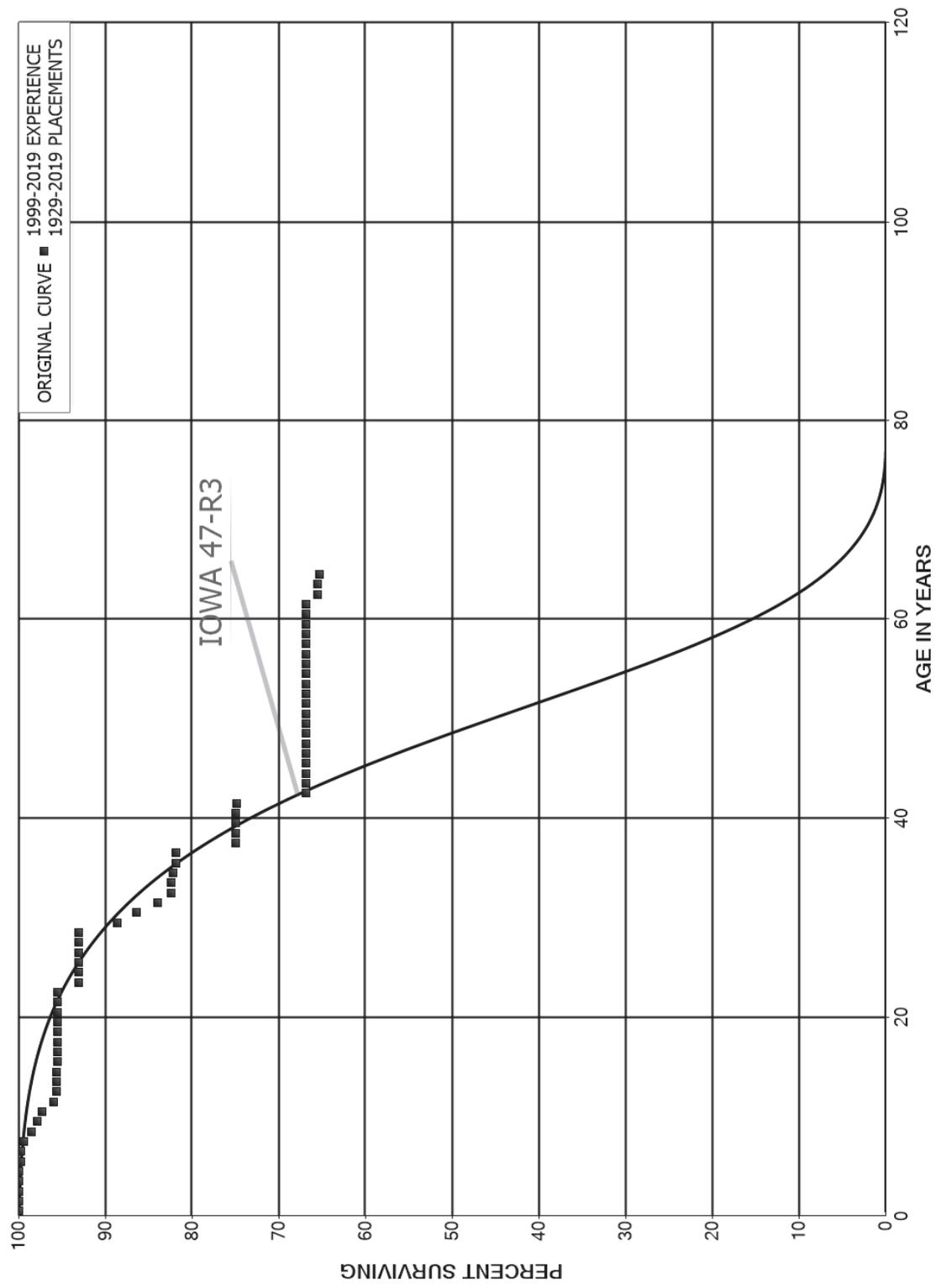
PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS

ACCOUNT 361.20 MANHOLES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1938-2019			EXPERIENCE BAND 2001-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	306,691	1,171	0.0038		
80.5	263,058		0.0000		
81.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 363.00 SERVICES
 ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1929-2019

EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	10,615,796	0	0.0000	1.0000	100.00
0.5	10,038,138	0	0.0000	1.0000	100.00
1.5	9,510,472	60	0.0000	1.0000	100.00
2.5	8,790,677	5,668	0.0006	0.9994	100.00
3.5	8,679,530	421	0.0000	1.0000	99.93
4.5	7,932,683	12,635	0.0016	0.9984	99.93
5.5	6,966,530	2,890	0.0004	0.9996	99.77
6.5	8,411,000	31,963	0.0038	0.9962	99.73
7.5	8,278,555	65,894	0.0080	0.9920	99.35
8.5	8,313,922	64,649	0.0078	0.9922	98.56
9.5	8,351,147	42,617	0.0051	0.9949	97.79
10.5	6,470,010	87,729	0.0136	0.9864	97.29
11.5	6,246,021	19,892	0.0032	0.9968	95.98
12.5	5,858,877	0	0.0000	1.0000	95.67
13.5	4,698,450	4,942	0.0011	0.9989	95.67
14.5	4,095,435	871	0.0002	0.9998	95.57
15.5	3,284,377		0.0000	1.0000	95.55
16.5	3,511,888	0	0.0000	1.0000	95.55
17.5	3,953,464	0	0.0000	1.0000	95.55
18.5	3,909,166	55	0.0000	1.0000	95.55
19.5	3,630,733		0.0000	1.0000	95.55
20.5	3,925,137		0.0000	1.0000	95.55
21.5	3,646,749		0.0000	1.0000	95.55
22.5	3,395,484	87,997	0.0259	0.9741	95.55
23.5	3,780,922		0.0000	1.0000	93.07
24.5	4,115,954	497	0.0001	0.9999	93.07
25.5	5,003,579		0.0000	1.0000	93.06
26.5	5,176,777		0.0000	1.0000	93.06
27.5	4,635,070		0.0000	1.0000	93.06
28.5	4,421,930	209,578	0.0474	0.9526	93.06
29.5	3,596,999	92,585	0.0257	0.9743	88.65
30.5	2,947,708	80,733	0.0274	0.9726	86.37
31.5	2,783,645	51,927	0.0187	0.9813	84.00
32.5	2,491,265	1,241	0.0005	0.9995	82.43
33.5	2,228,511	4,871	0.0022	0.9978	82.39
34.5	1,965,612	8,461	0.0043	0.9957	82.21
35.5	1,925,423	503	0.0003	0.9997	81.86
36.5	1,973,278	167,021	0.0846	0.9154	81.84
37.5	1,839,375	192	0.0001	0.9999	74.91
38.5	1,657,395		0.0000	1.0000	74.90

PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2019			EXPERIENCE BAND 1999-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,207,182		0.0000	1.0000	74.90
40.5	1,197,802	385	0.0003	0.9997	74.90
41.5	1,022,673	110,064	0.1076	0.8924	74.88
42.5	886,687		0.0000	1.0000	66.82
43.5	1,408,938		0.0000	1.0000	66.82
44.5	900,914		0.0000	1.0000	66.82
45.5	855,938		0.0000	1.0000	66.82
46.5	736,586		0.0000	1.0000	66.82
47.5	156,414		0.0000	1.0000	66.82
48.5	155,860		0.0000	1.0000	66.82
49.5	82,277		0.0000	1.0000	66.82
50.5	145,022		0.0000	1.0000	66.82
51.5	132,653		0.0000	1.0000	66.82
52.5	134,754	0	0.0000	1.0000	66.82
53.5	137,757		0.0000	1.0000	66.82
54.5	20,119		0.0000	1.0000	66.82
55.5	100,869		0.0000	1.0000	66.82
56.5	100,869		0.0000	1.0000	66.82
57.5	97,866		0.0000	1.0000	66.82
58.5	256,316		0.0000	1.0000	66.82
59.5	180,162	20	0.0001	0.9999	66.82
60.5	228,822		0.0000	1.0000	66.81
61.5	228,822	4,595	0.0201	0.9799	66.81
62.5	50,781		0.0000	1.0000	65.47
63.5	50,781	162	0.0032	0.9968	65.47
64.5					65.26
65.5	60,144		0.0000		
66.5	60,144		0.0000		
67.5	60,144		0.0000		
68.5	70,211		0.0000		
69.5	13,932	819	0.0588		
70.5	36,101		0.0000		
71.5	36,101	4,521	0.1252		
72.5	31,580	1,251	0.0396		
73.5	30,329	442	0.0146		
74.5	6,899	644	0.0933		
75.5	6,255		0.0000		
76.5	6,255		0.0000		
77.5	151,010		0.0000		
78.5	151,010		0.0000		

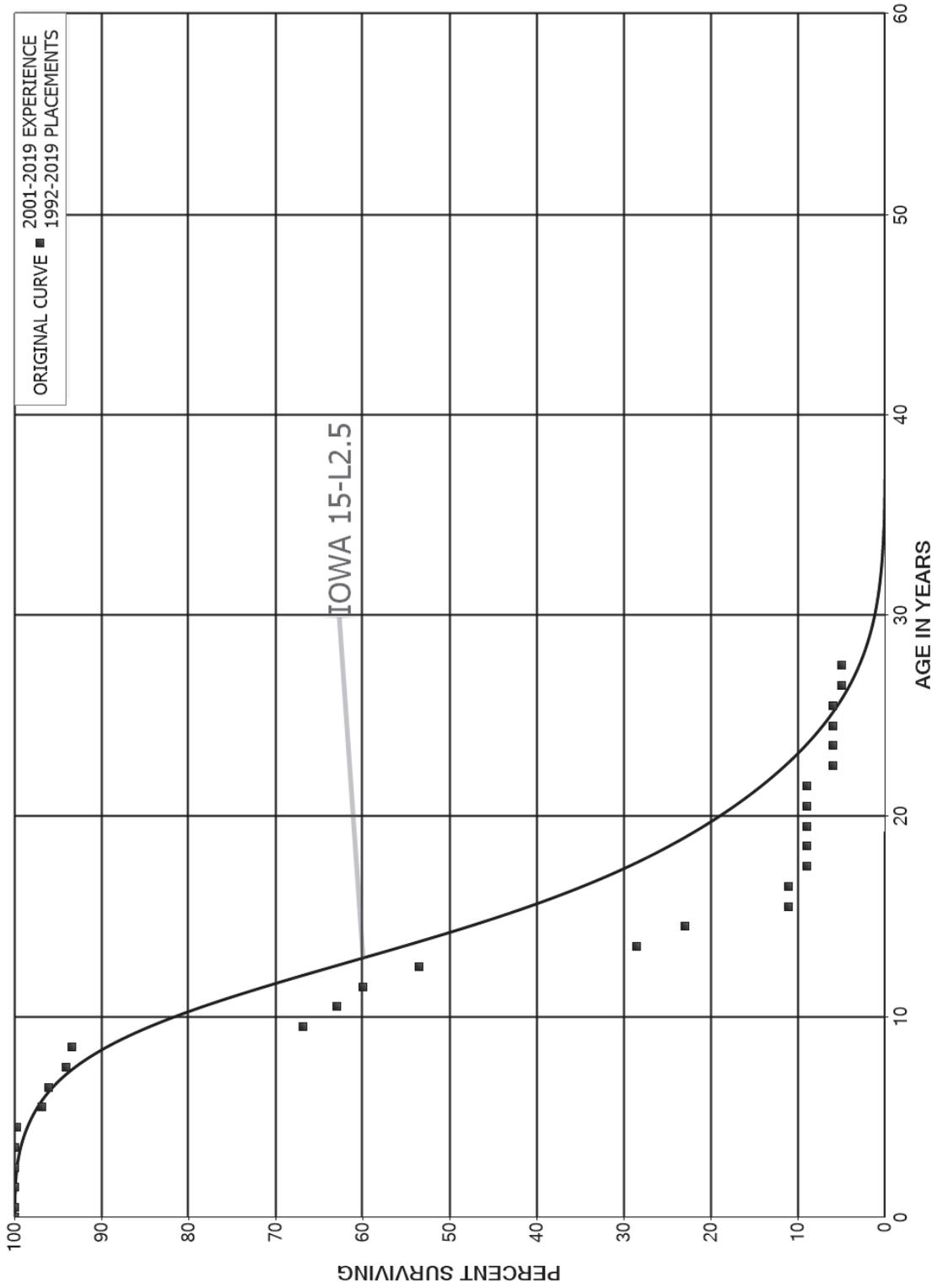
PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS

ACCOUNT 363.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2019			EXPERIENCE BAND 1999-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	151,010		0.0000		
80.5	144,755	1,628	0.0112		
81.5					
82.5	717		0.0000		
83.5	717		0.0000		
84.5	717		0.0000		
85.5	717		0.0000		
86.5	717		0.0000		
87.5	717		0.0000		
88.5	717		0.0000		
89.5	717		0.0000		
90.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 364.00 FLOW MEASURING DEVICES
 ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 364.00 FLOW MEASURING DEVICES

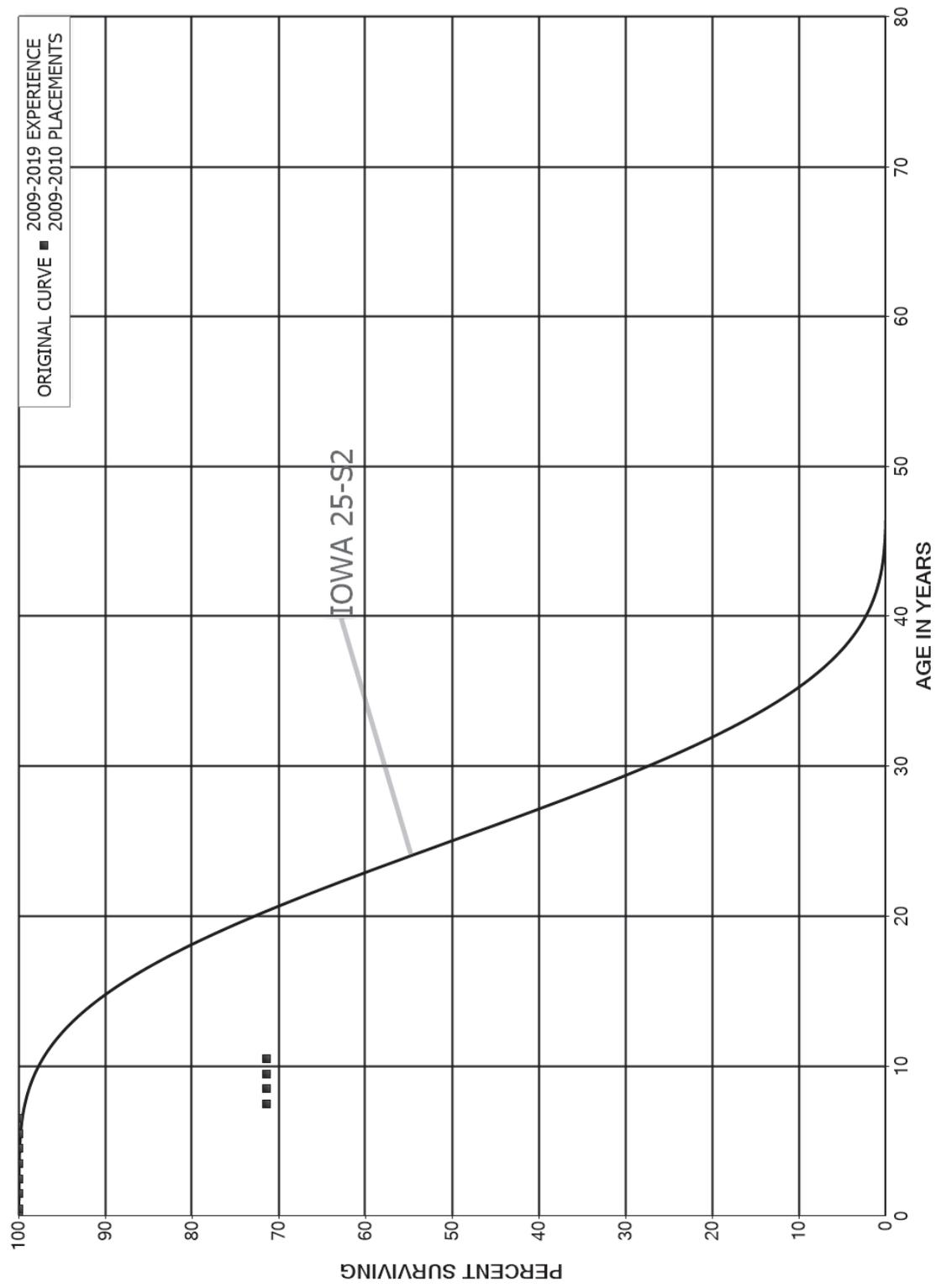
ORIGINAL LIFE TABLE

PLACEMENT BAND 1992-2019

EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,359,184		0.0000	1.0000	100.00
0.5	993,961		0.0000	1.0000	100.00
1.5	1,007,023		0.0000	1.0000	100.00
2.5	1,088,761		0.0000	1.0000	100.00
3.5	829,368	2,564	0.0031	0.9969	100.00
4.5	790,917	22,463	0.0284	0.9716	99.69
5.5	745,466	5,882	0.0079	0.9921	96.86
6.5	575,156	12,254	0.0213	0.9787	96.10
7.5	576,785	4,337	0.0075	0.9925	94.05
8.5	639,652	181,670	0.2840	0.7160	93.34
9.5	332,968	19,182	0.0576	0.9424	66.83
10.5	221,704	10,816	0.0488	0.9512	62.98
11.5	90,287	9,617	0.1065	0.8935	59.91
12.5	71,639	33,466	0.4671	0.5329	53.53
13.5	31,704	6,133	0.1934	0.8066	28.52
14.5	16,849	8,739	0.5187	0.4813	23.00
15.5	16,281		0.0000	1.0000	11.07
16.5	16,281	3,203	0.1967	0.8033	11.07
17.5	13,078		0.0000	1.0000	8.90
18.5	13,078		0.0000	1.0000	8.90
19.5	13,078		0.0000	1.0000	8.90
20.5	13,078		0.0000	1.0000	8.90
21.5	13,078	4,272	0.3266	0.6734	8.90
22.5	8,806		0.0000	1.0000	5.99
23.5	8,806		0.0000	1.0000	5.99
24.5	8,806		0.0000	1.0000	5.99
25.5	8,806	1,522	0.1728	0.8272	5.99
26.5	7,285		0.0000	1.0000	4.95
27.5					4.95

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS
 ORIGINAL AND SMOOTH SURVIVOR CURVES



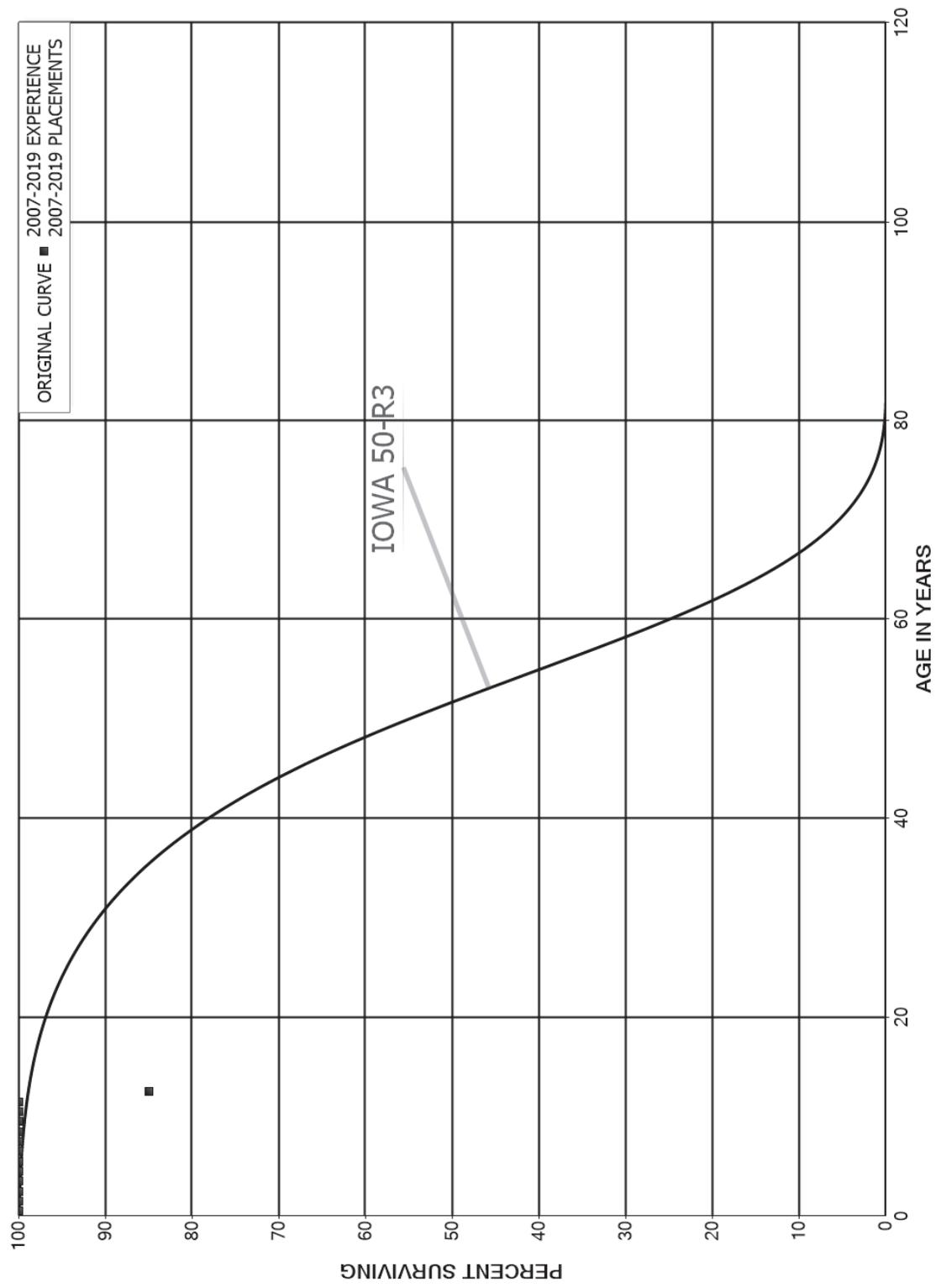
PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS

ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2009-2010			EXPERIENCE BAND 2009-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	20,918		0.0000	1.0000	100.00
0.5	20,918		0.0000	1.0000	100.00
1.5	20,918		0.0000	1.0000	100.00
2.5	20,918		0.0000	1.0000	100.00
3.5	20,918		0.0000	1.0000	100.00
4.5	20,918		0.0000	1.0000	100.00
5.5	20,918		0.0000	1.0000	100.00
6.5	20,918	5,980	0.2859	0.7141	100.00
7.5	14,938		0.0000	1.0000	71.41
8.5	14,938		0.0000	1.0000	71.41
9.5	14,938		0.0000	1.0000	71.41
10.5					71.41

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 370.00 RECEIVING WELLS
 ORIGINAL AND SMOOTH SURVIVOR CURVES



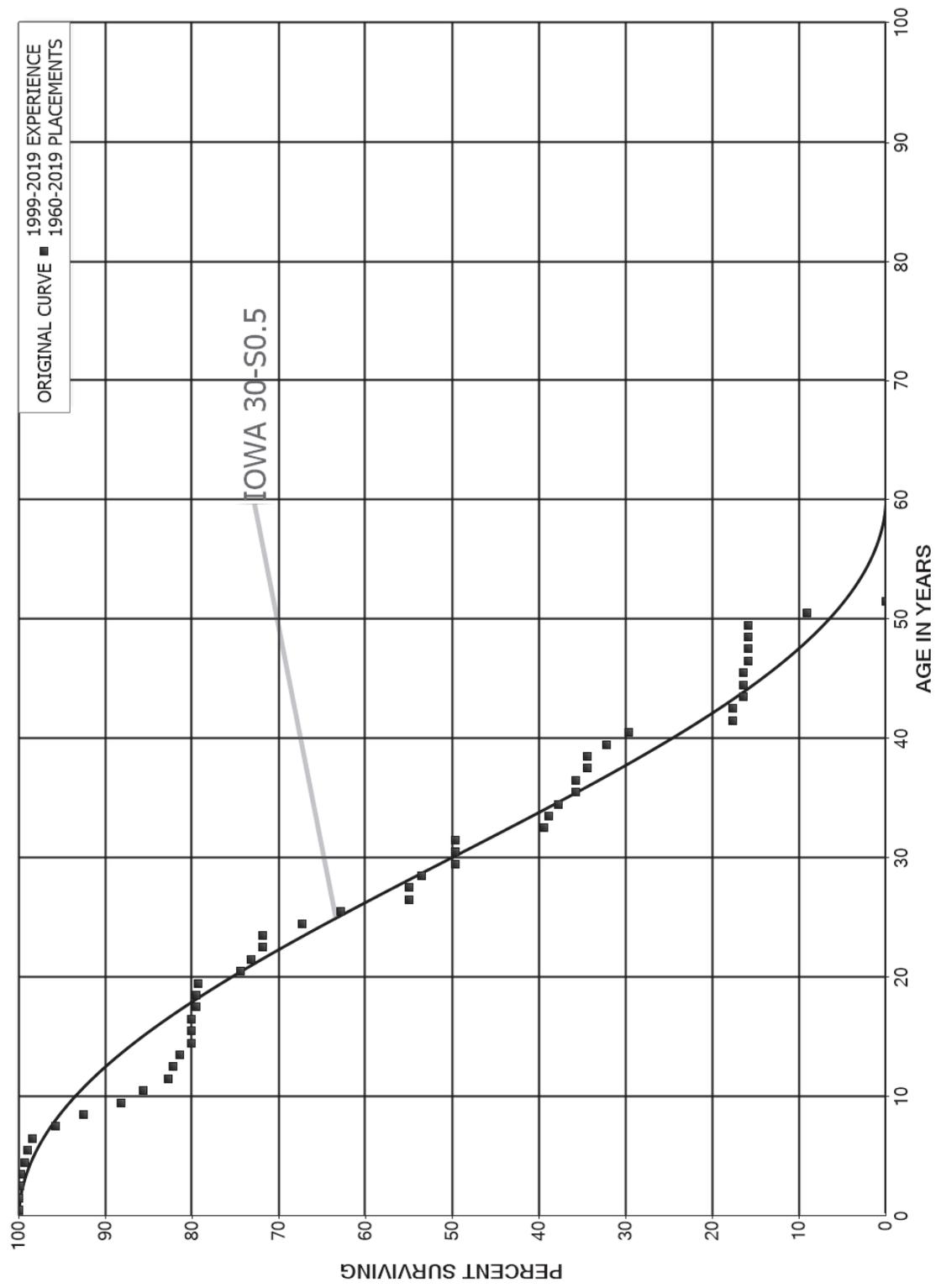
PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 370.00 RECEIVING WELLS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2007-2019			EXPERIENCE BAND 2007-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	121,180		0.0000	1.0000	100.00
0.5	111,148		0.0000	1.0000	100.00
1.5	111,148		0.0000	1.0000	100.00
2.5	132,949		0.0000	1.0000	100.00
3.5	132,949		0.0000	1.0000	100.00
4.5	132,949		0.0000	1.0000	100.00
5.5	132,949		0.0000	1.0000	100.00
6.5	99,482		0.0000	1.0000	100.00
7.5	99,482		0.0000	1.0000	100.00
8.5	99,482		0.0000	1.0000	100.00
9.5	99,482		0.0000	1.0000	100.00
10.5	7,370		0.0000	1.0000	100.00
11.5	7,370	1,109	0.1505	0.8495	100.00
12.5					84.95

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 371.00 PUMPING EQUIPMENT
 ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1960-2019

EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	13,928,914		0.0000	1.0000	100.00
0.5	8,653,630	5,419	0.0006	0.9994	100.00
1.5	11,021,964	12,306	0.0011	0.9989	99.94
2.5	10,781,219	12,096	0.0011	0.9989	99.83
3.5	9,453,412	44,345	0.0047	0.9953	99.71
4.5	6,817,321	23,246	0.0034	0.9966	99.25
5.5	5,785,361	27,560	0.0048	0.9952	98.91
6.5	5,413,591	148,677	0.0275	0.9725	98.44
7.5	3,768,518	126,794	0.0336	0.9664	95.73
8.5	3,446,810	160,001	0.0464	0.9536	92.51
9.5	2,549,487	73,710	0.0289	0.9711	88.22
10.5	1,455,129	50,056	0.0344	0.9656	85.67
11.5	1,043,502	7,445	0.0071	0.9929	82.72
12.5	1,137,255	10,025	0.0088	0.9912	82.13
13.5	837,345	14,096	0.0168	0.9832	81.41
14.5	784,395		0.0000	1.0000	80.04
15.5	677,887		0.0000	1.0000	80.04
16.5	534,434	3,610	0.0068	0.9932	80.04
17.5	610,401	101	0.0002	0.9998	79.50
18.5	664,971	1,413	0.0021	0.9979	79.48
19.5	663,558	41,426	0.0624	0.9376	79.31
20.5	588,736	9,514	0.0162	0.9838	74.36
21.5	638,927	11,409	0.0179	0.9821	73.16
22.5	599,786		0.0000	1.0000	71.85
23.5	517,501	33,177	0.0641	0.9359	71.85
24.5	484,324	31,555	0.0652	0.9348	67.25
25.5	497,723	62,415	0.1254	0.8746	62.87
26.5	428,133		0.0000	1.0000	54.98
27.5	312,603	8,673	0.0277	0.9723	54.98
28.5	241,647	17,595	0.0728	0.9272	53.46
29.5	235,281		0.0000	1.0000	49.56
30.5	280,168		0.0000	1.0000	49.56
31.5	280,168	57,666	0.2058	0.7942	49.56
32.5	222,502	2,887	0.0130	0.9870	39.36
33.5	140,599	3,932	0.0280	0.9720	38.85
34.5	136,159	7,170	0.0527	0.9473	37.77
35.5	183,946		0.0000	1.0000	35.78
36.5	183,946	7,008	0.0381	0.9619	35.78
37.5	176,938		0.0000	1.0000	34.41
38.5	127,299	8,408	0.0660	0.9340	34.41

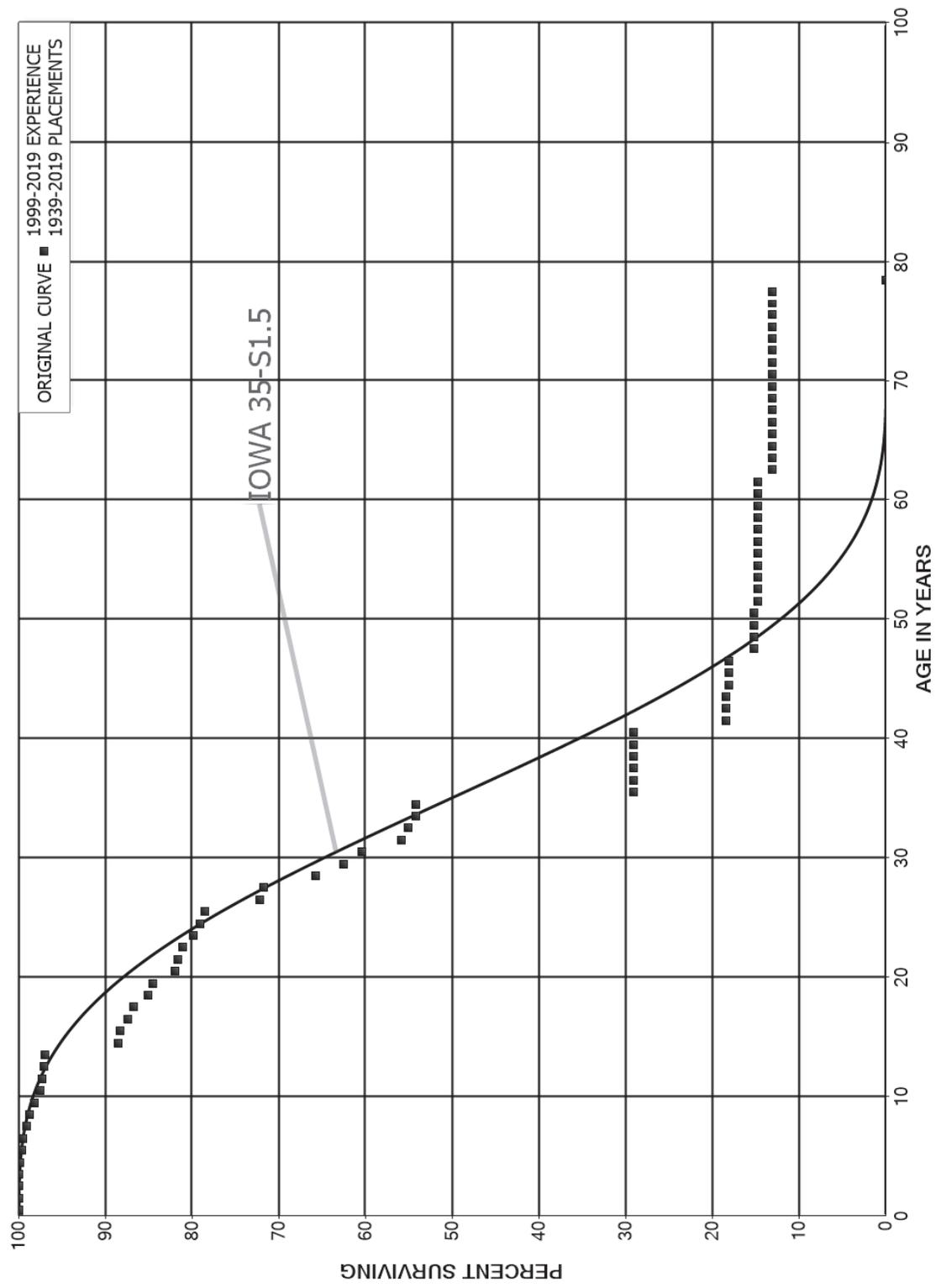
PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1960-2019			EXPERIENCE BAND 1999-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	128,004	9,910	0.0774	0.9226	32.14
40.5	140,361	56,891	0.4053	0.5947	29.65
41.5	83,470		0.0000	1.0000	17.63
42.5	83,470	6,122	0.0733	0.9267	17.63
43.5	28,842		0.0000	1.0000	16.34
44.5	28,842		0.0000	1.0000	16.34
45.5	28,842	860	0.0298	0.9702	16.34
46.5	27,983		0.0000	1.0000	15.85
47.5	21,408		0.0000	1.0000	15.85
48.5	5,141		0.0000	1.0000	15.85
49.5	5,141	2,187	0.4255	0.5745	15.85
50.5	2,953	2,953	1.0000		9.11
51.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 380.00 TREATMENT EQUIPMENT
 ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1939-2019

EXPERIENCE BAND 1999-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	52,484,979		0.0000	1.0000	100.00
0.5	52,338,297		0.0000	1.0000	100.00
1.5	64,377,580	1,853	0.0000	1.0000	100.00
2.5	61,280,085	2,456	0.0000	1.0000	100.00
3.5	56,645,719	97,216	0.0017	0.9983	99.99
4.5	44,542,853	95,360	0.0021	0.9979	99.82
5.5	39,192,994	29,279	0.0007	0.9993	99.61
6.5	37,993,990	195,343	0.0051	0.9949	99.53
7.5	37,038,634	104,008	0.0028	0.9972	99.02
8.5	38,046,057	237,211	0.0062	0.9938	98.74
9.5	28,856,102	179,693	0.0062	0.9938	98.13
10.5	11,015,164	26,343	0.0024	0.9976	97.52
11.5	15,100,040	30,352	0.0020	0.9980	97.28
12.5	16,280,292	28,816	0.0018	0.9982	97.09
13.5	16,807,417	1,468,058	0.0873	0.9127	96.92
14.5	14,676,816	22,218	0.0015	0.9985	88.45
15.5	11,808,330	121,942	0.0103	0.9897	88.32
16.5	11,627,778	92,492	0.0080	0.9920	87.41
17.5	12,550,432	231,211	0.0184	0.9816	86.71
18.5	10,724,551	78,054	0.0073	0.9927	85.11
19.5	10,812,422	322,982	0.0299	0.9701	84.49
20.5	9,468,414	37,906	0.0040	0.9960	81.97
21.5	9,609,732	62,020	0.0065	0.9935	81.64
22.5	9,543,450	153,592	0.0161	0.9839	81.11
23.5	9,334,263	87,607	0.0094	0.9906	79.81
24.5	9,070,811	59,133	0.0065	0.9935	79.06
25.5	8,792,217	707,485	0.0805	0.9195	78.54
26.5	4,703,706	32,521	0.0069	0.9931	72.22
27.5	4,778,474	397,707	0.0832	0.9168	71.72
28.5	6,059,797	298,086	0.0492	0.9508	65.75
29.5	6,184,153	215,062	0.0348	0.9652	62.52
30.5	5,152,304	387,965	0.0753	0.9247	60.35
31.5	5,356,247	72,674	0.0136	0.9864	55.80
32.5	3,421,800	52,448	0.0153	0.9847	55.05
33.5	2,753,091		0.0000	1.0000	54.20
34.5	2,272,767	1,055,181	0.4643	0.5357	54.20
35.5	635,826		0.0000	1.0000	29.04
36.5	779,480		0.0000	1.0000	29.04
37.5	801,627		0.0000	1.0000	29.04
38.5	778,140		0.0000	1.0000	29.04

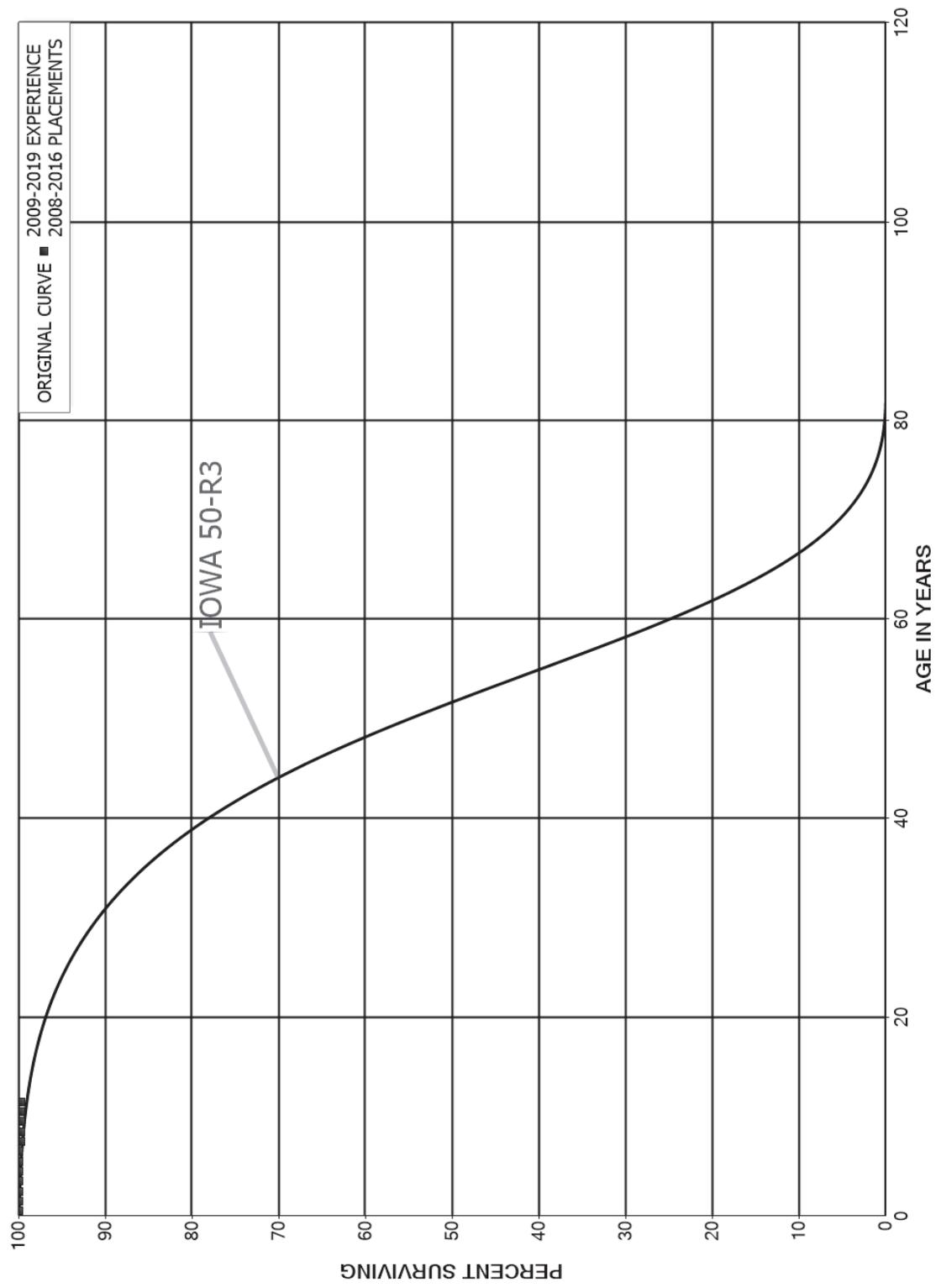
PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019			EXPERIENCE BAND 1999-2019			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	778,140	411	0.0005	0.9995	29.04	
40.5	777,730	285,407	0.3670	0.6330	29.02	
41.5	15,823,498		0.0000	1.0000	18.37	
42.5	15,823,498		0.0000	1.0000	18.37	
43.5	15,823,498	268,317	0.0170	0.9830	18.37	
44.5	515,644		0.0000	1.0000	18.06	
45.5	515,644		0.0000	1.0000	18.06	
46.5	371,038	60,316	0.1626	0.8374	18.06	
47.5	288,575		0.0000	1.0000	15.12	
48.5	288,575		0.0000	1.0000	15.12	
49.5	288,575		0.0000	1.0000	15.12	
50.5	288,575	6,818	0.0236	0.9764	15.12	
51.5	281,757	315	0.0011	0.9989	14.77	
52.5	107,182		0.0000	1.0000	14.75	
53.5	107,182	462	0.0043	0.9957	14.75	
54.5	23,321		0.0000	1.0000	14.69	
55.5	23,321		0.0000	1.0000	14.69	
56.5	298,010		0.0000	1.0000	14.69	
57.5	298,010		0.0000	1.0000	14.69	
58.5	298,010		0.0000	1.0000	14.69	
59.5	25,215		0.0000	1.0000	14.69	
60.5	25,215		0.0000	1.0000	14.69	
61.5	25,215	2,761	0.1095	0.8905	14.69	
62.5	1,894		0.0000	1.0000	13.08	
63.5	1,894		0.0000	1.0000	13.08	
64.5	1,894		0.0000	1.0000	13.08	
65.5	1,894		0.0000	1.0000	13.08	
66.5	1,894		0.0000	1.0000	13.08	
67.5	1,894		0.0000	1.0000	13.08	
68.5	1,894		0.0000	1.0000	13.08	
69.5	1,894		0.0000	1.0000	13.08	
70.5	1,894		0.0000	1.0000	13.08	
71.5	1,894		0.0000	1.0000	13.08	
72.5	1,894		0.0000	1.0000	13.08	
73.5	1,894		0.0000	1.0000	13.08	
74.5	1,894		0.0000	1.0000	13.08	
75.5	1,894		0.0000	1.0000	13.08	
76.5	1,894		0.0000	1.0000	13.08	
77.5	1,894	1,894	1.0000		13.08	
78.5						

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 381.00 PLANT SEWERS
 ORIGINAL AND SMOOTH SURVIVOR CURVES



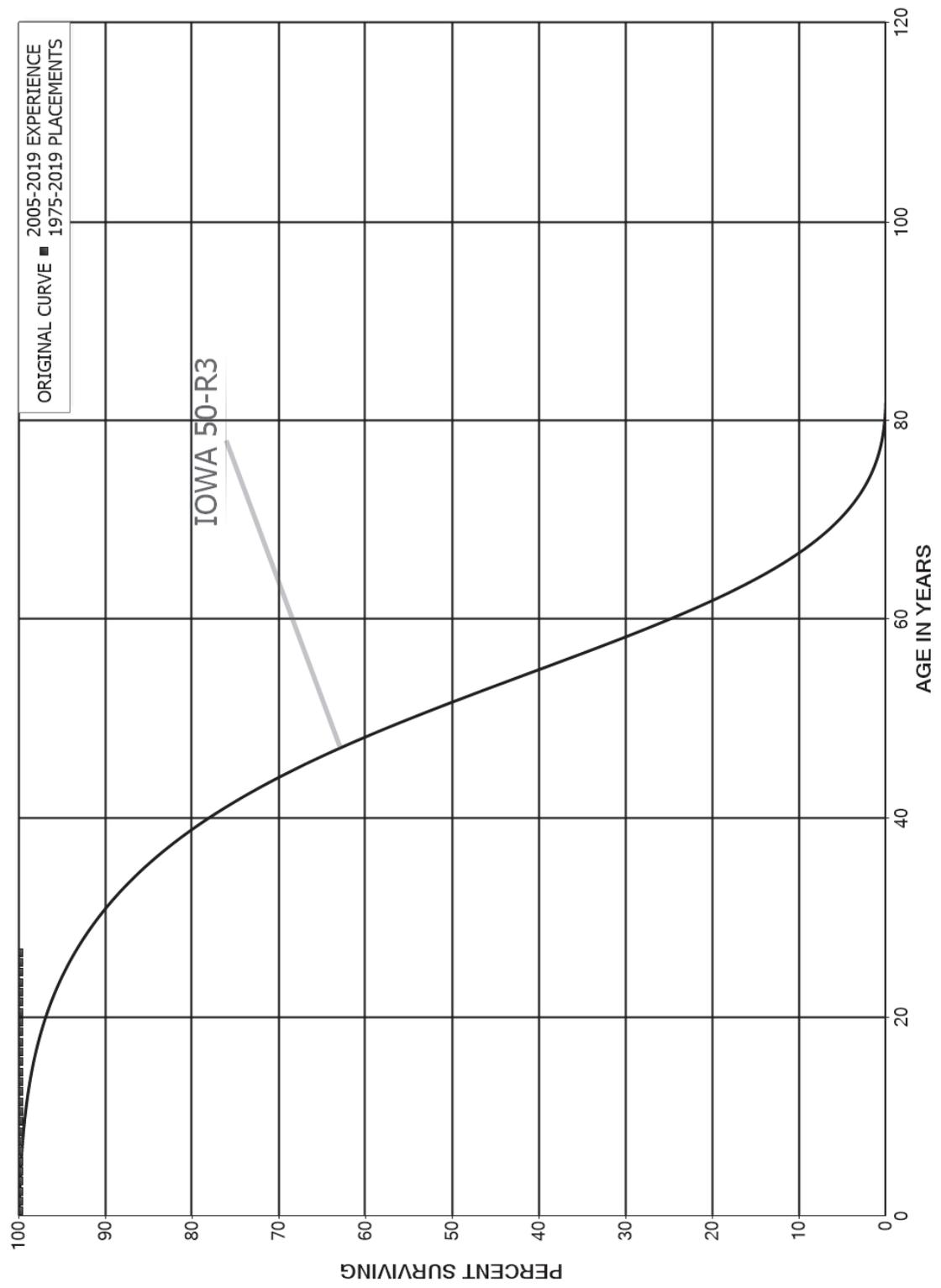
PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 381.00 PLANT SEWERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2008-2016			EXPERIENCE BAND 2009-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	5,524,134		0.0000	1.0000	100.00
0.5	6,227,961		0.0000	1.0000	100.00
1.5	6,227,961		0.0000	1.0000	100.00
2.5	6,227,961		0.0000	1.0000	100.00
3.5	6,182,721		0.0000	1.0000	100.00
4.5	6,175,263		0.0000	1.0000	100.00
5.5	5,940,945		0.0000	1.0000	100.00
6.5	5,940,945	13,300	0.0022	0.9978	100.00
7.5	5,925,961	2,120	0.0004	0.9996	99.78
8.5	5,917,243		0.0000	1.0000	99.74
9.5	4,729,279		0.0000	1.0000	99.74
10.5	294,412		0.0000	1.0000	99.74
11.5					99.74

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 382.00 OUTFALL SEWER LINES
 ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1975-2019

EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,700,716		0.0000	1.0000	100.00
0.5	1,605,061		0.0000	1.0000	100.00
1.5	360,675		0.0000	1.0000	100.00
2.5	355,425		0.0000	1.0000	100.00
3.5	355,425		0.0000	1.0000	100.00
4.5	355,425		0.0000	1.0000	100.00
5.5	255,003		0.0000	1.0000	100.00
6.5	264,243		0.0000	1.0000	100.00
7.5	265,939		0.0000	1.0000	100.00
8.5	265,939		0.0000	1.0000	100.00
9.5	238,111		0.0000	1.0000	100.00
10.5	212,060		0.0000	1.0000	100.00
11.5	244,789	6	0.0000	1.0000	100.00
12.5	244,783		0.0000	1.0000	100.00
13.5	43,666		0.0000	1.0000	100.00
14.5	34,425		0.0000	1.0000	100.00
15.5	32,729		0.0000	1.0000	100.00
16.5	32,729		0.0000	1.0000	100.00
17.5	32,729		0.0000	1.0000	100.00
18.5	32,729		0.0000	1.0000	100.00
19.5	32,729		0.0000	1.0000	100.00
20.5	32,729		0.0000	1.0000	100.00
21.5	202,476		0.0000	1.0000	100.00
22.5	202,476		0.0000	1.0000	100.00
23.5	202,476		0.0000	1.0000	100.00
24.5	202,476		0.0000	1.0000	100.00
25.5	202,476		0.0000	1.0000	100.00
26.5					100.00
27.5					
28.5					
29.5					
30.5					
31.5					
32.5					
33.5					
34.5					
35.5					
36.5	4,984		0.0000		
37.5	4,984		0.0000		
38.5	4,984		0.0000		

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

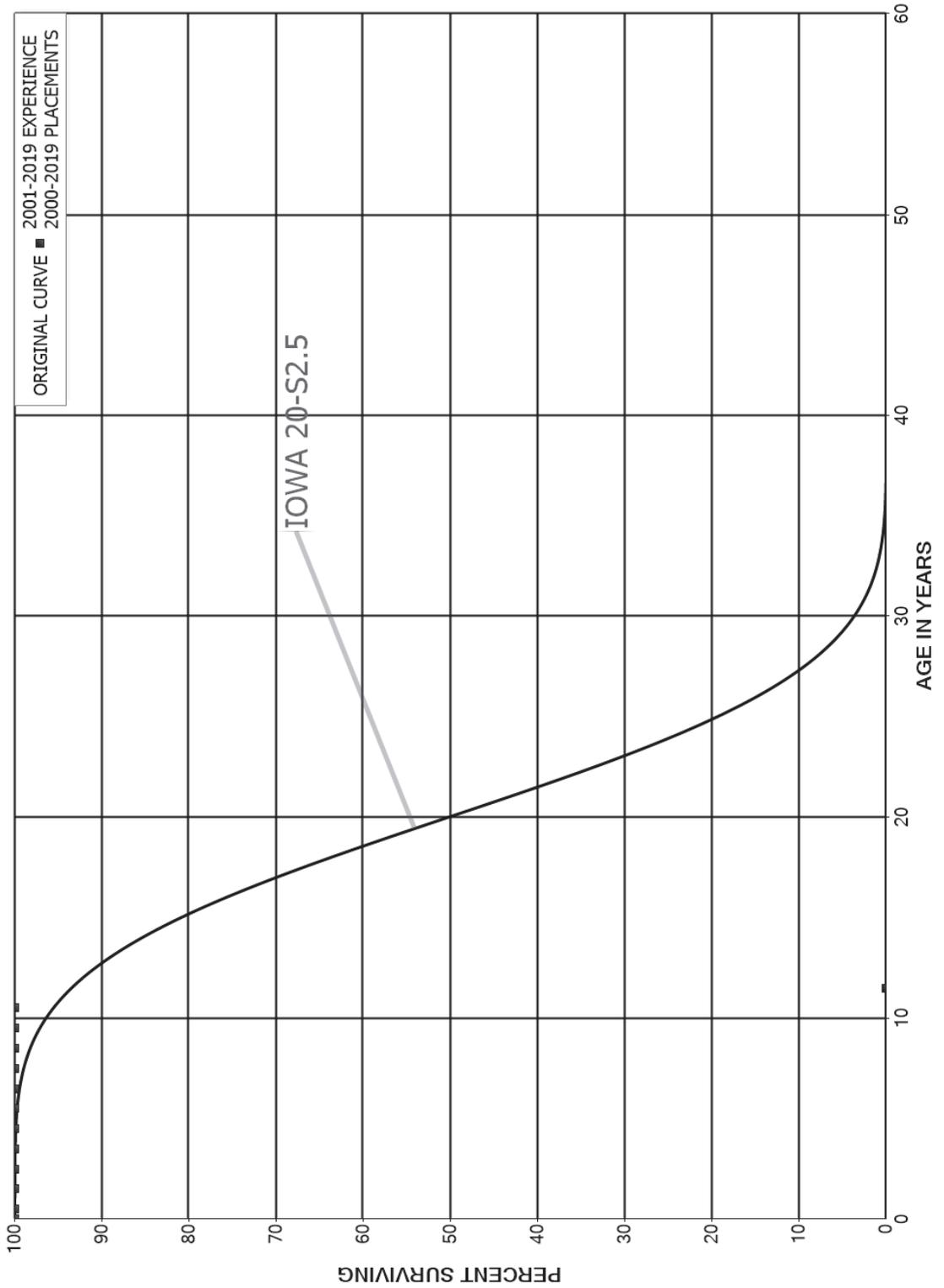
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1975-2019

EXPERIENCE BAND 2005-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,984		0.0000		
40.5	4,984		0.0000		
41.5	4,984		0.0000		
42.5	4,984		0.0000		
43.5	4,984		0.0000		
44.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT
 ORIGINAL AND SMOOTH SURVIVOR CURVES



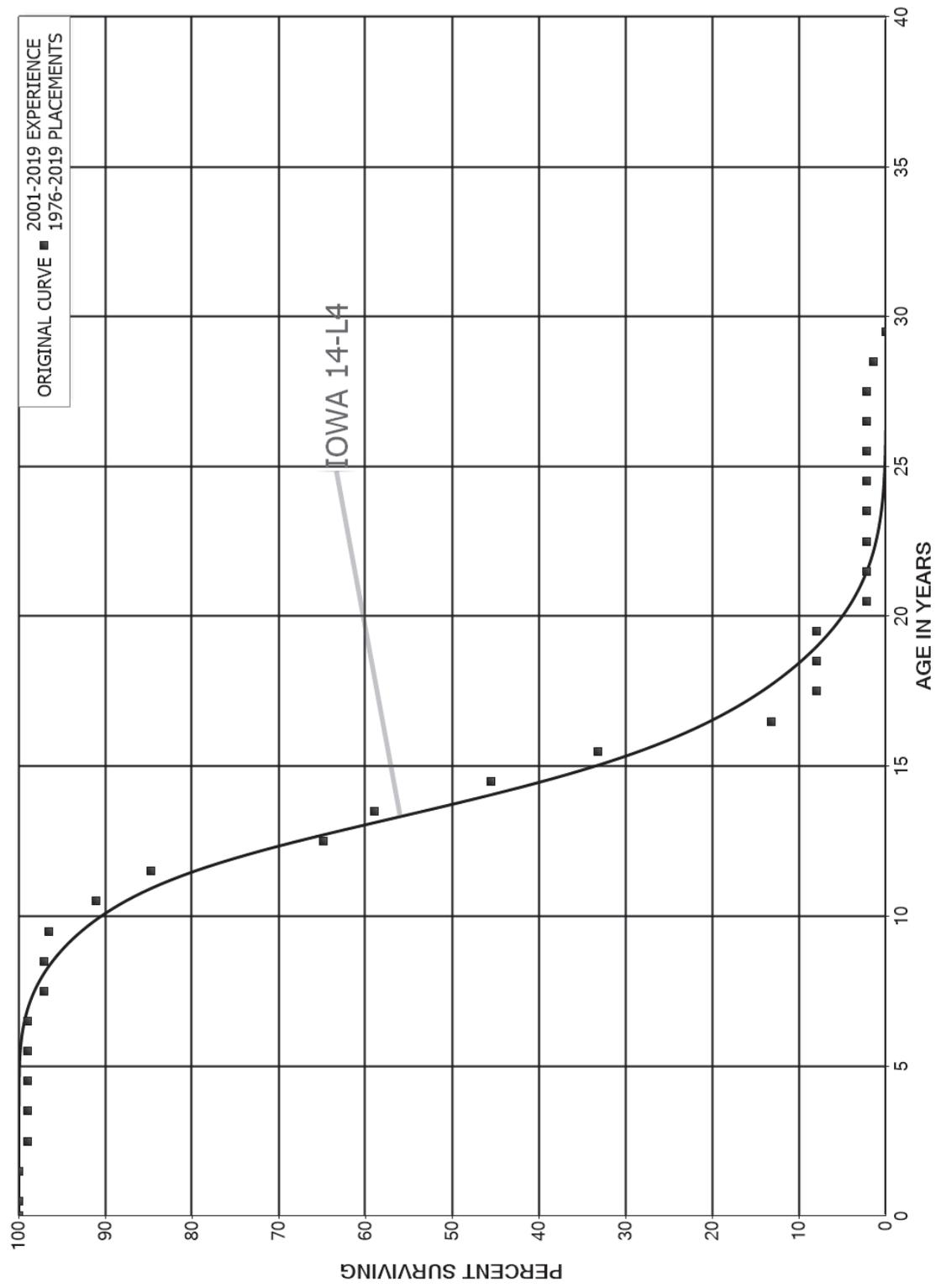
PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 2000-2019			EXPERIENCE BAND 2001-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	737,756		0.0000	1.0000	100.00
0.5	437,340		0.0000	1.0000	100.00
1.5	405,165		0.0000	1.0000	100.00
2.5	4,547,918		0.0000	1.0000	100.00
3.5	4,547,918		0.0000	1.0000	100.00
4.5	4,547,918	2,997	0.0007	0.9993	100.00
5.5	4,544,921		0.0000	1.0000	99.93
6.5	393,353		0.0000	1.0000	99.93
7.5	393,353		0.0000	1.0000	99.93
8.5	281,642		0.0000	1.0000	99.93
9.5	8,492		0.0000	1.0000	99.93
10.5	8,492	8,492	1.0000		99.93
11.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 391.00 TRANSPORTATION EQUIPMENT
 ORIGINAL AND SMOOTH SURVIVOR CURVES



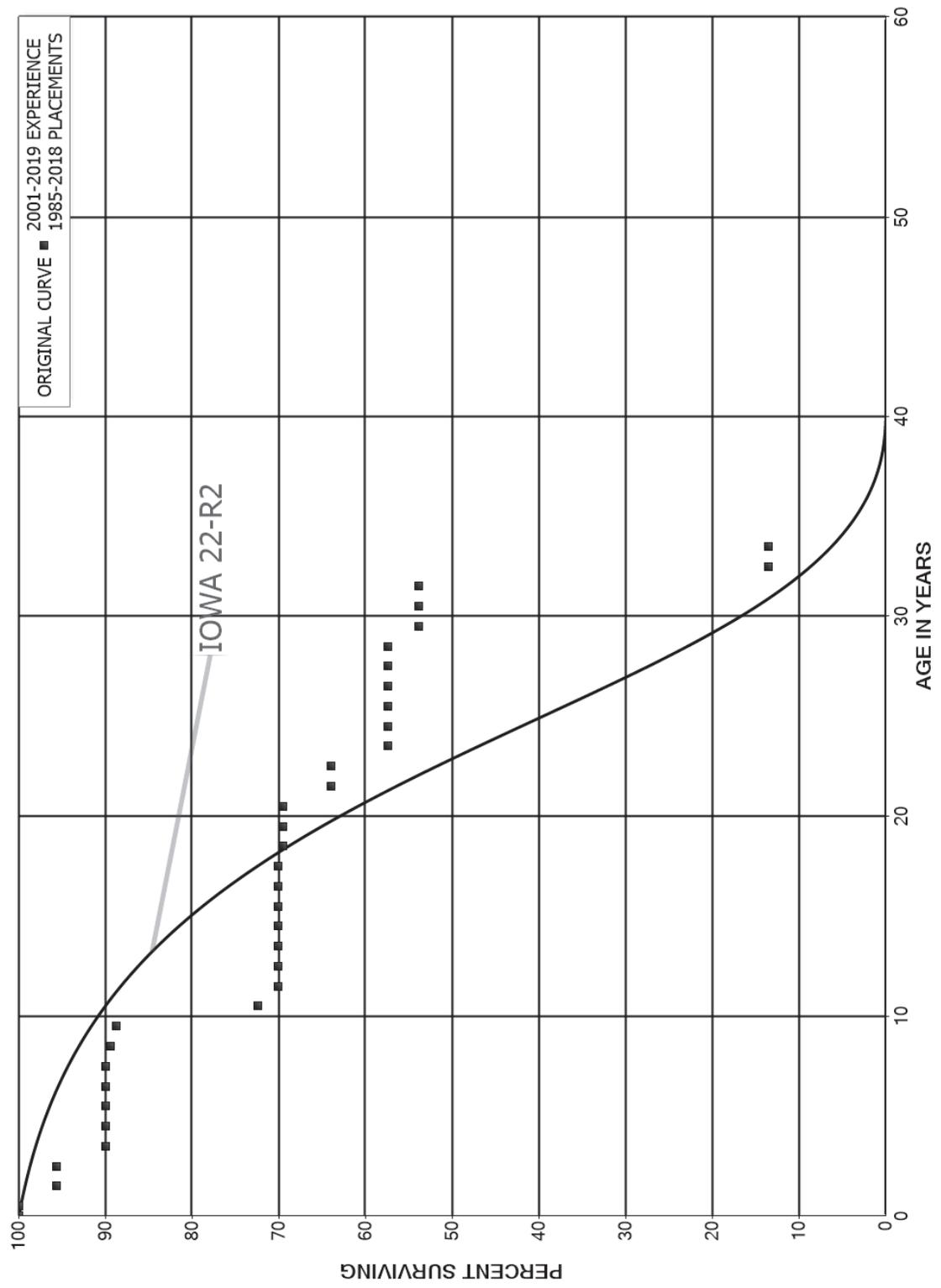
PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1976-2019			EXPERIENCE BAND 2001-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,168,919		0.0000	1.0000	100.00
0.5	3,692,372		0.0000	1.0000	100.00
1.5	1,458,511	14,523	0.0100	0.9900	100.00
2.5	2,332,879		0.0000	1.0000	99.00
3.5	2,514,168		0.0000	1.0000	99.00
4.5	1,930,107		0.0000	1.0000	99.00
5.5	1,664,209		0.0000	1.0000	99.00
6.5	1,677,203	32,676	0.0195	0.9805	99.00
7.5	1,535,566		0.0000	1.0000	97.08
8.5	1,373,777	8,793	0.0064	0.9936	97.08
9.5	1,545,830	87,008	0.0563	0.9437	96.45
10.5	879,899	61,030	0.0694	0.9306	91.03
11.5	743,329	174,600	0.2349	0.7651	84.71
12.5	440,822	40,215	0.0912	0.9088	64.81
13.5	348,542	79,500	0.2281	0.7719	58.90
14.5	276,542	75,000	0.2712	0.7288	45.47
15.5	195,354	117,872	0.6034	0.3966	33.14
16.5	51,900	20,700	0.3988	0.6012	13.14
17.5	31,200		0.0000	1.0000	7.90
18.5	32,855		0.0000	1.0000	7.90
19.5	32,855	23,700	0.7214	0.2786	7.90
20.5	9,155		0.0000	1.0000	2.20
21.5	9,155		0.0000	1.0000	2.20
22.5	9,155		0.0000	1.0000	2.20
23.5	9,155		0.0000	1.0000	2.20
24.5	14,155		0.0000	1.0000	2.20
25.5	14,155		0.0000	1.0000	2.20
26.5	14,155		0.0000	1.0000	2.20
27.5	14,155	5,000	0.3532	0.6468	2.20
28.5	9,155	9,155	1.0000		1.42
29.5					

PENNSYLVANIA-AMERICAN WATER COMPANY
 ALL WASTEWATER OPERATIONS
 ACCOUNT 395.00 POWER OPERATED EQUIPMENT
 ORIGINAL AND SMOOTH SURVIVOR CURVES



PENNSYLVANIA-AMERICAN WATER COMPANY
ALL WASTEWATER OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1985-2018

EXPERIENCE BAND 2001-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	192,967		0.0000	1.0000	100.00
0.5	192,967	8,551	0.0443	0.9557	100.00
1.5	127,706		0.0000	1.0000	95.57
2.5	255,380	14,864	0.0582	0.9418	95.57
3.5	324,176		0.0000	1.0000	90.01
4.5	885,603		0.0000	1.0000	90.01
5.5	967,489		0.0000	1.0000	90.01
6.5	1,410,131		0.0000	1.0000	90.01
7.5	1,250,710	8,033	0.0064	0.9936	90.01
8.5	871,073	6,988	0.0080	0.9920	89.43
9.5	536,633	98,717	0.1840	0.8160	88.71
10.5	191,853	6,125	0.0319	0.9681	72.39
11.5	137,458		0.0000	1.0000	70.08
12.5	190,308		0.0000	1.0000	70.08
13.5	169,091		0.0000	1.0000	70.08
14.5	169,091		0.0000	1.0000	70.08
15.5	169,587		0.0000	1.0000	70.08
16.5	190,470		0.0000	1.0000	70.08
17.5	117,685	875	0.0074	0.9926	70.08
18.5	116,810		0.0000	1.0000	69.56
19.5	116,810		0.0000	1.0000	69.56
20.5	124,335	9,999	0.0804	0.9196	69.56
21.5	124,336		0.0000	1.0000	63.97
22.5	124,336	12,782	0.1028	0.8972	63.97
23.5	111,554		0.0000	1.0000	57.39
24.5	111,554		0.0000	1.0000	57.39
25.5	111,554		0.0000	1.0000	57.39
26.5	18,021		0.0000	1.0000	57.39
27.5	8,021		0.0000	1.0000	57.39
28.5	8,021	496	0.0618	0.9382	57.39
29.5	30,053		0.0000	1.0000	53.84
30.5	30,053		0.0000	1.0000	53.84
31.5	30,053	22,528	0.7496	0.2504	53.84
32.5	7,525		0.0000	1.0000	13.48
33.5					13.48

**PART VII. DETAILED DEPRECIATION
CALCULATIONS**

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		DEPRECIATED ORIGINAL COST CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
			(2)	(3)		
1915	78,022	59,761	18,261		18,261	0.0
1920	114,900	86,872	28,028		46,289	0.0
1929	18,091	13,510	4,581		50,870	0.0
1930	184,450	135,869	48,581		99,451	0.0
1932	583	556	27		99,478	0.0
1935	14,835	10,663	4,172		103,650	0.0
1939	84,531	63,795	20,736		124,386	0.0
1945	35,363	23,891	11,472		135,858	0.0
1946	99,765	67,762	32,003		167,861	0.0
1955	43,995	28,650	15,345		183,206	0.0
1957	1,518,853	1,017,067	501,786		684,992	0.2
1961	357,389	283,118	74,271		759,263	0.2
1962	33,342	20,391	12,951		772,214	0.2
1965	785,298	501,845	283,453		1,055,667	0.3
1966	35,552,266	23,406,402	12,145,864		13,201,531	3.4
1967	24,090,806	18,301,264	5,789,542		18,991,073	4.9
1968	81,723	53,136	28,587		19,019,660	4.9
1969	498,942	283,522	215,420		19,235,080	4.9
1970	1,333,340	860,736	472,604		19,707,684	5.0
1971	553	470	83		19,707,767	5.0
1972	8,088,543	4,453,273	3,635,270		23,343,037	6.0
1973	160,521	71,125	89,396		23,432,433	6.0
1974	1,568,232	563,944	1,004,288		24,436,721	6.3
1975	7,548,446	4,284,781	3,263,665		27,700,386	7.1
1976	1,277,920	507,662	770,258		28,470,644	7.3
1977	700,869	291,050	409,819		28,880,463	7.4
1978	20,861,097	13,941,072	6,920,025		35,800,488	9.2
1979	145,895	69,869	76,026		35,876,514	9.2
1980	1,387,735	824,071	563,664		36,440,178	9.3
1981	232,882	104,364	128,518		36,568,696	9.4
1982	182,410	100,394	82,016		36,650,712	9.4
1983	872,723	429,311	443,412		37,094,124	9.5
1984	4,217,673	2,084,569	2,133,104		39,227,228	10.0
1985	6,928,092	3,544,780	3,383,312		42,610,540	10.9
1986	2,165,127	1,158,341	1,006,786		43,617,326	11.2
1987	2,434,920	1,224,572	1,210,348		44,827,674	11.5
1988	5,165,453	2,336,168	2,829,285		47,656,959	12.2
1989	3,759,259	1,684,419	2,074,840		49,731,799	12.7
1990	11,177,882	5,269,207	5,908,675		55,640,474	14.2
1991	673,710	456,179	217,531		55,858,005	14.3
1992	55,309,637	29,642,876	25,666,761		81,524,766	20.9
1993	14,142,676	6,554,602	7,588,074		89,112,840	22.8
1994	1,536,935	623,917	913,018		90,025,858	23.0
1995	19,349,193	7,836,499	11,512,694		101,538,552	26.0
1996	1,196,713	506,034	690,679		102,229,231	26.2

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		DEPRECIATED ORIGINAL COST CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
			(2)	(3)		
1997	6,818,938	2,173,095	4,645,843		106,875,074	27.3
1998	3,706,768	1,307,954	2,398,814		109,273,888	28.0
1999	3,734,900	1,233,896	2,501,004		111,774,892	28.6
2000	11,195,194	4,321,566	6,873,628		118,648,520	30.4
2001	3,106,732	970,735	2,135,997		120,784,517	30.9
2002	3,560,764	1,182,493	2,378,271		123,162,788	31.5
2003	1,986,129	620,948	1,365,181		124,527,969	31.9
2004	7,007,256	2,025,905	4,981,351		129,509,320	33.1
2005	15,335,623	4,281,176	11,054,447		140,563,767	36.0
2006	7,192,399	1,963,868	5,228,531		145,792,298	37.3
2007	8,351,902	1,868,457	6,483,445		152,275,743	39.0
2008	20,159,697	4,869,054	15,290,643		167,566,386	42.9
2009	56,123,062	17,080,871	39,042,191		206,608,577	52.9
2010	29,283,109	7,994,165	21,288,944		227,897,521	58.3
2011	1,909,862	610,221	1,299,641		229,197,162	58.6
2012	3,492,018	700,015	2,792,003		231,989,165	59.4
2013	9,764,203	1,833,121	7,931,082		239,920,247	61.4
2014	45,383,837	8,067,627	37,316,210		277,236,457	70.9
2015	17,506,475	2,795,493	14,710,982		291,947,439	74.7
2016	12,330,357	1,250,235	11,080,122		303,027,561	77.5
2017	24,036,222	1,993,723	22,042,499		325,070,060	83.2
2018	12,483,424	1,477,692	11,005,732		336,075,792	86.0
2019	22,175,170	1,349,675	20,825,495		356,901,287	91.3
2020	18,104,100	1,026,786	17,077,314		373,978,601	95.7
2021	18,238,338	602,789	17,635,549		391,614,150	100.2
2022	31,912,510	415,648	31,496,862		423,111,012	108.3
9999	44,946,498-	12,624,655-	32,321,843-		390,789,169	100.0
SUBTOTAL	585,964,083	195,174,913	390,789,173			
NONDEPRECIABLE	6,136,256		6,136,256			
TOTAL	592,100,339	195,174,913	396,925,429			

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2007	13,297.31	4,885	2,810	10,487	26.69	393
2008	399,842.08	138,585	79,730	320,112	27.34	11,709
2009	168,222.23	54,504	31,357	136,865	28.17	4,859
2011	8,426.67	2,354	1,354	7,073	29.65	239
2013	99,983.85	23,276	13,391	86,593	31.31	2,766
2014	14,625.88	3,058	1,759	12,867	32.15	400
2015	41,586.97	7,735	4,450	37,137	32.82	1,132
2016	36,446.89	5,897	3,393	33,054	33.66	982
2017	196,791.79	27,059	15,567	181,225	34.50	5,253
2018	185,177.42	20,999	12,081	173,096	35.18	4,920
2019	320,157.37	28,366	16,319	303,838	36.02	8,435
2020	492,334.80	31,411	18,071	474,264	36.71	12,919
2021	1,220,053.13	47,094	27,095	1,192,958	37.41	31,889
2022	205,674.00	2,694	1,550	204,124	37.67	5,419
9999	57,754.99-	6,754-	3,886-	53,869-		1,550-
	3,344,865.40	391,163	225,041	3,119,824		89,765

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.8 2.68

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1965	48,049.76	36,191	48,050			
1976	26,175.87	17,771	23,613	2,563	21.99	117
1978	11,112.75	7,319	9,725	1,388	23.07	60
1980	3,240.55	2,080	2,764	477	23.72	20
1982	25,179.65	15,808	21,005	4,175	24.01	174
1983	86,348.92	53,208	70,699	15,650	24.60	636
1984	30,472.67	18,537	24,631	5,842	24.79	236
1985	109,325.34	65,595	87,158	22,167	25.00	887
1986	67,905.67	39,901	53,018	14,888	25.61	581
1987	29,605.87	17,130	22,761	6,845	25.85	265
1988	229,627.41	130,704	173,671	55,956	26.11	2,143
1989	90,213.49	50,465	67,055	23,158	26.38	878
1990	129,473.10	71,107	94,482	34,991	26.67	1,312
1991	284,803.56	153,395	203,821	80,983	26.98	3,002
1992	76,512.88	40,368	53,638	22,875	27.31	838
1993	2,168,132.95	1,119,190	1,487,107	681,026	27.65	24,630
1994	48,978.62	24,705	32,826	16,153	28.00	577
1996	24,126.04	11,636	15,461	8,665	28.45	305
1997	208,032.48	97,609	129,697	78,335	28.85	2,715
1998	223,646.85	102,475	136,162	87,485	28.97	3,020
1999	304,491.38	135,255	179,718	124,773	29.41	4,243
2000	7,023.16	3,034	4,031	2,992	29.58	101
2001	178,683.61	74,904	99,528	79,156	29.78	2,658
2002	9,706.60	3,920	5,209	4,498	30.26	149
2003	270,629.51	105,546	140,243	130,387	30.50	4,275
2004	1,146,922.21	430,784	572,398	574,524	30.76	18,678
2005	465,434.51	167,789	222,947	242,488	31.04	7,812
2006	927,407.70	319,770	424,890	502,518	31.35	16,029
2007	515,893.83	170,348	226,347	289,547	31.45	9,207
2008	885,935.93	277,475	368,691	517,245	31.80	16,266
2009	2,929,433.06	870,042	1,156,055	1,773,378	31.95	55,505
2010	1,288,784.32	360,860	479,487	809,297	32.14	25,180
2011	14,558.79	3,817	5,072	9,487	32.36	293
2013	181,520.85	40,697	54,076	127,445	32.87	3,877
2014	4,039,231.06	827,235	1,099,176	2,940,055	33.00	89,093
2015	1,543,809.71	284,833	378,468	1,165,342	33.15	35,154
2016	544,557.62	88,872	118,087	426,471	33.34	12,792
2017	463,106.44	65,205	86,640	376,466	33.56	11,218
2018	387,884.99	45,732	60,766	327,119	33.67	9,715
2019	10,217.35	962	1,278	8,939	33.67	265
2020	80,166.47	5,531	7,349	72,817	33.73	2,159

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
2021	128,522.53	5,501	7,310	121,213	33.59	3,609
2022	349,461.49	5,172	6,872	342,589	33.40	10,257
9999	2,802,736.17-	866,702-	1,151,612-	1,651,124-		51,842-
	17,791,611.38	5,501,776	7,310,370	10,481,241		329,089
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						31.8 1.85

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1932	583.49	544	556	27	6.58	4
1946	498.66	431	441	58	12.00	5
1957	136,756.41	110,171	112,608	24,148	15.80	1,528
1961	345,597.08	269,911	275,882	69,715	17.24	4,044
1965	53,844.78	40,556	41,453	12,392	18.84	658
1967	23,953,261.76	17,814,041	18,208,139	5,745,123	19.13	300,320
1973	38,406.57	26,808	27,401	11,006	21.42	514
1975	418,623.48	286,338	292,673	125,950	21.94	5,741
1976	17,406.59	11,817	12,078	5,329	21.99	242
1978	20,476,818.01	13,486,032	13,784,382	6,692,436	23.07	290,093
1984	692,316.46	421,136	430,453	261,863	24.79	10,563
1985	133,649.60	80,190	81,964	51,686	25.00	2,067
1986	415,959.50	244,418	249,825	166,134	25.61	6,487
1988	1,121,049.18	638,101	652,218	468,831	26.11	17,956
1989	99,653.53	55,746	56,979	42,675	26.38	1,618
1992	52,485,507.70	27,691,354	28,303,966	24,181,542	27.31	885,446
1993	243,583.39	125,738	128,520	115,063	27.65	4,161
1994	16,658.86	8,403	8,589	8,070	28.00	288
1996	597,637.89	288,241	294,618	303,020	28.45	10,651
1997	69,650.20	32,680	33,403	36,247	28.85	1,256
1998	598,947.38	274,438	280,509	318,438	28.97	10,992
2000	6,477,023.33	2,798,074	2,859,975	3,617,048	29.58	122,280
2001	406,957.14	170,596	174,370	232,587	29.78	7,810
2002	784,906.16	316,945	323,957	460,949	30.26	15,233
2003	12,827.34	5,003	5,114	7,713	30.50	253
2004	15,540.81	5,837	5,966	9,575	30.76	311
2005	533,149.97	192,201	196,453	336,697	31.04	10,847
2006	441,275.55	152,152	155,518	285,758	31.35	9,115
2007	3,280.77	1,083	1,107	2,174	31.45	69
2008	789,634.02	247,313	252,784	536,850	31.80	16,882
2009	16,271,275.09	4,832,569	4,939,479	11,331,796	31.95	354,673
2010	11,050,095.07	3,094,027	3,162,476	7,887,619	32.14	245,414
2011	87,348.15	22,903	23,410	63,938	32.36	1,976
2012	9,694.20	2,362	2,414	7,280	32.60	223
2013	216,439.88	48,526	49,600	166,840	32.87	5,076
2014	10,054,488.22	2,059,159	2,104,713	7,949,775	33.00	240,902
2015	33,052.77	6,098	6,233	26,820	33.15	809
2016	116,091.34	18,946	19,365	96,726	33.34	2,901
2017	803,107.60	113,078	115,579	687,529	33.56	20,487
2018	205,454.24	24,223	24,759	180,695	33.67	5,367
2019	206,028.02	19,408	19,837	186,191	33.67	5,530

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
2021	1,099,986.27	47,079	48,121	1,051,865	33.59	31,315
2022	2,608,805.99	38,610	39,464	2,569,342	33.40	76,926
9999	2,010,278.00-	992,774-	1,014,737-	995,541-		35,591-
	152,132,594.45	75,130,512	76,792,614	75,339,980		2,693,442
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						28.0 1.77

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1						
NET SALVAGE PERCENT.. 0						
1972	351.44	318	351			
1984	10,250.17	8,327	10,250			
1992	14,121.18	10,251	14,121			
1993	16,080.63	11,433	16,081			
1994	27,752.03	19,376	27,752			
1997	5,610.34	3,677	5,610			
2002	1,034.69	592	1,035			
2003	38,095.34	21,097	38,095			
2007	1,117.27	525	1,117			
2008	353,420.27	157,837	353,420			
2009	50,650.68	21,405	50,651			
2010	38,401.51	15,265	37,723	679	18.95	36
2011	7,020.01	2,607	6,442	578	19.46	30
2012	28,171.36	9,702	23,975	4,196	19.99	210
2013	25,036.64	7,897	19,515	5,522	20.62	268
2014	410,668.52	117,615	290,649	120,020	21.18	5,667
2015	1,015,793.39	260,551	643,870	371,923	21.74	17,108
2016	9,135.90	2,055	5,078	4,058	22.40	181
2017	131,102.88	25,237	62,365	68,738	23.07	2,980
2018	371,679.45	59,209	146,317	225,362	23.75	9,489
2019	84,364.43	10,546	26,061	58,303	24.51	2,379
2020	194,600.54	17,514	43,280	151,321	25.28	5,986
2021	644,532.09	34,998	86,487	558,045	26.12	21,365
2022	367,825.99	6,694	16,542	351,284	26.97	13,025
	3,846,816.75	824,728	1,926,787	1,920,030		78,724

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.4 2.05

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 355.00 POWER GENERATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
NET SALVAGE PERCENT.. 0						
1983	13,192.15	10,577	13,192			
1987	17,854.82	13,627	17,855			
1989	46,135.27	34,159	46,135			
1990	25,009.68	18,287	25,010			
1992	56,551.66	40,016	56,552			
1993	253,498.55	175,725	253,499			
1994	19,313.55	13,156	19,314			
1997	29,160.95	18,663	28,552	609	14.34	42
1998	12,078.24	7,546	11,544	534	14.71	36
1999	52,102.79	31,710	48,513	3,590	15.11	238
2001	37,189.26	21,428	32,782	4,407	15.81	279
2002	60,444.61	33,825	51,748	8,697	16.13	539
2005	66,534.95	33,534	51,303	15,232	17.22	885
2007	11,937.34	5,532	8,463	3,474	17.95	194
2008	496,031.92	218,651	334,511	161,521	18.39	8,783
2009	2,508,942.27	1,049,992	1,606,365	902,577	18.76	48,112
2010	20,324.70	8,028	12,282	8,043	19.15	420
2011	14,151.77	5,240	8,017	6,135	19.56	314
2012	27,259.84	9,388	14,363	12,897	19.99	645
2013	26,424.85	8,408	12,863	13,562	20.35	666
2014	603,025.76	175,300	268,188	334,838	20.74	16,145
2015	90,052.10	23,576	36,069	53,983	21.15	2,552
2016	10,411.34	2,409	3,685	6,726	21.59	312
2017	12,956.52	2,594	3,969	8,988	21.97	409
2018	4,283.77	717	1,097	3,187	22.38	142
2019	9,155.75	1,218	1,863	7,293	22.82	320
2020	160,510.75	15,602	23,869	136,642	23.21	5,887
2022	1,267,930.74	26,119	39,959	1,227,972	23.83	51,531
9999	207,469.32-	69,884-	105,663-	101,806-		4,826-
	5,744,996.58	1,935,143	2,925,899	2,819,098		133,625

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.1 2.33

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1957	9,316.95	7,262	3,936	5,381	18.54	290
1965	12,011.15	8,564	4,642	7,369	23.15	318
1972	77,237.08	50,312	27,270	49,967	27.02	1,849
1973	118,813.48	75,874	41,125	77,688	28.02	2,773
1974	1,427,996.55	900,352	488,006	939,991	28.42	33,075
1975	810,409.44	504,237	273,305	537,104	28.84	18,624
1976	930,086.72	566,609	307,112	622,975	29.83	20,884
1977	440,934.45	264,825	143,540	297,394	30.26	9,828
1978	260,674.92	153,120	82,994	177,681	31.26	5,684
1979	71,328.75	41,271	22,370	48,959	31.68	1,545
1980	72,846.77	41,486	22,486	50,361	32.13	1,567
1981	156,507.75	87,034	47,174	109,334	33.13	3,300
1982	52,127.32	28,503	15,449	36,678	33.57	1,093
1983	187,925.96	100,202	54,311	133,615	34.58	3,864
1985	303,899.88	154,989	84,007	219,893	36.03	6,103
1986	32,246.03	16,123	8,739	23,507	36.50	644
1987	222,239.60	108,097	58,590	163,650	37.49	4,365
1988	486,980.67	231,851	125,667	361,314	37.96	9,518
1989	90,835.56	41,993	22,761	68,075	38.96	1,747
1990	68,525.83	30,960	16,781	51,745	39.44	1,312
1991	74,577.91	32,889	17,826	56,752	39.93	1,421
1992	34,310.07	14,650	7,941	26,369	40.93	644
1993	579,921.14	241,247	130,760	449,161	41.42	10,844
1994	284,433.31	114,285	61,944	222,489	42.43	5,244
1995	925,947.16	361,582	195,984	729,963	42.92	17,008
1996	131,294.64	49,406	26,779	104,516	43.92	2,380
1997	1,666,499.40	607,606	329,333	1,337,166	44.43	30,096
1998	427,280.83	149,719	81,150	346,131	45.43	7,619
1999	400,141.33	135,408	73,393	326,748	45.94	7,112
2000	486,655.56	157,676	85,463	401,193	46.94	8,547
2001	870,136.47	269,394	146,016	724,120	47.94	15,105
2002	553,794.48	164,588	89,210	464,584	48.47	9,585
2003	408,979.61	115,659	62,689	346,291	49.46	7,001
2004	2,404,006.01	649,322	351,944	2,052,062	49.99	41,049
2005	653,775.06	167,040	90,539	563,236	50.99	11,046
2006	1,975,882.50	479,349	259,815	1,716,068	51.52	33,309
2007	1,186,512.39	270,288	146,501	1,040,011	52.53	19,798
2008	3,790,652.01	813,474	440,917	3,349,735	53.07	63,119
2009	534,862.75	106,866	57,923	476,940	54.07	8,821
2010	263,320.41	49,030	26,575	236,745	54.62	4,334
2013	306,353.39	43,655	23,662	282,691	57.17	4,945

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
2014	4,401,391.40	561,177	304,168	4,097,223	58.17	70,435
2015	2,388,780.05	270,410	146,567	2,242,213	58.73	38,178
2016	3,137,021.62	308,056	166,972	2,970,050	59.72	49,733
2017	3,389,147.00	283,333	153,571	3,235,576	60.29	53,667
2018	1,164,267.38	80,102	43,417	1,120,850	60.86	18,417
2019	4,222,752.12	226,340	122,680	4,100,072	61.86	66,280
2020	2,934,532.19	112,979	61,236	2,873,296	62.44	46,017
2021	2,539,951.49	59,435	32,215	2,507,736	62.60	40,060
2022	4,259,122.77	33,647	18,237	4,240,886	62.79	67,541
9999	11,664,188.72-	2,309,707-	1,251,901-	10,412,288-		198,256-
	40,565,058.59	8,032,569	4,353,791	36,211,268		689,482
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						52.5 1.70

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1915	78,021.93	71,296	59,761	18,261	10.14	1,801
1920	114,899.80	103,640	86,872	28,028	11.14	2,516
1929	17,396.98	15,290	12,816	4,581	12.88	356
1930	184,450.23	162,095	135,869	48,581	12.76	3,807
1935	14,834.79	12,721	10,663	4,172	14.54	287
1939	36,886.20	30,800	25,817	11,069	16.50	671
1945	35,363.14	28,503	23,891	11,472	18.65	615
1946	92,960.86	74,666	62,586	30,375	18.74	1,621
1955	35,506.79	26,364	22,099	13,408	23.41	573
1957	1,181,359.68	866,645	726,429	454,931	23.79	19,123
1961	10,890.01	7,635	6,400	4,490	26.22	171
1962	30,350.30	21,118	17,701	12,649	26.45	478
1965	496,282.35	331,020	277,464	218,818	28.71	7,622
1966	21,405,079.40	14,148,757	11,859,611	9,545,468	28.97	329,495
1968	34,115.27	21,940	18,390	15,725	30.25	520
1969	398,960.54	253,978	212,887	186,074	30.54	6,093
1970	775,030.93	484,239	405,893	369,138	31.53	11,708
1972	6,380,737.90	3,866,727	3,241,124	3,139,614	32.83	95,632
1974	112,233.55	66,409	55,665	56,569	33.47	1,690
1975	4,039,106.21	2,340,662	1,961,963	2,077,143	34.47	60,259
1976	246,555.42	141,030	118,213	128,342	34.80	3,688
1977	160,562.29	89,851	75,314	85,248	35.80	2,381
1978	79,373.69	43,798	36,712	42,662	36.15	1,180
1979	32,612.36	17,591	14,745	17,867	37.15	481
1980	584,248.61	310,353	260,141	324,108	37.50	8,643
1982	45,671.76	23,306	19,535	26,137	38.87	672
1983	442,819.78	222,118	186,181	256,639	39.24	6,540
1984	2,593,050.21	1,268,002	1,062,850	1,530,200	40.24	38,027
1985	3,476,158.15	1,668,556	1,398,598	2,077,560	40.62	51,146
1986	623,094.59	293,353	245,891	377,204	41.02	9,196
1987	1,002,907.28	459,332	385,016	617,891	42.02	14,705
1988	2,759,323.65	1,237,557	1,037,331	1,721,993	42.42	40,594
1989	2,339,667.75	1,018,925	854,072	1,485,596	43.42	34,215
1990	5,905,141.32	2,514,409	2,107,599	3,797,542	43.83	86,643
1992	1,072,248.39	431,687	361,844	710,404	45.26	15,696
1993	6,212,873.07	2,437,931	2,043,495	4,169,378	45.68	91,274
1994	575,339.24	218,054	182,775	392,564	46.69	8,408
1995	9,517,154.54	3,507,071	2,939,657	6,577,498	47.13	139,561
1996	231,060.17	82,673	69,297	161,763	47.57	3,401
1997	3,298,935.67	1,135,494	951,781	2,347,155	48.58	48,315
1998	1,833,726.85	610,998	512,144	1,321,583	49.03	26,955

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1999	1,846,554.84	590,159	494,676	1,351,879	50.03	27,021
2000	2,697,555.14	831,386	696,875	2,000,680	50.50	39,617
2001	935,828.43	277,660	232,737	703,091	50.96	13,797
2002	1,213,419.16	343,276	287,737	925,682	51.96	17,815
2003	613,260.13	166,193	139,304	473,956	52.45	9,036
2004	1,157,427.27	299,774	251,273	906,154	52.93	17,120
2005	7,227,404.74	1,770,714	1,484,228	5,743,177	53.93	106,493
2006	1,918,283.22	446,193	374,003	1,544,280	54.43	28,372
2007	4,103,642.14	903,212	757,080	3,346,562	54.92	60,935
2008	7,572,787.45	1,570,596	1,316,487	6,256,300	55.43	112,868
2009	6,958,117.38	1,342,917	1,125,645	5,832,472	56.43	103,358
2010	4,005,051.97	720,909	604,272	3,400,780	56.94	59,726
2011	876,127.63	146,138	122,494	753,634	57.46	13,116
2012	2,046,957.52	313,799	263,029	1,783,929	57.99	30,763
2013	3,786,931.76	528,656	443,124	3,343,808	58.53	57,130
2014	11,196,375.06	1,408,504	1,180,620	10,015,755	59.07	169,557
2015	4,607,815.28	515,154	431,807	4,176,008	59.61	70,055
2016	5,949,679.28	580,094	486,240	5,463,439	60.17	90,800
2017	15,245,561.53	1,274,529	1,068,321	14,177,241	60.29	235,151
2018	2,791,430.75	193,446	162,148	2,629,283	60.44	43,502
2019	9,510,983.40	515,495	432,092	9,078,891	61.02	148,785
2020	3,279,559.71	129,543	108,584	3,170,976	60.79	52,163
2021	5,226,842.25	127,012	106,463	5,120,379	60.23	85,014
2022	7,855,183.94	67,555	56,625	7,798,559	57.98	134,504
9999	14,838,396.49-	4,326,571-	3,626,569-	11,211,827-		225,410-
	176,291,375.14	51,402,937	43,086,387	133,204,988		2,678,047
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						49.7 1.52

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
1939	41,445.52	40,144	31,779	9,667	2.71	3,567
1946	6,305.44	5,981	4,735	1,570	4.15	378
1955	6,557.79	6,020	4,766	1,792	6.03	297
1965	51,991.62	45,441	35,972	16,020	8.29	1,932
1966	4,605,718.02	4,007,435	3,172,367	1,433,351	8.44	169,828
1968	35,274.60	30,375	24,045	11,230	8.79	1,278
1969	84,340.10	72,195	57,151	27,189	9.00	3,021
1970	146,952.51	124,204	98,322	48,631	9.61	5,060
1972	1,034,313.09	861,790	682,211	352,102	10.11	34,827
1974	15,963.86	13,084	10,358	5,606	10.67	525
1975	598,767.32	486,319	384,980	213,787	10.98	19,471
1977	42,706.43	34,003	26,917	15,789	11.65	1,355
1980	118,875.59	90,940	71,990	46,886	13.06	3,590
1984	95,831.06	69,363	54,909	40,922	14.69	2,786
1985	763,184.86	543,769	430,459	332,726	15.13	21,991
1986	107,154.59	75,094	59,446	47,709	15.58	3,062
1987	216,909.68	148,627	117,656	99,254	16.31	6,085
1988	245,253.89	165,007	130,623	114,631	16.78	6,831
1990	1,607,956.26	1,040,026	823,306	784,650	17.75	44,206
1992	255,386.53	157,344	124,557	130,830	19.00	6,886
1993	252,362.51	151,115	119,626	132,737	19.76	6,717
1994	240,194.81	140,322	111,082	129,113	20.28	6,367
1995	2,706,287.20	1,533,112	1,213,642	1,492,645	21.04	70,943
1996	39,642.29	21,851	17,298	22,344	21.58	1,035
1997	1,036,128.33	552,256	437,177	598,951	22.34	26,811
1998	248,987.19	128,104	101,410	147,577	23.12	6,383
1999	391,765.44	194,237	153,762	238,003	23.90	9,958
2000	521,761.07	248,880	197,018	324,743	24.67	13,163
2001	317,384.48	145,362	115,071	202,313	25.45	7,949
2002	230,597.79	101,163	80,083	150,515	26.23	5,738
2003	214,676.45	89,992	71,239	143,437	27.01	5,311
2004	561,265.19	224,282	177,546	383,719	27.80	13,803
2005	2,195,707.78	833,930	660,156	1,535,552	28.58	53,728
2006	171,029.08	61,228	48,469	122,560	29.59	4,142
2007	1,856,107.19	627,179	496,488	1,359,619	30.37	44,768
2008	2,076,562.19	659,516	522,086	1,554,476	31.16	49,887
2009	179,543.32	53,073	42,014	137,529	32.16	4,276
2010	303,628.49	83,133	65,810	237,818	33.16	7,172
2011	118,799.68	30,056	23,793	95,007	33.95	2,798
2012	96,982.06	22,403	17,735	79,247	34.95	2,267
2013	1,061,811.12	221,919	175,675	886,136	35.95	24,649

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
2014	2,194,347.67	410,343	324,836	1,869,512	36.95	50,596
2015	5,490,215.54	910,278	720,594	4,769,622	37.75	126,348
2016	283,133.42	40,658	32,186	250,947	38.75	6,476
2017	372,836.21	45,337	35,890	336,946	39.75	8,477
2018	19,204.02	1,909	1,511	17,693	40.75	434
2019	42,873.79	3,318	2,627	40,247	41.75	964
2020	320,886.29	17,713	14,022	306,864	42.75	7,178
2021	253,481.99	8,416	6,662	246,820	43.75	5,642
2022	450,375.00	4,954	3,921	446,454	44.75	9,977
9999	4,677,145.31-	2,123,100-	1,680,689-	2,996,456-		125,471-
	29,652,321.04	13,460,100	10,655,289	18,997,032		795,462
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						23.9 2.68

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1929	694.02	694	694			
1939	6,199.06	6,199	6,199			
1955	1,930.40	1,850	1,785	145	2.92	50
1957	172,664.36	163,997	158,243	14,421	3.46	4,168
1961	902.39	844	814	88	4.29	21
1962	2,991.87	2,788	2,690	302	4.44	68
1965	54,044.69	49,408	47,675	6,370	5.40	1,180
1966	9,541,468.96	8,678,920	8,374,424	1,167,045	5.61	208,029
1968	12,332.96	11,090	10,701	1,632	6.11	267
1969	15,641.26	13,974	13,484	2,157	6.38	338
1970	380,995.59	338,019	326,160	54,836	6.67	8,221
1971	552.81	487	470	83	6.98	12
1972	595,903.65	520,581	502,317	93,587	7.31	12,803
1973	2,458.79	2,130	2,055	404	7.65	53
1974	12,037.54	10,275	9,915	2,123	8.32	255
1975	1,676,555.52	1,417,528	1,367,795	308,761	8.68	35,572
1976	57,695.30	48,291	46,597	11,098	9.06	1,225
1977	56,666.01	46,925	45,279	11,387	9.45	1,205
1978	33,117.74	27,117	26,166	6,952	9.85	706
1979	41,954.13	33,945	32,754	9,200	10.26	897
1980	608,523.45	483,654	466,685	141,838	10.97	12,930
1981	72,240.88	56,666	54,678	17,563	11.41	1,539
1982	59,431.77	45,976	44,363	15,069	11.85	1,272
1983	142,436.48	108,594	104,784	37,652	12.31	3,059
1984	250,639.45	187,203	180,635	70,004	13.05	5,364
1985	1,691,037.32	1,242,912	1,199,305	491,732	13.52	36,371
1986	175,378.28	126,746	122,299	53,079	14.01	3,789
1987	754,257.32	532,807	514,114	240,143	14.75	16,281
1988	323,217.73	224,119	216,256	106,962	15.25	7,014
1989	308,962.48	210,094	202,723	106,239	15.76	6,741
1990	3,441,775.71	2,281,897	2,201,837	1,239,939	16.52	75,057
1991	79,047.06	51,294	49,494	29,553	17.04	1,734
1992	413,049.93	260,800	251,650	161,400	17.81	9,062
1993	720,489.18	444,254	428,668	291,821	18.34	15,912
1994	249,798.77	149,505	144,260	105,539	19.12	5,520
1995	6,192,698.17	3,610,343	3,483,675	2,709,023	19.67	137,724
1996	94,447.21	53,306	51,436	43,011	20.45	2,103
1997	437,353.79	239,757	231,345	206,009	21.01	9,805
1998	358,521.14	189,729	183,072	175,449	21.80	8,048
1999	151,614.14	77,672	74,947	76,667	22.37	3,427
2000	1,005,176.12	495,351	477,972	527,204	23.16	22,764

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
2001	259,631.20	122,806	118,497	141,134	23.95	5,893
2002	327,645.80	149,112	143,880	183,766	24.55	7,485
2003	303,083.03	131,781	127,158	175,925	25.35	6,940
2004	1,238,862.61	513,385	495,373	743,490	26.14	28,443
2005	2,714,528.65	1,073,596	1,035,929	1,678,600	26.75	62,751
2006	1,023,649.84	383,459	370,006	653,644	27.55	23,726
2007	615,798.80	217,623	209,988	405,811	28.36	14,309
2008	1,850,087.90	614,229	592,679	1,257,409	29.17	43,106
2009	2,568,309.20	797,460	769,481	1,798,828	29.98	60,001
2010	656,264.22	190,317	183,640	472,624	30.60	15,445
2011	212,281.90	56,892	54,896	157,386	31.42	5,009
2012	246,419.42	60,545	58,421	187,998	32.24	5,831
2013	561,961.67	125,430	121,029	440,933	33.06	13,337
2014	980,661.48	196,721	189,819	790,842	33.87	23,349
2015	1,159,929.85	206,236	199,000	960,930	34.69	27,700
2016	681,722.73	105,940	102,223	579,500	35.34	16,398
2017	2,222,444.93	293,363	283,071	1,939,374	36.17	53,618
2018	739,722.76	80,186	77,373	662,350	37.00	17,901
2019	367,190.19	31,211	30,116	337,074	37.65	8,953
2020	550,060.48	33,554	32,377	517,683	38.48	13,453
2021	1,015,230.07	37,462	36,148	979,082	39.15	25,008
2022	1,199,187.37	15,110	14,579	1,184,608	39.34	30,112
9999	6,252,474.42-	3,372,793-	3,254,489-	2,997,985-		141,442-
	45,439,103.11	24,511,366	23,651,609	21,787,494		1,027,912

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.2 2.26

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 364.00 FLOW MEASURING DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-L2.5						
NET SALVAGE PERCENT.. 0						
1989	4,861.58	4,658	3,044	1,818	1.47	1,237
1991	8,016.40	7,575	4,950	3,066	1.83	1,675
1992	6,229.03	5,852	3,824	2,405	1.97	1,221
1999	48,220.39	42,723	27,919	20,301	3.02	6,722
2005	8,468.88	6,861	4,484	3,985	4.10	972
2006	15,249.71	12,128	7,926	7,324	4.25	1,723
2007	8,846.10	6,911	4,516	4,330	4.34	998
2008	28,925.28	22,145	14,472	14,453	4.44	3,255
2009	90,817.91	67,923	44,387	46,431	4.55	10,205
2010	29,151.92	21,170	13,835	15,317	4.71	3,252
2011	8,682.56	6,081	3,974	4,709	4.92	957
2013	26,720.21	16,804	10,981	15,739	5.61	2,806
2014	151,737.83	88,615	57,910	93,828	6.06	15,483
2015	79,440.19	42,246	27,607	51,833	6.60	7,853
2016	5,501.63	2,603	1,701	3,801	7.24	525
2018	1,267.76	434	284	984	8.64	114
2021	13,779.33	1,641	1,072	12,707	11.09	1,146
2022	43,772.61	1,751	1,145	42,628	12.02	3,546
9999	14,726.81-	9,098-	5,946-	8,781-		1,618-
	564,962.51	349,023	228,085	336,878		62,072

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.4 10.99

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-S2						
NET SALVAGE PERCENT.. 0						
1970	30,360.76	30,361	30,361			
1991	227,265.28	202,584	179,675	47,590	3.84	12,393
2009	14,938.00	8,309	7,369	7,569	10.77	703
	272,564.04	241,254	217,405	55,159		13,096
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						4.2 4.80

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 370.00 RECEIVING WELLS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2007	6,261.10	2,086	1,926	4,335	31.01	140
2009	92,112.20	27,109	25,034	67,078	32.37	2,072
2013	33,467.05	7,058	6,518	26,949	35.55	758
2017	1,547.02	192	177	1,370	38.75	35
2019	10,032.40	801	740	9,292	40.36	230
	143,419.77	37,246	34,395	109,025		3,235
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						33.7 2.26

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0.5						
NET SALVAGE PERCENT.. 0						
1985	369.05	310	154	215	7.14	30
1986	74,752.90	61,940	30,682	44,071	7.55	5,837
1989	4,349.94	3,468	1,718	2,632	8.52	309
1992	107,340.07	82,180	40,708	66,632	9.34	7,134
1993	191,038.23	143,699	71,181	119,857	9.72	12,331
1994	17,923.71	13,231	6,554	11,370	10.11	1,125
1996	53,495.66	38,132	18,889	34,607	10.68	3,240
1997	48,063.67	33,582	16,635	31,429	11.00	2,857
1999	523,202.11	349,185	172,968	350,234	11.71	29,909
2001	14,377.63	9,118	4,517	9,861	12.40	795
2003	124,577.98	74,336	36,822	87,756	13.18	6,658
2004	157,598.66	91,250	45,200	112,399	13.45	8,357
2005	74,399.07	41,530	20,572	53,827	13.85	3,886
2006	88,422.72	47,563	23,560	64,863	14.17	4,577
2007	5,867.22	3,019	1,495	4,372	14.62	299
2008	540,660.47	265,789	131,658	409,002	15.00	27,267
2009	609,813.93	285,637	141,490	468,324	15.32	30,569
2010	274,713.14	121,561	60,215	214,498	15.75	13,619
2011	38,312.48	15,949	7,900	30,412	16.12	1,887
2012	50,976.20	19,804	9,810	41,166	16.53	2,490
2013	59,339.46	21,362	10,582	48,757	16.89	2,887
2014	1,832,702.90	604,425	299,400	1,533,303	17.27	88,784
2015	229,165.32	68,245	33,805	195,360	17.69	11,044
2016	611,525.43	161,382	79,940	531,585	18.13	29,321
2017	398,624.02	91,205	45,178	353,446	18.54	19,064
2018	394,330.90	75,790	37,542	356,789	18.92	18,858
2019	5,451,703.78	835,746	413,986	5,037,718	19.33	260,617
2020	2,177,499.17	244,969	121,345	2,056,154	19.72	104,267
2021	697,058.40	48,376	23,963	673,095	20.10	33,487
2022	2,461,102.00	59,066	29,258	2,431,844	20.38	119,325
9999	112,738.57-	25,473-	12,618-	100,121-		5,540-
	17,200,567.65	3,886,376	1,925,109	15,275,459		845,290

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.1 4.91

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
1957	6,616.06	6,500	4,620	1,996	1.17	1,706
1965	69,073.55	65,537	46,586	22,488	3.10	7,254
1967	137,543.96	129,016	91,708	45,836	3.67	12,489
1973	841.79	762	542	300	5.15	58
1981	4,133.50	3,534	2,512	1,622	7.04	230
1984	545,113.27	451,245	320,758	224,355	8.01	28,009
1985	450,467.96	369,924	262,952	187,516	8.16	22,980
1986	661,110.44	535,698	380,789	280,321	8.55	32,786
1987	191,144.97	152,687	108,534	82,611	8.94	9,241
1989	774,579.02	604,636	429,792	344,787	9.42	36,602
1992	778,379.62	579,270	411,761	366,619	10.48	34,983
1993	3,208,687.07	2,337,849	1,661,809	1,546,878	10.99	140,753
1994	56,542.45	40,450	28,753	27,789	11.34	2,451
1995	7,105.57	4,982	3,541	3,565	11.72	304
1996	25,009.34	17,166	12,202	12,807	12.11	1,058
1997	19,503.13	13,079	9,297	10,206	12.52	815
1998	3,579.83	2,342	1,665	1,915	12.95	148
1999	16,807.69	10,743	7,636	9,172	13.26	692
2001	64,181.66	38,637	27,464	36,718	14.21	2,584
2002	306,429.81	178,403	126,814	179,616	14.71	12,210
2004	323,937.75	174,991	124,389	199,549	15.75	12,670
2005	1,386,977.99	718,455	510,698	876,280	16.28	53,826
2006	278,481.69	137,848	97,986	180,496	16.83	10,725
2007	18,280.49	8,614	6,123	12,157	17.39	699
2008	1,002,004.29	447,495	318,092	683,912	17.97	38,059
2009	18,068,738.71	7,610,553	5,409,794	12,658,945	18.55	682,423
2010	9,619,831.86	3,799,834	2,701,028	6,918,804	19.15	361,295
2011	16,461.04	6,038	4,292	12,169	19.85	613
2012	745,773.45	252,966	179,815	565,958	20.46	27,662
2013	2,956,540.15	915,640	650,863	2,305,677	21.17	108,912
2014	8,973,383.17	2,508,958	1,783,438	7,189,945	21.90	328,308
2015	729,631.69	181,678	129,142	600,490	22.62	26,547
2016	521,077.98	113,126	80,413	440,665	23.44	18,800
2017	668,902.93	124,015	88,153	580,750	24.17	24,028
2018	4,997,168.99	762,568	542,055	4,455,114	25.00	178,205
2019	1,135,545.09	135,584	96,377	1,039,168	25.82	40,247
2020	6,781,860.59	579,849	412,173	6,369,688	26.74	238,208

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
2021	4,717,831.73	242,497	172,373	4,545,459	27.66	164,333
2022	8,277,097.45	142,366	101,198	8,175,899	28.57	286,171
9999	2,239,396.79-	695,814-	494,604-	1,744,793-		84,080-
	76,306,980.94	23,709,721	16,853,533	59,453,448		2,865,004
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						20.8 3.75

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 381.00 PLANT SEWERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2008	294,411.86	92,210	81,053	213,359	31.80	6,709
2009	4,434,866.70	1,305,181	1,147,258	3,287,609	32.37	101,563
2010	1,187,964.50	325,265	285,909	902,056	33.16	27,203
2011	6,597.06	1,669	1,467	5,130	33.95	151
2012	1,684.33	391	344	1,340	34.75	39
2014	234,318.33	44,427	39,051	195,267	36.34	5,373
2015	7,458.23	1,253	1,101	6,357	37.14	171
2016	45,239.43	6,614	5,814	39,425	37.95	1,039
2021	1,641.43	57	50	1,591	41.60	38
9999	30,192.33-	8,634-	7,589-	22,603-		691-
	6,183,989.54	1,768,433	1,554,458	4,629,532		141,595
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						32.7 2.29

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1957	12,139.53	11,370	11,222	918	4.43	207
1975	4,984.00	4,096	4,043	941	10.30	91
1993	202,475.94	118,853	117,301	85,175	20.75	4,105
2004	1,695.94	665	656	1,040	28.67	36
2005	9,240.93	3,445	3,400	5,841	29.45	198
2006	201,117.58	71,015	70,087	131,031	30.23	4,334
2009	26,051.26	7,667	7,567	18,484	32.37	571
2010	27,827.93	7,619	7,520	20,308	33.16	612
2014	100,422.48	19,040	18,791	81,631	36.34	2,246
2017	18,433.32	2,291	2,261	16,172	38.75	417
	604,388.91	246,061	242,848	361,541		12,817
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						28.2 2.12

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-S2.5						
NET SALVAGE PERCENT.. 0						
2010	273,149.74	171,046	164,892	108,258	7.46	14,512
2013	8,814.50	4,421	4,262	4,552	9.44	482
2018	48,374.95	11,949	11,519	36,856	13.72	2,686
2019	268,065.51	51,683	49,823	218,243	14.65	14,897
2022	600,000.00	16,560	15,964	584,036	17.62	33,146
	1,198,404.70	255,659	246,460	951,945		65,723
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						14.5 5.48

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2008	3,529.23	2,559	1,718	1,811	5.50	329
2009	52,251.63	35,270	23,683	28,569	6.50	4,395
2010	7,240.80	4,526	3,039	4,202	7.50	560
2011	2,249.52	1,293	868	1,382	8.50	163
2012	30,582.71	16,056	10,781	19,802	9.50	2,084
2013	52,070.05	24,733	16,608	35,462	10.50	3,377
2014	3,709.04	1,576	1,058	2,651	11.50	231
2015	8,933.71	3,350	2,250	6,684	12.50	535
2016	33,090.02	10,754	7,221	25,869	13.50	1,916
2017	28,119.56	7,733	5,193	22,927	14.50	1,581
2018	10,405.16	2,341	1,572	8,833	15.50	570
2019	20,626.43	3,610	2,424	18,202	16.50	1,103
2020	74,595.48	9,324	6,261	68,334	17.50	3,905
2021	355,192.69	26,639	17,888	337,305	18.50	18,233
2022	35,793.96	895	601	35,193	19.50	1,805
	718,389.99	150,659	101,165	617,225		40,787

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.1 5.68

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L4						
NET SALVAGE PERCENT.. 0						
2001	22,361.85	21,154	19,538	2,824	1.23	2,296
2006	73,113.90	64,779	59,831	13,283	2.12	6,266
2011	128,391.92	100,557	92,876	35,516	3.18	11,169
2012	73,865.31	54,446	50,287	23,578	3.75	6,287
2013	62,726.96	42,786	39,518	23,209	4.43	5,239
2014	3,075.33	1,913	1,767	1,308	5.16	253
2016	2,423.80	1,183	1,093	1,331	6.81	195
2017	8,526.46	3,540	3,270	5,256	7.75	678
2018	927,895.26	316,041	291,898	635,997	8.71	73,019
2019	299,081.56	79,346	73,284	225,798	9.69	23,302
2020	26,190.18	4,963	4,584	21,606	10.69	2,021
	1,627,652.53	690,708	637,946	989,707		130,725
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						7.6 8.03

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 392.00 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2012	58,391.33	24,524	24,452	33,939	14.50	2,341
2017	2,199.71	484	483	1,717	19.50	88
2018	46,760.40	8,417	8,392	38,368	20.50	1,872
	107,351.44	33,425	33,327	74,024		4,301
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						17.2 4.01

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 393.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2006	78,485.36	64,750	70,905	7,580	3.50	2,166
2007	5,060.13	3,922	4,295	765	4.50	170
2008	2,776.47	2,013	2,204	572	5.50	104
2009	378.54	256	280	99	6.50	15
2010	61,467.53	38,417	42,069	19,399	7.50	2,587
2012	58,472.38	30,698	33,616	24,856	9.50	2,616
2013	28,453.57	13,515	14,800	13,654	10.50	1,300
2014	40,133.99	17,057	18,679	21,455	11.50	1,866
2015	62,657.78	23,497	25,731	36,927	12.50	2,954
2016	105,803.20	34,386	37,655	68,148	13.50	5,048
2017	7,458.66	2,051	2,246	5,213	14.50	360
2018	94,551.82	21,274	23,296	71,256	15.50	4,597
2019	14,014.13	2,452	2,685	11,329	16.50	687
2020	193,729.12	24,216	26,518	167,211	17.50	9,555
2021	102,471.06	7,685	8,416	94,055	18.50	5,084
2022	178,605.83	4,465	4,889	173,717	19.50	8,909
	1,034,519.57	290,654	318,284	716,236		48,018

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.9 4.64

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 394.00 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2008	62,682.15	60,593	55,878	6,804	0.50	6,804
2009	41,773.44	37,596	34,671	7,102	1.50	4,735
2010	31,269.93	26,058	24,030	7,240	2.50	2,896
2011	16,841.59	12,912	11,907	4,935	3.50	1,410
2012	13,442.75	9,410	8,678	4,765	4.50	1,059
2013	5,917.50	3,748	3,456	2,462	5.50	448
2014	51,523.14	29,197	26,925	24,598	6.50	3,784
2015	14,895.30	7,448	6,869	8,026	7.50	1,070
2016	65,493.26	28,380	26,172	39,321	8.50	4,626
2017	48,566.17	17,808	16,422	32,144	9.50	3,384
2018	28,248.23	8,474	7,815	20,433	10.50	1,946
2019	57,097.59	13,323	12,286	44,812	11.50	3,897
2020	32,405.64	5,401	4,981	27,425	12.50	2,194
2021	11,284.32	1,128	1,040	10,244	13.50	759
	481,441.01	261,476	241,130	240,311		39,012

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.2 8.10

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 22-R2						
NET SALVAGE PERCENT.. 0						
1986	7,525.00	7,306	7,525			
1992	10,000.00	9,180	10,000			
1993	93,533.45	84,704	93,533			
2002	72,784.90	55,957	72,785			
2011	345,636.00	179,247	235,578	110,058	10.67	10,315
2015	3,257.24	1,197	1,573	1,684	12.91	130
2018	19,634.12	4,647	6,107	13,527	14.51	932
9999	10,000.00-	6,196-	7,732-	2,268-		206-
	542,370.71	336,042	419,369	123,002		11,171
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						11.0 2.06

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2008	9,753.43	9,428	9,243	510	0.50	510
2009	521,963.46	469,767	460,526	61,437	1.50	40,958
2010	144,621.29	120,517	118,146	26,475	2.50	10,590
2011	7,975.30	6,114	5,994	1,981	3.50	566
2012	3,344.78	2,341	2,295	1,050	4.50	233
2013	263,689.84	167,003	163,718	99,972	5.50	18,177
2014	98,016.16	55,543	54,450	43,566	6.50	6,702
2016	172,002.57	74,534	73,068	98,935	8.50	11,639
2017	13,811.63	5,064	4,964	8,848	9.50	931
2018	12,412.19	3,724	3,651	8,761	10.50	834
2019	7,055.35	1,646	1,614	5,441	11.50	473
2020	666,834.19	111,141	108,954	557,880	12.50	44,630
2021	34,544.77	3,454	3,386	31,159	13.50	2,308
2022	1,316,570.40	43,881	43,018	1,273,552	14.50	87,831
	3,272,595.36	1,074,157	1,053,027	2,219,568		226,382

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.8 6.92

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 397.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2017	2,977.20	1,092	1,650	1,327	9.50	140
2018	33,269.93	9,981	15,078	18,192	10.50	1,733
2019	123,994.70	28,932	43,705	80,290	11.50	6,982
2020	138,334.00	23,056	34,829	103,505	12.50	8,280
2021	175,934.86	17,593	26,577	149,358	13.50	11,064
2022	436,000.00	14,532	21,952	414,048	14.50	28,555
9999	29,000.00-	3,032-	4,580-	24,420-		1,808-
	881,510.69	92,154	139,211	742,300		54,946
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						13.5 6.23

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 398.00 OTHER TANGIBLE PLANT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	14,231.50	1,992	1,374	12,858	21.50	598
	14,231.50	1,992	1,374	12,858		598
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						21.5 4.20

**PART VIII. EXPERIENCED AND ESTIMATED
NET SALVAGE**

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED AND ESTIMATED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2018 TRANSACTION YEAR				
354.20	416.47	2,367.05		2,367.05-
354.30	573,594.97	87.11		87.11-
354.40	744,885.32	18,538.55-		18,538.55
354.70		36,099.53		36,099.53-
355.00	422,792.78	4,538.63		4,538.63-
360.10	276,235.14	85,350.18		85,350.18-
361.10	2,339,080.10	345,943.14		345,943.14-
361.20	13,749.21			
363.00	56,288.53	48,455.35		48,455.35-
364.00	31,450.72			
371.00	113,724.18	18,884.54-		18,884.54
380.00	1,203,983.11	12,304.03		12,304.03-
382.00	5.76	980.65		980.65-
389.10		3,678.20-		3,678.20
390.00	5,925.73	93.95		93.95-
391.00	79,247.81	9,708.42		9,708.42-
393.00	17,334.55			
394.00	28,673.47	117.59		117.59-
396.00	3,064.59			
397.00		6,019.17		6,019.17-
	5,910,452.44	510,963.51		510,963.51-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED AND ESTIMATED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2019 TRANSACTION YEAR				
354.20	3,076.09	27,531.06		27,531.06-
354.30		61,135.00		61,135.00-
354.40	913,340.30	1,985.51		1,985.51-
354.70	3,125.06	18,075.18		18,075.18-
355.00		9,730.05		9,730.05-
360.10	55,943.69	245,202.29		245,202.29-
361.10	352,132.81	1,038,558.77		1,038,558.77-
361.20	1,170.55	109,567.01		109,567.01-
363.00	5,384.61	150,830.30		150,830.30-
364.00	3,202.68	239.58		239.58-
370.00	1,108.89			
371.00	5,188.39	141,438.05		141,438.05-
380.00	36,603.24	214,843.19		214,843.19-
381.00	2,120.40			
389.10		5,681.56		5,681.56-
390.00	67,403.59			
391.00		6,028.96		6,028.96-
393.00	60,983.28	1,931.40		1,931.40-
394.00	26,823.05	5,593.49		5,593.49-
395.00		2,048.24		2,048.24-
396.00	48,155.78	1,897.96		1,897.96-
397.00	141,002.08	5,512.61		5,512.61-
398.00		1,251.49		1,251.49-
	1,726,764.49	2,049,081.70		2,049,081.70-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED AND ESTIMATED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
354.20	3,007.76	18,802.35		18,802.35-
354.30	39,414.10	73,614.29		73,614.29-
354.40	120,604.23	29,899.13		29,899.13-
354.70	6,910.37	246.65		246.65-
355.00		23,920.78		23,920.78-
360.10	40,213.82	186,669.20		186,669.20-
361.10	361,924.39	323,715.46		323,715.46-
361.20	22,020.95	34,151.69		34,151.69-
363.00	128,735.68	76,222.67		76,222.67-
371.00	144,361.10	273,771.37		273,771.37-
380.00	92,274.49	652,150.29		652,150.29-
391.00	31,332.59	10.19		10.19-
393.00		5,643.88		5,643.88-
394.00	10,122.79	1,075.22		1,075.22-
395.00	7,833.15			
396.00	234,211.01	52,578.21		52,578.21-
397.00		9,909.72	1,369.21	8,540.51-
	1,242,966.43	1,762,381.10	1,369.21	1,761,011.89-
2021 TRANSACTION YEAR				
354.30	7,989.66	20,176.30		20,176.30-
354.40	11,481.83	28,995.08		28,995.08-
354.70	2,875.51	11,677.96		11,677.96-
355.00		1,253.37		1,253.37-
360.10	11,013.00	147,595.80		147,595.80-
361.10	796,849.84	245,041.20		245,041.20-
361.20	83,125.55	20,315.71		20,315.71-
363.00	414,022.10	105,836.92	159.00	105,677.92-
364.00	6,151.40			
371.00	16,177.71	206,559.57		206,559.57-
380.00	231,513.16	269,030.45		269,030.45-
381.00		90.22		90.22-
390.00		3,619.09		3,619.09-
394.00	1,401.00	1,113.04		1,113.04-
396.00		4,528.34		4,528.34-
397.00	20,048.36	4,676.57	87.00	4,589.57-
	1,602,649.12	1,070,509.62	246.00	1,070,263.62-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED AND ESTIMATED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2022 TRANSACTION YEAR				
354.20	15,702.45	1,884.29		1,884.29-
354.30	26,680.07	3,201.61		3,201.61-
354.40	199,172.52	23,900.70		23,900.70-
354.70	28,082.13	3,369.86		3,369.86-
355.00	96,801.74	8,712.16		8,712.16-
360.10	325,168.00	198,352.48		198,352.48-
361.10	599,713.73	365,825.38		365,825.38-
361.20	26,444.42	36,228.86		36,228.86-
363.00	61,602.50	44,353.80		44,353.80-
364.00	9,014.72			
371.00	187,895.88	176,622.13		176,622.13-
380.00	631,925.26	297,004.87		297,004.87-
393.00	16,369.00	1,145.83		1,145.83-
394.00	54,586.97	6,004.57		6,004.57-
396.00	239,917.65	52,781.88		52,781.88-
397.00	86,974.00	6,088.18		6,088.18-
	2,606,051.04	1,225,476.60		1,225,476.60-
TOTAL	13,088,883.52	6,618,412.53	1,615.21	6,616,797.32-

EXHIBIT NO. 11-F - DEPRECIATION STUDY

WASTEWATER SSS GENERAL OPERATIONS

AS OF DECEMBER 31, 2023

Exhibit No. 11-F
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

MECHANICSBURG, PENNSYLVANIA

WASTEWATER SSS GENERAL OPERATIONS

2023 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF DECEMBER 31, 2023

Prepared by:



GANNETT FLEMING

Excellence Delivered As Promised

Exhibit No. 11-F
Witness: J. J. Spanos

PENNSYLVANIA-AMERICAN WATER COMPANY

Mechanicsburg, Pennsylvania

WASTEWATER SSS GENERAL OPERATIONS

2023 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF DECEMBER 31, 2023

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania



Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | F 717.763.8150

gannettfleming.com

April 20, 2022

Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055

Attention Ms. Stacey Gress
Director, Rates and Regulatory

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to wastewater plant as of December 31, 2023. The results of our study as of December 31, 2022 are presented in our report titled "2022 Depreciation Study - Calculated Annual Depreciation Accruals Related to Wastewater Plant as of December 31, 2022". The same methods, procedures and estimates are used in both studies.

Summaries of the original cost, annual accruals, book depreciation reserve and amortization of net salvage are presented in Tables 1 through 5, beginning on page I-3 of the attached report.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

A handwritten signature in black ink that reads "John J. Spanos".

JOHN J. SPANOS
President

JJS:mle

070800.100

TABLE OF CONTENTS

PART I. RESULTS OF STUDY	I-1
Description of Summary Tabulations	I-2
Description of Detailed Tabulations	I-2
Table 1. Development of Net Original Cost as of December 31, 2023	I-3
Table 2. Summary of Estimated Survivor Curve, Original Cost, Book Depreciation Reserve and Calculated Annual Depreciation Accruals Related to Wastewater Plant as of December 31, 2023	I-4
Table 3. Bringforward to December 31, 2023, of the Book Reserve as of December 31, 2022	I-5
Table 4. Calculation of Depreciation Accruals for the Twelve Months Ended December 31, 2023	I-6
Table 5. Amortization of Experienced and Estimated Net Salvage	I-7
PART II. DETAILED DEPRECIATION CALCULATIONS	II-1
Cumulative Depreciated Original Cost	II-2
Net Utility Plant in Service	II-5
PART III. EXPERIENCED AND ESTIMATED NET SALVAGE	III-1

PART I. RESULTS OF STUDY

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

DEPRECIATION STUDY

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

Tables 1 through 5 presented on pages I-3 through I-7 summarize the results of the depreciation study as of December 31, 2023. Table 1 sets forth the development of the net original cost by account as of December 31, 2023. Table 2 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of December 31, 2023, future book accruals, calculated annual accrual amount and rate, and composite remaining life for plant in service. Table 3 presents the bringforward of the book reserve to December 31, 2023. Table 4 sets forth the calculation of the depreciation accruals for the twelve months ended December 31, 2023. Table 5 presents the annual amortization of experienced and estimated net salvage based on the period 2019 through 2023.

DESCRIPTION OF DETAILED TABULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-6. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2019 through 2023, beginning on pages III-2 through III-4.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 1. DEVELOPMENT OF NET ORIGINAL COST AS OF DECEMBER 31, 2023

DEPRECIABLE GROUP (1)	ORIGINAL COST AS OF DECEMBER 31, 2023 (2)	CUSTOMER ADVANCES (3)	CONTRIBUTIONS IN AID OF CONSTRUCTION (4)	EXCLUDED PROPERTY (5)	NET ORIGINAL COST AS OF DECEMBER 31, 2023 (6)
DEPRECIABLE PLANT					
354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION	3,669,955.53		57,755.00		3,612,200.53
354.30 STRUCTURES AND IMPROVEMENTS - SPP	21,368,831.01		2,802,735.70		18,566,095.31
354.40 STRUCTURES AND IMPROVEMENTS - TDP	155,345,056.19		2,010,277.73		153,334,778.46
354.70 STRUCTURES AND IMPROVEMENTS - GENERAL	4,070,803.79				4,070,803.79
355.00 POWER GENERATION EQUIPMENT	8,229,058.39		207,489.16		8,021,569.23
360.10 COLLECTION SEWERS - FORCE MAINS	57,225,739.21	259,700.45	11,404,488.61		45,561,550.15
361.10 COLLECTION SEWERS - GRAVITY MAINS	199,905,105.99	133,423.53	15,379,651.09		184,392,031.37
361.20 MANHOLES	34,716,192.84		4,677,145.76		30,039,047.08
363.00 SERVICES	52,816,421.35	87,755.05	6,164,719.52		46,563,946.78
364.00 FLOW MEASURING DEVICES	614,228.23		14,726.81		599,501.42
365.00 FLOW MEASURING INSTALLATIONS	272,564.04				272,564.04
370.00 RECEIVING WELLS	143,419.77				143,419.77
371.00 PUMPING EQUIPMENT	19,636,757.66		112,738.22		19,524,019.44
380.00 TREATMENT EQUIPMENT	90,398,558.93		2,239,396.47		88,159,162.46
381.00 PLANT SEWERS	6,214,181.87		30,192.33		6,183,989.54
382.00 OUTFALL SEWER LINES	604,388.91				604,388.91
389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	2,057,547.56				2,057,547.56
390.00 OFFICE FURNITURE AND EQUIPMENT	759,062.66				759,062.66
391.00 TRANSPORTATION EQUIPMENT	1,627,652.53				1,627,652.53
392.00 STORES EQUIPMENT	107,351.44				107,351.44
393.00 TOOLS, SHOP AND GARAGE EQUIPMENT	1,300,973.27				1,300,973.27
394.00 LABORATORY EQUIPMENT	418,758.86				418,758.86
395.00 POWER OPERATED EQUIPMENT	552,370.71		10,000.00		542,370.71
396.00 COMMUNICATION EQUIPMENT	4,946,898.15				4,946,898.15
397.00 MISCELLANEOUS EQUIPMENT	1,266,451.91		29,000.00		1,237,451.91
398.00 OTHER TANGIBLE PLANT	14,231.50				14,231.50
TOTAL DEPRECIABLE PLANT	668,282,562.30	480,879.03	45,140,296.40		622,661,386.87
NONDEPRECIABLE PLANT					
352.10 FRANCHISES	221,139.78				221,139.78
353.20 LAND AND LAND RIGHTS - COLLECTION	1,857,560.19				1,857,560.19
353.30 LAND AND LAND RIGHTS - SPP	203,839.26				203,839.26
353.40 LAND AND LAND RIGHTS - TDP	3,978,717.18		125,000.00		3,853,717.18
TOTAL NONDEPRECIABLE PLANT	6,261,256.41		125,000.00		6,136,256.41
TOTAL PLANT	674,543,818.71		45,265,296.40		628,797,643.28

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 2. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF DECEMBER 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
DEPRECIABLE GROUP	SURVIVOR CURVE	ORIGINAL COST AS OF DECEMBER 31, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)
DEPRECIABLE PLANT							
354.20	45-R3	3,612,200.53	297,122	3,315,079	96,348	2.67	34.4
354.30	55-S0	18,566,095.31	7,611,923	10,954,172	344,938	1.86	31.8
354.40	55-S0	153,334,778.46	79,389,942	73,944,836	2,680,957	1.74	27.8
354.70	35-S1	4,070,803.79	2,007,181	2,063,623	86,335	2.12	23.9
355.00	35-S0.5	8,021,589.23	2,880,147	5,141,442	234,190	2.92	22.0
360.10	75-R3	45,561,550.15	4,624,544	40,937,006	773,411	1.70	52.9
361.10	80-R2.5	184,392,031.37	45,103,176	139,288,855	2,792,821	1.51	49.9
361.20	50-S2.5	30,039,047.08	11,440,838	18,598,209	782,893	2.61	23.8
363.00	47-R3	46,563,946.78	24,671,948	21,891,999	1,023,840	2.20	21.4
364.00	15-L2.5	599,501.42	284,926	314,575	55,186	9.21	5.7
365.00	25-S2	272,564.04	230,488	42,076	10,482	3.85	4.0
370.00	50-R3	143,419.77	37,636	105,784	3,200	2.23	33.1
371.00	30-S0.5	19,524,019.44	2,649,119	16,874,900	930,890	4.77	18.1
380.00	35-S1.5	88,159,162.46	18,610,808	69,548,354	3,260,297	3.70	21.3
381.00	50-R3	6,183,989.54	1,696,089	4,487,901	139,968	2.26	32.1
382.00	50-R3	604,388.91	255,857	348,532	12,614	2.09	27.6
389.10	20-S2.5	2,057,547.56	329,600	1,727,948	112,889	5.49	15.3
390.00	20-SQ	759,062.66	144,758	614,305	42,424	5.59	14.5
391.00	14-L4	1,627,652.53	777,196	850,457	124,345	7.64	6.9
392.00	25-SQ	107,351.44	37,632	69,719	4,300	4.01	16.2
393.00	20-SQ	1,300,973.27	344,614	956,359	62,704	4.82	15.3
394.00	15-SQ	418,758.86	210,580	208,179	33,391	7.97	6.2
395.00	22-R2	542,370.71	430,952	111,419	10,647	1.96	10.5
396.00	15-SQ	4,946,898.15	1,191,435	3,755,463	329,937	6.67	11.4
397.00	15-SQ	1,237,451.91	169,275	1,068,177	81,253	6.57	13.1
398.00	25-SQ	14,231.50	2,222	12,010	586	4.12	20.5
TOTAL DEPRECIABLE PLANT		622,661,386.87	205,424,608	417,236,779	14,010,846	2.25	
NONDEPRECIABLE PLANT							
352.10		221,139.78					
353.20		1,857,560.19					
353.30		203,839.26					
353.40		3,853,717.18					
TOTAL NONDEPRECIABLE PLANT		6,136,256.41			1,515,247		
AMORTIZATION OF NET SALVAGE							
TOTAL UTILITY PLANT		628,797,643.28	205,424,608	417,236,779	15,526,093		

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 3. BRINGFORWARD TO DECEMBER 31, 2023, OF BOOK RESERVE AS OF DECEMBER 31, 2022

ACCOUNT (1)	BOOK RESERVE BALANCE AS OF 12/31/2022 (2)	+	PROJECTED DEPRECIATION ACCRUALS (3)	-	PROJECTED RETIREMENTS (4)	-	PROJECTED COST OF REMOVAL (5)	+	PROJECTED SALVAGE (6)	+	ACQUISITIONS (7)	=	PROJECTED BOOK RESERVE BALANCE AS OF 12/31/2023 (8)
354.20	225,041		104,107		28,595		3,431						297,122
354.30	7,310,370		372,131		63,016		7,562						7,611,923
354.40	76,792,614		2,706,882		97,816		11,738						79,389,942
354.70	1,926,787		93,142		11,382		1,366						2,007,181
355.00	2,925,899		156,155		185,236		16,671						2,880,147
360.10	4,353,791		925,283		406,541		247,990						4,624,544
361.10	43,086,387		3,166,341		714,007		435,544						45,103,176
361.20	10,655,289		839,689		22,844		31,296						11,440,838
363.00	23,651,609		1,123,465		59,957		43,169						24,671,948
364.00	228,085		65,615		8,774								284,926
365.00	217,405		13,083										230,488
370.00	34,395		3,241										37,636
371.00	1,925,109		1,090,763		189,048		177,705						2,649,119
380.00	16,853,533		3,174,878		964,356		453,247						18,610,808
381.00	1,554,458		141,631										1,696,089
382.00	242,848		13,009										255,857
389.10	246,460		83,140										329,600
390.00	101,165		43,593										144,758
391.00	637,946		133,850										771,796
392.00	33,327		4,305										37,632
393.00	318,284		53,069		24,989		1,749						344,614
394.00	241,130		39,028		62,662		6,895						210,580
395.00	419,369		11,583										430,952
396.00	1,053,027		304,805		136,391		30,006						1,191,435
397.00	139,211		61,089		28,995		2,030						169,275
398.00	1,374		848										2,222
TOTAL	195,174,913		14,724,724		3,004,629		1,470,400		0		0		205,424,608

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 4. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2023

ACCOUNT (1)	NET ORIGINAL COST AS OF 12/31/2022 (2)	NET ORIGINAL COST AS OF 12/31/2023 (3)	ACCRUAL RATE (4)	DEPRECIATION ACCRUALS (5)*	AMORTIZATION OF NET SALVAGE (6)	PROJECTED DEPRECIATION ACCRUALS (7)=(5)+(6)
354.20	3,344,865.40	3,612,200.54	2.68	93,990	10,117	104,107
354.30	17,791,611.38	18,566,095.31	1.85	340,488	31,643	372,131
354.40	152,132,594.45	153,334,778.46	1.77	2,693,634	13,248	2,706,882
354.70	3,846,816.75	4,070,803.81	2.05	79,248	13,894	93,142
355.00	5,744,996.58	8,021,589.21	2.33	146,524	9,631	156,155
360.10	40,565,058.59	45,561,550.15	1.70	752,649	172,634	925,283
361.10	176,291,375.14	184,392,031.37	1.52	2,702,524	463,817	3,166,341
361.20	29,652,321.04	30,039,047.08	2.68	799,636	40,053	839,689
363.00	45,439,103.11	46,563,946.82	2.26	1,038,357	85,108	1,123,465
364.00	564,962.51	599,501.42	10.99	65,567	48	65,615
365.00	272,564.04	272,564.04	4.80	13,083		13,083
370.00	143,419.77	143,419.77	2.26	3,241		3,241
371.00	17,200,567.65	19,524,019.44	4.91	934,862	155,901	1,090,763
380.00	76,306,980.94	88,159,162.45	3.75	2,885,811	289,067	3,174,878
381.00	6,183,989.54	6,183,989.54	2.29	141,613	18	141,631
382.00	604,388.91	604,388.91	2.12	12,813	196	13,009
389.10	1,198,404.70	2,057,547.56	5.48	82,739	401	83,140
390.00	718,389.99	759,062.65	5.68	42,850	743	43,593
391.00	1,627,652.53	1,627,652.53	8.03	130,700	3,150	133,850
392.00	107,351.44	107,351.44	4.01	4,305		4,305
393.00	1,034,519.57	1,300,973.29	4.64	51,325	1,744	53,069
394.00	481,441.01	418,758.86	8.10	36,247	2,781	39,028
395.00	542,370.71	542,370.71	2.06	11,173	410	11,583
396.00	3,272,595.36	4,946,898.12	6.92	282,448	22,357	304,805
397.00	881,510.69	1,237,451.91	6.23	54,939	6,150	61,089
398.00	14,231.50	14,231.50	4.20	598	250	848
TOTAL	585,964,083.30	622,661,386.88		13,401,363	1,323,361	14,724,724

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

TABLE 5. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

ACCOUNT (1)	2019		2020		2021		PROJECTED 2022		PROJECTED 2023		NET SALVAGE (12)*	SALVAGE ACCRUAL (13)-(12)/5
	GROSS SALVAGE (2)	COST OF REMOVAL (3)	GROSS SALVAGE (4)	COST OF REMOVAL (5)	GROSS SALVAGE (6)	COST OF REMOVAL (7)	GROSS SALVAGE (8)	COST OF REMOVAL (9)	GROSS SALVAGE (10)	COST OF REMOVAL (11)		
354.20		27,531	18,802				1,884			3,431	(51,649)	(10,330)
354.30		61,135	73,614		20,176		3,202			7,562	(165,689)	(33,138)
354.40		1,986	29,899		28,985		23,901			11,738	(96,518)	(19,304)
354.70		18,075	247		11,678		3,370			1,366	(34,735)	(6,947)
355.00		9,730	23,921		1,253		8,712			16,671	(60,288)	(12,058)
360.10		245,202	186,669		147,596		198,352			247,990	(1,025,810)	(205,162)
361.10		1,038,559	323,715		245,041		365,825			435,544	(2,408,685)	(481,737)
361.20		109,567	34,152		20,316		36,229			31,296	(231,560)	(46,312)
363.00		150,830	76,223		105,837		44,354			43,169	(420,254)	(84,051)
364.00		240									(240)	(48)
371.00		141,438	273,771		206,560		176,622			177,705	(976,096)	(195,219)
380.00		214,843	652,150		289,030		297,005			453,247	(1,886,276)	(377,255)
381.00					90						(90)	(18)
389.10		5,682									(5,682)	(1,136)
390.00					3,619						(3,619)	(724)
391.00		6,029	10								(6,039)	(1,208)
393.00		1,931	5,644				1,146			1,749	(10,470)	(2,094)
394.00		5,593	1,075		1,113		6,005			6,895	(20,681)	(4,136)
395.00		2,048									(2,048)	(410)
396.00		1,898	52,578		4,528		52,782			30,006	(141,792)	(28,358)
397.00		5,513	9,910		4,677		6,088			2,030	(26,761)	(5,352)
398.00		1,251									(1,251)	(250)
TOTAL	0	2,049,082	1,762,381	1,762,381	1,070,510	1,070,510	1,225,477	0	0	1,470,400	(7,576,234)	(1,515,247)

* Column (12) equals the summation of Columns (2) through (11).

PART II. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		DEPRECIATED ORIGINAL COST CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
			(2)	(3)		
1915	70,875	55,338	15,537		15,537	0.0
1920	106,148	81,854	24,294		39,831	0.0
1929	17,056	12,862	4,194		44,025	0.0
1930	174,480	129,835	44,645		88,670	0.0
1932	577	556	21		88,691	0.0
1935	14,133	10,272	3,861		92,552	0.0
1939	82,903	64,378	18,525		111,077	0.0
1945	34,259	23,680	10,579		121,656	0.0
1946	96,935	66,871	30,064		151,720	0.0
1955	43,254	28,962	14,292		166,012	0.0
1957	1,488,121	1,014,532	473,589		639,601	0.2
1961	356,850	287,515	69,335		708,936	0.2
1962	32,905	20,483	12,422		721,358	0.2
1965	753,001	492,422	260,579		981,937	0.2
1966	35,259,814	23,726,172	11,533,642		12,515,579	3.0
1967	24,028,350	18,605,022	5,423,328		17,938,907	4.3
1968	81,229	54,378	26,851		17,965,758	4.3
1969	494,628	288,074	206,554		18,172,312	4.4
1970	1,324,514	878,356	446,158		18,618,470	4.5
1971	551	477	74		18,618,544	4.5
1972	8,022,424	4,555,465	3,466,959		22,085,503	5.3
1973	151,877	68,843	83,034		22,168,537	5.3
1974	1,473,569	531,622	941,947		23,110,484	5.5
1975	7,463,386	4,362,725	3,100,661		26,211,145	6.3
1976	1,224,158	494,475	729,683		26,940,828	6.5
1977	677,108	287,433	389,675		27,330,503	6.6
1978	20,830,680	14,259,957	6,570,723		33,901,226	8.1
1979	142,566	70,000	72,566		33,973,792	8.1
1980	1,380,130	844,760	535,370		34,509,162	8.3
1981	226,730	104,099	122,631		34,631,793	8.3
1982	180,202	101,273	78,929		34,710,722	8.3
1983	860,671	431,159	429,512		35,140,234	8.4
1984	4,152,568	2,114,923	2,037,645		37,177,879	8.9
1985	6,860,537	3,616,769	3,243,768		40,421,647	9.7
1986	2,099,548	1,163,018	936,530		41,358,177	9.9
1987	2,406,934	1,253,653	1,153,281		42,511,458	10.2
1988	5,141,835	2,390,549	2,751,286		45,262,744	10.8
1989	3,686,965	1,701,571	1,985,394		47,248,138	11.3
1990	11,145,833	5,453,506	5,692,327		52,940,465	12.7
1991	670,395	469,640	200,755		53,141,220	12.7
1992	55,212,019	30,484,030	24,727,989		77,869,209	18.7
1993	13,894,154	6,615,638	7,278,516		85,147,725	20.4
1994	1,525,133	642,876	882,257		86,029,982	20.6
1995	19,304,698	8,155,348	11,149,350		97,179,332	23.3
1996	1,190,506	525,467	665,039		97,844,371	23.5

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	DEPRECIATED ORIGINAL COST		CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
			AMOUNT (2) - (3) (4)			
1997	6,788,640	2,260,781	4,527,859		102,372,230	24.5
1998	3,695,986	1,353,739	2,342,247		104,714,477	25.1
1999	3,696,848	1,303,555	2,393,293		107,107,770	25.7
2000	11,181,493	4,498,472	6,683,021		113,790,791	27.3
2001	3,093,770	1,006,858	2,086,912		115,877,703	27.8
2002	3,543,135	1,227,752	2,315,383		118,193,086	28.3
2003	1,977,099	652,126	1,324,973		119,518,059	28.6
2004	6,977,825	2,117,506	4,860,319		124,378,378	29.8
2005	15,284,149	4,541,594	10,742,555		135,120,933	32.4
2006	7,145,771	2,041,913	5,103,858		140,224,791	33.6
2007	8,337,664	1,994,542	6,343,122		146,567,913	35.1
2008	19,998,922	5,091,256	14,907,666		161,475,579	38.7
2009	55,654,688	17,953,022	37,701,666		199,177,245	47.7
2010	29,164,928	8,591,549	20,573,379		219,750,624	52.7
2011	1,907,025	655,292	1,251,733		221,002,357	53.0
2012	3,482,265	766,617	2,715,648		223,718,005	53.6
2013	9,737,640	2,042,034	7,695,606		231,413,611	55.5
2014	45,271,084	8,951,282	36,319,802		267,733,413	64.2
2015	17,484,760	3,089,330	14,395,430		282,128,843	67.6
2016	12,311,698	1,451,515	10,860,183		292,989,026	70.2
2017	24,007,691	2,347,714	21,659,977		314,649,003	75.4
2018	12,441,208	1,799,235	10,641,973		325,290,976	78.0
2019	22,129,809	1,809,737	20,320,072		345,611,048	82.8
2020	18,083,442	1,453,239	16,630,203		362,241,251	86.8
2021	18,227,114	994,552	17,232,562		379,473,813	90.9
2022	31,896,088	1,214,783	30,681,305		410,155,118	98.3
2023	40,376,611	530,925	39,845,686		450,000,804	107.9
9999	45,621,176-	12,857,150-	32,764,026-		417,236,778	100.0
SUBTOTAL	622,661,387	205,424,608	417,236,779			
NONDEPRECIABLE	6,136,256		6,136,256			
TOTAL	628,797,643	205,424,608	423,373,035			

NET UTILITY PLANT IN SERVICE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.20 STRUCTURES AND IMPROVEMENTS - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2007	12,669.12	4,933	3,130	9,539	25.87	369
2008	385,095.95	141,484	89,780	295,316	26.69	11,065
2009	163,115.08	56,536	35,875	127,240	27.34	4,654
2011	8,253.82	2,486	1,578	6,676	29.00	230
2013	98,627.56	25,268	16,034	82,594	30.48	2,710
2014	14,466.53	3,368	2,137	12,330	31.31	394
2015	41,227.33	8,621	5,471	35,756	32.15	1,112
2016	36,200.19	6,733	4,272	31,928	32.82	973
2017	195,767.13	31,675	20,100	175,667	33.66	5,219
2018	184,446.56	25,361	16,093	168,354	34.50	4,880
2019	319,217.51	36,199	22,970	296,248	35.18	8,421
2020	491,281.98	43,528	27,621	463,661	36.02	12,872
2021	1,218,199.55	77,721	49,319	1,168,881	36.71	31,841
2022	205,457.19	7,931	5,033	200,424	37.41	5,357
2023	295,930.02	3,877	2,460	293,470	37.67	7,791
9999	57,754.99-	7,487-	4,751-	53,004-		1,540-
	3,612,200.53	468,234	297,122	3,315,079		96,348
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						34.4 2.67

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1965	47,634.23	36,226	47,367	267	18.42	14
1976	25,987.54	17,775	23,242	2,746	21.94	125
1978	11,035.62	7,381	9,651	1,385	22.53	61
1980	3,218.88	2,100	2,746	473	23.17	20
1982	25,017.59	15,886	20,772	4,246	23.86	178
1983	85,803.98	53,868	70,435	15,369	24.01	640
1984	30,284.30	18,661	24,400	5,884	24.60	239
1985	108,663.34	66,100	86,429	22,234	24.79	897
1986	67,502.98	40,502	52,958	14,545	25.00	582
1987	29,434.01	17,295	22,614	6,820	25.61	266
1988	228,323.25	132,108	172,738	55,585	25.85	2,150
1989	89,712.45	51,064	66,769	22,943	26.11	879
1990	128,770.30	72,034	94,188	34,582	26.38	1,311
1991	283,293.45	155,585	203,435	79,858	26.67	2,994
1992	76,116.85	40,997	53,606	22,511	26.98	834
1993	2,157,185.50	1,138,131	1,488,165	669,020	27.31	24,497
1994	48,737.54	25,158	32,895	15,843	27.65	573
1996	24,013.47	11,887	15,543	8,470	28.06	302
1997	207,088.66	99,879	130,597	76,492	28.45	2,689
1998	222,661.24	104,473	136,604	86,057	28.85	2,983
1999	303,189.48	138,921	181,646	121,543	28.97	4,195
2000	6,994.10	3,107	4,063	2,931	29.41	100
2001	177,968.04	76,882	100,527	77,441	29.58	2,618
2002	9,669.03	4,053	5,300	4,369	29.78	147
2003	269,618.90	108,872	142,356	127,263	30.26	4,206
2004	1,142,796.82	445,691	582,764	560,033	30.50	18,362
2005	463,825.09	174,213	227,792	236,033	30.76	7,673
2006	924,331.59	333,222	435,705	488,627	31.04	15,742
2007	514,256.44	177,316	231,850	282,406	31.35	9,008
2008	883,252.82	291,650	381,347	501,906	31.45	15,959
2009	2,920,994.11	914,855	1,196,220	1,724,774	31.80	54,238
2010	1,285,265.85	381,724	499,124	786,142	31.95	24,605
2011	14,521.28	4,066	5,317	9,204	32.14	286
2013	181,111.04	44,119	57,688	123,423	32.60	3,786
2014	4,030,782.34	903,701	1,181,636	2,849,146	32.87	86,679
2015	1,540,850.01	315,566	412,619	1,128,231	33.00	34,189
2016	543,613.83	100,297	131,143	412,471	33.15	12,443
2017	462,389.63	75,462	98,670	363,720	33.34	10,909
2018	387,359.97	54,540	71,314	316,046	33.56	9,417
2019	10,205.62	1,203	1,573	8,633	33.67	256
2020	80,092.16	7,545	9,866	70,226	33.67	2,086

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - SPP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
2021	128,434.68	8,862	11,587	116,848	33.73	3,464
2022	349,323.47	14,951	19,549	329,774	33.59	9,818
2023	837,500.00	12,395	16,208	821,292	33.40	24,590
9999	2,802,736.17-	878,814-	1,149,095-	1,653,641-		52,072-
	18,566,095.31	5,821,509	7,611,923	10,954,172		344,938
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						31.8 1.86

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
1932	577.25	539	556	21	6.54	3
1946	498.03	432	445	53	11.79	4
1957	136,600.01	110,824	114,254	22,346	15.47	1,444
1961	345,221.48	271,862	280,277	64,944	16.87	3,850
1965	53,789.54	40,907	42,173	11,617	18.42	631
1967	23,928,974.40	17,980,231	18,536,760	5,392,214	18.69	288,508
1973	38,370.49	27,128	27,968	10,402	20.93	497
1975	418,246.30	290,096	299,075	119,171	21.43	5,561
1976	17,390.92	11,895	12,263	5,128	21.94	234
1978	20,459,241.99	13,683,141	14,106,665	6,352,577	22.53	281,961
1984	691,783.03	426,277	439,471	252,312	24.60	10,257
1985	133,546.70	81,236	83,750	49,797	24.79	2,009
1986	415,651.73	249,391	257,110	158,542	25.00	6,342
1988	1,120,236.89	648,169	668,231	452,006	25.85	17,486
1989	99,583.95	56,683	58,437	41,147	26.11	1,576
1992	52,451,101.99	28,250,164	29,124,572	23,326,530	26.98	864,586
1993	243,429.72	128,434	132,409	111,021	27.31	4,065
1994	16,648.36	8,594	8,860	7,788	27.65	282
1996	597,290.24	295,659	304,810	292,480	28.06	10,423
1997	69,609.71	33,573	34,612	34,998	28.45	1,230
1998	598,607.81	280,867	289,560	309,048	28.85	10,712
2000	6,473,587.02	2,875,567	2,964,573	3,509,014	29.41	119,314
2001	406,745.26	175,714	181,153	225,592	29.58	7,627
2002	784,530.97	328,875	339,054	445,477	29.78	14,959
2003	12,821.21	5,177	5,337	7,484	30.26	247
2004	15,533.46	6,058	6,246	9,287	30.50	304
2005	532,924.53	200,166	206,362	326,563	30.76	10,616
2006	441,089.04	159,013	163,935	277,154	31.04	8,929
2007	3,279.38	1,131	1,166	2,113	31.35	67
2008	789,345.50	260,642	268,709	520,636	31.45	16,554
2009	16,265,342.21	5,094,305	5,251,986	11,013,356	31.80	346,332
2010	11,046,067.42	3,280,682	3,382,227	7,663,840	31.95	239,870
2011	87,321.11	24,450	25,207	62,114	32.14	1,933
2012	9,691.26	2,541	2,620	7,071	32.36	219
2013	216,374.35	52,709	54,340	162,034	32.60	4,970
2014	10,051,976.38	2,253,653	2,323,408	7,728,568	32.87	235,125
2015	33,044.97	6,768	6,977	26,068	33.00	790
2016	116,063.95	21,414	22,077	93,987	33.15	2,835
2017	802,959.91	131,043	135,099	667,861	33.34	20,032
2018	205,421.14	28,923	29,818	175,603	33.56	5,233
2019	205,994.83	24,287	25,039	180,956	33.67	5,374

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TDP

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0						
NET SALVAGE PERCENT.. 0						
2021	1,099,912.05	75,894	78,243	1,021,669	33.73	30,290
2022	2,608,629.97	111,649	115,105	2,493,525	33.59	74,234
2023	1,300,000.00	19,240	19,836	1,280,164	33.40	38,328
9999	2,010,278.00-	1,009,584-	1,040,833-	969,445-		34,886-
	153,334,778.46	77,006,419	79,389,942	73,944,836		2,660,957
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						27.8 1.74

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 354.70 STRUCTURES AND IMPROVEMENTS - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1						
NET SALVAGE PERCENT.. 0						
1972	325.34	297	325			
1984	9,898.53	8,133	9,899			
1992	13,784.90	10,161	13,785			
1993	15,716.28	11,408	15,716			
1994	27,155.25	19,307	27,155			
1997	5,508.05	3,693	5,508			
2002	1,021.02	604	1,021			
2003	37,627.37	21,523	37,627			
2007	1,107.53	545	1,108			
2008	350,634.53	164,658	350,635			
2009	50,291.62	22,460	49,360	932	17.97	52
2010	38,159.48	16,126	35,440	2,719	18.45	147
2011	6,981.12	2,775	6,099	882	18.95	47
2012	28,035.29	10,412	22,882	5,153	19.46	265
2013	24,932.90	8,587	18,872	6,061	19.99	303
2014	409,242.93	129,075	283,667	125,576	20.62	6,090
2015	1,012,881.02	290,089	637,526	375,355	21.18	17,722
2016	9,114.86	2,338	5,138	3,977	21.74	183
2017	130,872.40	29,433	64,685	66,187	22.40	2,955
2018	371,198.53	71,456	157,038	214,161	23.07	9,283
2019	84,289.60	13,427	29,508	54,782	23.75	2,307
2020	194,497.21	24,312	53,431	141,066	24.51	5,755
2021	644,363.49	57,993	127,451	516,912	25.28	20,447
2022	367,795.86	19,971	43,890	323,906	26.12	12,401
2023	235,368.68	4,284	9,415	225,954	26.97	8,378
	4,070,803.79	943,067	2,007,181	2,063,623		86,335

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.9 2.12

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 355.00 POWER GENERATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S0.5						
NET SALVAGE PERCENT.. 0						
1983	9,856.98	7,984	9,857			
1987	15,008.34	11,613	15,008			
1989	39,901.28	30,010	39,901			
1990	21,880.25	16,200	21,880			
1992	50,434.05	36,222	50,434			
1993	227,927.30	161,281	225,616	2,311	12.60	183
1994	17,493.96	12,127	16,964	530	13.06	41
1997	26,909.66	17,615	24,642	2,268	13.98	162
1998	11,204.88	7,171	10,032	1,173	14.34	82
1999	48,574.09	30,349	42,455	6,119	14.71	416
2001	34,982.47	20,780	29,069	5,913	15.38	384
2002	57,090.90	32,896	46,018	11,073	15.81	700
2005	63,542.88	33,271	46,543	17,000	16.83	1,010
2007	11,475.71	5,547	7,760	3,716	17.63	211
2008	478,322.65	221,655	310,074	168,249	17.95	9,373
2009	2,426,550.93	1,069,624	1,496,299	930,252	18.39	50,585
2010	19,713.51	8,250	11,541	8,173	18.76	436
2011	13,764.42	5,437	7,606	6,158	19.15	322
2012	26,584.73	9,844	13,771	12,814	19.56	655
2013	25,837.08	8,898	12,447	13,390	19.99	670
2014	591,089.74	188,085	263,112	327,978	20.35	16,117
2015	88,485.56	25,723	35,984	52,502	20.74	2,531
2016	10,254.37	2,685	3,756	6,498	21.15	307
2017	12,790.21	2,960	4,141	8,649	21.59	401
2018	4,238.09	848	1,186	3,052	21.97	139
2019	9,077.55	1,520	2,126	6,952	22.38	311
2020	159,469.25	21,209	29,669	129,800	22.82	5,688
2022	1,264,769.55	75,633	105,804	1,158,966	23.56	49,192
2023	2,461,828.16	50,714	70,944	2,390,884	23.83	100,331
9999	207,469.32-	53,352-	74,492-	132,977-		6,057-
	8,021,589.23	2,062,799	2,880,147	5,141,442		234,190
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						22.0 2.92

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1957	7,098.11	5,570	2,969	4,129	18.25	226
1965	10,503.03	7,619	4,061	6,442	22.15	291
1972	71,289.47	46,994	25,051	46,238	26.62	1,737
1973	110,359.47	71,888	38,321	72,038	27.02	2,666
1974	1,334,295.35	852,081	454,212	880,083	28.02	31,409
1975	761,459.48	480,100	255,923	505,536	28.42	17,788
1976	878,459.82	546,578	291,360	587,100	28.84	20,357
1977	418,475.37	254,935	135,896	282,579	29.83	9,473
1978	248,506.70	149,253	79,561	168,946	30.26	5,583
1979	68,282.76	40,109	21,381	46,902	31.26	1,500
1980	70,003.44	40,504	21,591	48,412	31.68	1,528
1981	150,923.64	85,951	45,817	105,107	32.13	3,271
1982	50,427.76	28,043	14,949	35,479	33.13	1,071
1983	182,327.68	99,697	53,145	129,183	33.57	3,848
1985	296,339.94	155,164	82,712	213,628	35.03	6,098
1986	31,512.95	16,072	8,567	22,946	36.03	637
1987	217,626.28	108,813	58,004	159,622	36.50	4,373
1988	477,730.58	232,368	123,867	353,864	37.49	9,439
1989	89,256.06	42,495	22,652	66,604	37.96	1,755
1990	67,434.62	31,175	16,618	50,817	38.96	1,304
1991	73,490.07	33,203	17,699	55,791	39.44	1,415
1992	33,851.58	14,929	7,958	25,894	39.93	648
1993	572,821.84	244,595	130,384	442,438	40.93	10,810
1994	281,250.31	117,000	62,368	218,882	41.42	5,284
1995	916,463.88	368,235	196,292	720,172	42.43	16,973
1996	130,064.38	50,790	27,074	102,990	42.92	2,400
1997	1,652,225.85	621,733	331,423	1,320,803	43.92	30,073
1998	423,939.41	154,568	82,394	341,545	44.43	7,687
1999	397,288.23	139,210	74,208	323,080	45.43	7,112
2000	483,496.74	163,615	87,217	396,280	45.94	8,626
2001	865,011.21	280,264	149,398	715,613	46.94	15,245
2002	550,840.11	170,540	90,909	459,931	47.94	9,594
2003	407,005.11	120,962	64,480	342,525	48.47	7,067
2004	2,393,527.91	676,890	360,825	2,032,703	49.46	41,098
2005	651,176.12	175,883	93,757	557,419	49.99	11,151
2006	1,968,917.56	503,058	268,162	1,700,756	50.99	33,355
2007	1,182,766.96	286,939	152,956	1,029,811	51.52	19,989
2008	3,779,975.23	861,078	459,009	3,320,966	52.53	63,220
2009	533,525.79	114,495	61,033	472,493	53.07	8,903
2010	262,736.51	52,495	27,983	234,754	54.07	4,342
2013	305,889.29	47,841	25,502	280,387	56.62	4,952

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 360.10 COLLECTION SEWERS - FORCE MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
2014	4,395,241.63	626,322	333,869	4,061,373	57.17	71,040
2015	2,386,022.23	304,218	162,167	2,223,855	58.17	38,230
2016	3,133,858.06	354,753	189,106	2,944,752	58.73	50,141
2017	3,386,239.60	332,529	177,259	3,208,981	59.72	53,734
2018	1,163,409.51	97,261	51,846	1,111,564	60.29	18,437
2019	4,220,093.37	290,342	154,771	4,065,322	60.86	66,798
2020	2,932,961.56	157,207	83,801	2,849,161	61.86	46,058
2021	2,538,801.69	97,744	52,104	2,486,698	62.44	39,825
2022	4,257,502.33	99,626	53,107	4,204,395	62.60	67,163
2023	5,403,032.29	42,684	22,753	5,380,279	62.79	85,687
9999	11,664,188.72-	2,220,991-	1,183,927-	10,480,262-		198,000-
	45,561,550.15	8,675,427	4,624,544	40,937,006		773,411
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						52.9 1.70

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1915	70,874.67	65,361	55,338	15,537	9.15	1,698
1920	106,148.00	96,680	81,854	24,294	10.14	2,396
1929	16,381.57	14,396	12,188	4,194	13.03	322
1930	174,480.50	153,351	129,835	44,646	12.88	3,466
1935	14,132.86	12,132	10,272	3,861	14.60	264
1939	35,762.41	30,219	25,585	10,177	15.50	657
1945	34,258.68	27,969	23,680	10,579	17.65	599
1946	90,183.12	72,688	61,541	28,642	18.65	1,536
1955	34,810.85	26,230	22,208	12,603	22.41	562
1957	1,160,351.36	856,571	725,218	435,133	23.59	18,446
1961	10,729.64	7,577	6,415	4,315	26.00	166
1962	29,923.18	20,979	17,762	12,161	26.22	464
1965	490,216.79	332,661	281,648	208,569	27.71	7,527
1966	21,155,560.05	14,110,759	11,946,902	9,208,658	28.71	320,747
1968	33,752.62	21,919	18,558	15,195	29.97	507
1969	394,907.24	253,965	215,020	179,887	30.25	5,947
1970	767,535.00	488,613	413,685	353,850	30.54	11,586
1972	6,324,192.42	3,908,351	3,309,013	3,015,179	31.83	94,728
1974	111,327.85	66,685	56,459	54,869	33.14	1,656
1975	4,007,896.32	2,371,472	2,007,811	2,000,085	33.47	59,758
1976	244,739.55	141,827	120,078	124,662	34.47	3,617
1977	159,432.44	91,195	77,210	82,222	34.80	2,363
1978	78,838.85	44,118	37,353	41,486	35.80	1,159
1979	32,402.56	17,880	15,138	17,265	36.15	478
1980	580,664.52	313,210	265,180	315,485	37.15	8,492
1982	45,415.27	23,748	20,106	25,309	37.87	668
1983	440,453.69	224,764	190,297	250,157	38.87	6,436
1984	2,579,789.00	1,294,022	1,095,586	1,484,203	39.24	37,824
1985	3,459,146.43	1,691,523	1,432,131	2,027,015	40.24	50,373
1986	620,196.88	297,695	252,044	368,153	40.62	9,063
1987	998,448.35	470,069	397,985	600,463	41.02	14,638
1988	2,747,590.14	1,258,396	1,065,424	1,682,166	42.02	40,033
1989	2,330,202.33	1,045,096	884,833	1,445,369	42.42	34,073
1990	5,882,361.53	2,561,768	2,168,926	3,713,436	43.42	85,524
1992	1,068,482.48	444,275	376,146	692,336	44.26	15,642
1993	6,192,125.44	2,492,950	2,110,661	4,081,464	45.26	90,178
1994	573,503.97	225,043	190,533	382,971	45.68	8,384
1995	9,488,202.55	3,596,029	3,044,585	6,443,618	46.69	138,009
1996	230,393.76	84,900	71,881	158,513	47.13	3,363
1997	3,289,854.39	1,177,110	996,603	2,293,251	47.57	48,208
1998	1,828,910.10	629,511	532,977	1,295,933	48.58	26,676

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.10 COLLECTION SEWERS - GRAVITY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-R2.5						
NET SALVAGE PERCENT.. 0						
1999	1,841,962.93	613,742	519,626	1,322,337	49.03	26,970
2000	2,691,162.61	860,096	728,202	1,962,961	50.03	39,236
2001	933,713.88	287,771	243,642	690,072	50.50	13,665
2002	1,210,820.10	359,250	304,160	906,660	50.96	17,792
2003	612,012.09	173,138	146,588	465,424	51.96	8,957
2004	1,155,182.81	313,055	265,049	890,134	52.45	16,971
2005	7,214,100.85	1,868,452	1,581,928	5,632,173	52.93	106,408
2006	1,914,938.42	469,160	397,215	1,517,723	53.93	28,142
2007	4,096,828.86	952,922	806,793	3,290,036	54.43	60,445
2008	7,560,832.88	1,664,139	1,408,947	6,151,886	54.92	112,015
2009	6,947,744.52	1,440,962	1,219,993	5,727,752	55.43	103,333
2010	3,999,370.02	771,878	653,512	3,345,858	56.43	59,292
2011	874,945.15	157,490	133,339	741,606	56.94	13,024
2012	2,044,350.84	340,998	288,707	1,755,644	57.46	30,554
2013	3,782,350.00	579,834	490,918	3,291,432	57.99	56,759
2014	11,183,493.48	1,561,216	1,321,806	9,861,687	58.53	168,489
2015	4,602,805.07	579,033	490,239	4,112,566	59.07	69,622
2016	5,943,550.16	664,489	562,591	5,380,959	59.61	90,269
2017	15,230,634.36	1,484,987	1,257,267	13,973,367	60.17	232,231
2018	2,788,842.97	233,147	197,394	2,591,449	60.29	42,983
2019	9,502,653.73	658,534	557,549	8,945,105	60.44	148,000
2020	3,276,830.67	177,604	150,369	3,126,462	61.02	51,237
2021	5,222,715.70	206,297	174,662	5,048,054	60.79	83,041
2022	7,849,343.00	190,739	161,490	7,687,853	60.23	127,642
2023	9,489,341.55	81,608	69,093	9,420,249	57.98	162,474
9999	15,513,074.64-	4,481,856-	3,794,572-	11,718,503-		234,963-
	184,392,031.37	53,272,392	45,103,176	139,288,855		2,792,821
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						49.9 1.51

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
1939	40,993.20	39,837	32,645	8,348	2.45	3,407
1946	6,253.58	5,961	4,885	1,369	3.80	360
1955	6,521.46	6,031	4,942	1,579	5.57	283
1965	51,820.94	45,779	37,514	14,307	7.72	1,853
1966	4,591,441.24	4,012,920	3,288,424	1,303,017	8.29	157,179
1968	35,177.45	30,457	24,958	10,219	8.60	1,188
1969	84,121.56	72,437	59,359	24,763	8.79	2,817
1970	146,594.70	125,485	102,830	43,765	9.00	4,863
1972	1,032,115.84	866,358	709,945	322,171	9.85	32,708
1974	15,934.19	13,171	10,793	5,141	10.38	495
1975	597,728.69	489,898	401,451	196,278	10.67	18,395
1977	42,642.21	34,301	28,108	14,534	11.31	1,285
1980	118,733.54	91,935	75,337	43,397	12.68	3,422
1984	95,749.17	70,347	57,646	38,103	14.26	2,672
1985	762,587.28	551,961	452,310	310,277	14.69	21,122
1986	107,077.88	76,293	62,519	44,559	15.13	2,945
1987	216,768.09	151,911	124,485	92,283	15.58	5,923
1988	245,108.30	167,948	137,627	107,481	16.31	6,590
1990	1,607,181.54	1,060,740	869,233	737,949	17.26	42,755
1992	255,287.04	160,831	131,794	123,493	18.50	6,675
1993	252,274.44	155,426	127,365	124,909	19.00	6,574
1994	240,119.86	143,784	117,825	122,295	19.76	6,189
1995	2,705,537.68	1,580,575	1,295,217	1,410,321	20.28	69,542
1996	39,632.61	22,452	18,398	21,235	21.04	1,009
1997	1,035,904.92	570,991	467,904	568,001	21.58	26,321
1998	248,940.18	132,685	108,730	140,210	22.34	6,276
1999	391,701.27	201,530	165,146	226,555	23.12	9,799
2000	521,688.05	258,653	211,956	309,732	23.90	12,959
2001	317,346.24	151,374	124,045	193,301	24.67	7,835
2002	230,574.03	105,603	86,537	144,037	25.45	5,660
2003	214,657.69	94,170	77,168	137,490	26.23	5,242
2004	561,223.95	235,265	192,790	368,434	27.01	13,641
2005	2,195,573.51	877,351	718,953	1,476,621	27.80	53,116
2006	171,020.48	64,954	53,227	117,793	28.58	4,122
2007	1,856,031.30	664,459	544,497	1,311,534	29.59	44,324
2008	2,076,494.24	701,647	574,971	1,501,523	30.37	49,441
2009	179,538.79	57,022	46,727	132,812	31.16	4,262
2010	303,622.58	89,751	73,547	230,076	32.16	7,154
2011	118,797.93	32,527	26,655	92,143	33.16	2,779
2012	96,981.00	24,536	20,106	76,875	33.95	2,264
2013	1,061,802.71	245,276	200,994	860,809	34.95	24,630

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 361.20 MANHOLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-S2.5						
NET SALVAGE PERCENT.. 0						
2014	2,194,335.67	458,616	375,817	1,818,519	35.95	50,585
2015	5,490,195.78	1,026,667	841,312	4,648,884	36.95	125,816
2016	283,132.77	46,943	38,468	244,665	37.75	6,481
2017	372,835.70	53,539	43,873	328,963	38.75	8,489
2018	19,204.01	2,335	1,913	17,291	39.75	435
2019	42,873.77	4,262	3,493	39,381	40.75	966
2020	320,886.27	24,837	20,353	300,533	41.75	7,198
2021	253,481.99	13,992	11,466	242,016	42.75	5,661
2022	450,375.00	14,952	12,252	438,123	43.75	10,014
2023	409,570.07	4,505	3,692	405,878	44.75	9,070
9999	4,677,145.31-	2,173,829-	1,781,364-	2,895,781-		121,898-
	30,039,047.08	13,961,451	11,440,838	18,598,209		782,893
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						23.8 2.61

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1929	674.44	674	674			
1939	6,147.67	6,148	6,148			
1955	1,921.58	1,856	1,812	110	2.43	45
1957	171,931.61	164,642	160,746	11,186	2.94	3,805
1961	899.11	843	823	76	4.17	18
1962	2,981.39	2,787	2,721	260	4.29	61
1965	53,875.94	49,480	48,309	5,567	5.20	1,071
1966	9,512,812.57	8,696,613	8,490,846	1,021,967	5.40	189,253
1968	12,298.72	11,125	10,862	1,437	5.85	246
1969	15,599.70	14,027	13,695	1,905	6.11	312
1970	380,023.36	339,513	331,480	48,543	6.38	7,609
1971	551.46	489	477	74	6.67	11
1972	594,501.29	523,518	511,131	83,370	6.98	11,944
1973	2,453.24	2,143	2,092	361	7.31	49
1974	12,011.45	10,404	10,158	1,853	7.65	242
1975	1,673,071.28	1,428,134	1,394,344	278,727	8.32	33,501
1976	57,580.36	48,684	47,532	10,048	8.68	1,158
1977	56,557.84	47,339	46,219	10,339	9.06	1,141
1978	33,057.20	27,375	26,727	6,330	9.45	670
1979	41,881.08	34,292	33,481	8,400	9.85	853
1980	607,509.45	491,536	479,906	127,603	10.26	12,437
1981	72,125.74	57,326	55,970	16,156	10.97	1,473
1982	59,341.21	46,547	45,446	13,895	11.41	1,218
1983	142,229.07	110,028	107,425	34,804	11.85	2,937
1984	250,290.86	190,822	186,307	63,984	12.31	5,198
1985	1,688,792.22	1,261,359	1,231,514	457,278	13.05	35,040
1986	175,156.14	128,740	125,694	49,462	13.52	3,658
1987	753,346.33	544,443	531,561	221,785	14.01	15,830
1988	322,846.01	228,058	222,662	100,184	14.75	6,792
1989	308,625.80	214,001	208,938	99,688	15.25	6,537
1990	3,438,204.77	2,337,979	2,282,661	1,155,544	15.76	73,321
1991	78,969.03	52,356	51,117	27,852	16.52	1,686
1992	412,662.21	267,777	261,441	151,221	17.04	8,874
1993	719,846.47	454,511	443,757	276,089	17.81	15,502
1994	249,587.15	153,895	150,254	99,333	18.34	5,416
1995	6,187,719.27	3,703,350	3,615,726	2,571,993	19.12	134,518
1996	94,375.19	55,021	53,719	40,656	19.67	2,067
1997	437,037.72	246,664	240,828	196,210	20.45	9,595
1998	358,276.13	196,407	191,760	166,516	21.01	7,926
1999	151,516.57	80,183	78,286	73,231	21.80	3,359
2000	1,004,564.18	514,638	502,461	502,103	22.37	22,445

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 363.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
2001	259,481.77	127,873	124,847	134,635	23.16	5,813
2002	327,467.66	154,892	151,227	176,241	23.95	7,359
2003	302,927.50	137,862	134,600	168,328	24.55	6,857
2004	1,238,262.95	538,397	525,658	712,605	25.35	28,111
2005	2,713,290.28	1,124,387	1,097,783	1,615,507	26.14	61,802
2006	1,023,210.13	404,680	395,105	628,105	26.75	23,481
2007	615,549.87	230,585	225,129	390,421	27.55	14,171
2008	1,849,386.83	653,573	638,109	1,211,278	28.36	42,711
2009	2,567,399.30	852,377	832,210	1,735,189	29.17	59,485
2010	656,045.91	203,702	198,882	457,164	29.98	15,249
2011	212,215.66	61,543	60,087	152,129	30.60	4,972
2012	246,347.36	66,021	64,459	181,888	31.42	5,789
2013	561,807.80	138,036	134,770	427,038	32.24	13,246
2014	980,410.28	218,828	213,651	766,759	33.06	23,193
2015	1,159,652.17	232,626	227,122	932,530	33.87	27,533
2016	681,570.38	121,183	118,316	563,254	34.69	16,237
2017	2,221,981.60	345,296	337,126	1,884,856	35.34	53,335
2018	739,579.55	97,625	95,315	644,265	36.17	17,812
2019	367,124.35	39,796	38,854	328,270	37.00	8,872
2020	549,968.75	46,747	45,641	504,328	37.65	13,395
2021	1,015,072.71	61,919	60,454	954,619	38.48	24,808
2022	1,199,014.79	44,244	43,197	1,155,818	39.15	29,523
2023	1,184,800.79	14,928	14,575	1,170,226	39.34	29,746
9999	6,252,474.42-	3,393,144-	3,312,879-	2,939,595-		137,478-
	46,563,946.78	25,269,703	24,671,948	21,891,999		1,023,840

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.4 2.20

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 364.00 FLOW MEASURING DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-L2.5						
NET SALVAGE PERCENT.. 0						
1989	4,458.00	4,291	3,353	1,105	1.34	825
1991	7,377.29	7,025	5,490	1,887	1.63	1,158
1992	5,738.74	5,423	4,238	1,501	1.83	820
1999	45,353.13	40,668	31,780	13,573	2.82	4,813
2005	8,219.76	6,767	5,288	2,932	3.97	739
2006	14,867.72	12,046	9,413	5,455	4.10	1,330
2007	8,659.54	6,887	5,382	3,278	4.25	771
2008	28,415.45	22,198	17,346	11,069	4.34	2,550
2009	89,499.16	68,521	53,545	35,954	4.44	8,098
2010	28,805.47	21,544	16,835	11,970	4.55	2,631
2011	8,598.78	6,244	4,879	3,720	4.71	790
2013	26,551.43	17,731	13,856	12,695	5.22	2,432
2014	150,959.95	94,939	74,189	76,771	5.61	13,685
2015	79,115.89	46,204	36,106	43,010	6.06	7,097
2016	5,484.31	2,917	2,280	3,204	6.60	485
2018	1,265.74	519	406	860	7.90	109
2021	13,775.66	2,703	2,112	11,664	10.24	1,139
2022	43,769.36	5,213	4,073	39,696	11.09	3,579
2023	43,312.85	1,733	1,354	41,959	12.02	3,491
9999	14,726.81-	8,957-	6,999-	7,728-		1,356-
	599,501.42	364,616	284,926	314,575		55,186

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.7 9.21

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 365.00 FLOW MEASURING INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-S2						
NET SALVAGE PERCENT.. 0						
1970	30,360.76	30,361	30,361			
1991	227,265.28	204,584	191,899	35,366	3.60	9,824
2009	14,938.00	8,772	8,228	6,710	10.19	658
	272,564.04	243,717	230,488	42,076		10,482
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.0						3.85

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 370.00 RECEIVING WELLS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2007	6,261.10	2,211	2,076	4,185	30.23	138
2009	92,112.20	28,850	27,094	65,018	31.80	2,045
2013	33,467.05	7,764	7,291	26,176	34.75	753
2017	1,547.02	226	212	1,335	37.95	35
2019	10,032.40	1,025	963	9,069	39.55	229
	143,419.77	40,076	37,636	105,784		3,200
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						33.1 2.23

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 371.00 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0.5						
NET SALVAGE PERCENT.. 0						
1985	278.84	236	140	139	6.95	20
1986	68,234.99	57,317	33,918	34,317	7.14	4,806
1989	4,029.93	3,267	1,933	2,097	8.05	260
1992	100,641.86	77,987	46,149	54,493	9.15	5,956
1993	179,747.59	137,615	81,434	98,314	9.34	10,526
1994	16,920.53	12,728	7,532	9,389	9.72	966
1996	50,812.27	36,890	21,830	28,982	10.38	2,792
1997	45,782.96	32,634	19,311	26,472	10.68	2,479
1999	501,032.89	342,506	202,679	298,354	11.34	26,310
2001	13,835.93	8,996	5,323	8,513	12.10	704
2003	120,429.15	74,305	43,970	76,459	12.72	6,011
2004	152,677.60	91,103	53,911	98,767	13.18	7,494
2005	72,226.48	41,819	24,747	47,479	13.45	3,530
2006	86,013.64	48,013	28,412	57,602	13.85	4,159
2007	5,718.58	3,076	1,820	3,899	14.17	275
2008	527,964.79	271,691	160,774	367,191	14.62	25,116
2009	596,599.51	293,288	173,554	423,046	15.00	28,203
2010	269,243.55	126,114	74,628	194,616	15.32	12,703
2011	37,615.70	16,645	9,850	27,766	15.75	1,763
2012	50,134.50	20,871	12,350	37,784	16.12	2,344
2013	58,457.03	22,711	13,439	45,018	16.53	2,723
2014	1,808,372.95	651,014	385,240	1,423,133	16.89	84,259
2015	226,480.90	74,693	44,200	182,281	17.27	10,555
2016	605,290.13	180,255	106,667	498,623	17.69	28,187
2017	395,150.64	104,280	61,708	333,443	18.13	18,392
2018	391,463.11	89,567	53,002	338,461	18.54	18,256
2019	5,419,725.77	1,041,671	616,412	4,803,314	18.92	253,875
2020	2,167,715.40	332,311	196,646	1,971,069	19.33	101,969
2021	694,871.71	78,173	46,259	648,613	19.72	32,891
2022	2,456,789.08	170,501	100,895	2,355,894	20.10	117,209
2023	2,512,500.00	60,300	35,683	2,476,817	20.38	121,532
9999	112,738.57-	25,850-	15,297-	97,442-		5,375-
	19,524,019.44	4,476,727	2,649,119	16,874,900		930,890

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.1 4.77

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
1965	45,160.41	43,065	31,350	13,810	2.85	4,846
1967	99,375.98	93,771	68,262	31,114	3.38	9,205
1973	693.54	634	462	232	4.75	49
1981	3,680.87	3,176	2,312	1,369	6.76	203
1984	494,772.80	414,323	301,614	193,159	7.67	25,184
1985	411,182.47	340,377	247,783	163,399	8.01	20,399
1986	606,689.07	498,213	362,683	244,006	8.16	29,903
1987	176,302.42	142,858	103,996	72,306	8.55	8,457
1989	721,195.38	569,744	414,755	306,440	9.17	33,418
1992	733,917.54	554,842	403,907	330,011	10.17	32,449
1993	3,037,070.46	2,260,188	1,645,343	1,391,727	10.48	132,798
1994	53,715.94	39,137	28,490	25,226	10.99	2,295
1995	6,774.27	4,846	3,528	3,246	11.34	286
1996	23,924.27	16,776	12,212	11,712	11.72	999
1997	18,717.74	12,848	9,353	9,365	12.11	773
1998	3,446.40	2,311	1,682	1,764	12.52	141
1999	16,229.71	10,617	7,729	8,501	12.95	656
2001	62,323.00	38,703	28,175	34,148	13.73	2,487
2002	298,336.18	179,598	130,741	167,595	14.21	11,794
2004	316,923.32	177,984	129,567	187,356	15.22	12,310
2005	1,360,028.81	734,688	534,829	825,200	15.75	52,394
2006	273,654.80	141,753	103,192	170,463	16.28	10,471
2007	17,999.81	8,910	6,486	11,514	16.83	684
2008	988,483.99	465,774	339,068	649,416	17.39	37,344
2009	17,856,389.71	7,974,664	5,805,295	12,051,095	17.97	670,623
2010	9,522,355.55	4,010,816	2,919,744	6,602,612	18.55	355,936
2011	16,318.88	6,446	4,692	11,627	19.15	607
2012	740,356.79	271,563	197,689	542,668	19.85	27,338
2013	2,938,759.48	996,827	725,658	2,213,101	20.46	108,167
2014	8,929,513.92	2,765,470	2,013,172	6,916,342	21.17	326,705
2015	726,796.35	203,212	147,932	578,864	21.90	26,432
2016	519,512.81	129,359	94,169	425,344	22.62	18,804
2017	667,407.25	144,894	105,478	561,929	23.44	23,973
2018	4,989,244.56	925,006	673,374	4,315,871	24.17	178,563
2019	1,134,353.81	173,102	126,013	1,008,341	25.00	40,334
2020	6,777,649.76	809,251	589,108	6,188,542	25.82	239,680
2021	4,716,416.01	403,254	293,556	4,422,860	26.74	165,402

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 380.00 TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S1.5						
NET SALVAGE PERCENT.. 0						
2022	8,276,348.12	425,404	309,680	7,966,668	27.66	288,021
2023	12,816,537.07	220,444	160,476	12,656,061	28.57	442,984
9999	2,239,396.79-	649,407-	472,747-	1,766,650-		82,817-
	88,159,162.46	25,565,441	18,610,808	69,548,354		3,260,297
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						21.3 3.70

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 381.00 PLANT SEWERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
2008	294,411.86	98,098	88,115	206,297	31.01	6,653
2009	4,434,866.70	1,389,000	1,247,642	3,187,225	31.80	100,227
2010	1,187,964.50	349,618	314,038	873,926	32.37	26,998
2011	6,597.06	1,806	1,622	4,975	33.16	150
2012	1,684.33	426	383	1,301	33.95	38
2014	234,318.33	49,418	44,389	189,929	35.55	5,343
2015	7,458.23	1,414	1,270	6,188	36.34	170
2016	45,239.43	7,600	6,826	38,413	37.14	1,034
2021	1,641.43	94	85	1,556	40.98	38
9999	30,192.33-	9,219-	8,281-	21,911-		683-
	6,183,989.54	1,888,255	1,696,089	4,487,901		139,968
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						32.1 2.26

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 382.00 OUTFALL SEWER LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1957	12,139.53	11,382	11,345	795	4.43	179
1975	4,984.00	4,134	4,121	863	9.98	86
1993	202,475.94	121,648	121,255	81,221	20.26	4,009
2004	1,695.94	698	696	1,000	27.90	36
2005	9,240.93	3,624	3,612	5,629	28.67	196
2006	201,117.58	74,977	74,735	126,383	29.45	4,291
2009	26,051.26	8,159	8,133	17,918	31.80	563
2010	27,827.93	8,190	8,163	19,665	32.37	608
2014	100,422.48	21,179	21,111	79,311	35.55	2,231
2017	18,433.32	2,695	2,686	15,747	37.95	415
	604,388.91	256,686	255,857	348,532		12,614
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						27.6 2.09

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 389.10 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-S2.5						
NET SALVAGE PERCENT.. 0						
2010	273,149.74	181,044	175,500	97,650	6.87	14,214
2013	8,814.50	4,813	4,666	4,148	8.73	475
2018	48,374.95	14,551	14,105	34,270	12.78	2,682
2019	268,065.51	66,212	64,184	203,882	13.72	14,860
2022	600,000.00	49,680	48,159	551,841	16.62	33,203
2023	859,142.86	23,712	22,986	836,157	17.62	47,455
	2,057,547.56	340,012	329,600	1,727,948		112,889
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						15.3 5.49

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2008	3,529.23	2,735	2,110	1,419	4.50	315
2009	52,251.63	37,882	29,231	23,021	5.50	4,186
2010	7,240.80	4,888	3,772	3,469	6.50	534
2011	2,249.52	1,406	1,085	1,165	7.50	155
2012	30,582.71	17,585	13,569	17,014	8.50	2,002
2013	52,070.05	27,337	21,095	30,975	9.50	3,261
2014	3,709.04	1,762	1,360	2,349	10.50	224
2015	8,933.71	3,797	2,930	6,004	11.50	522
2016	33,090.02	12,409	9,575	23,515	12.50	1,881
2017	28,119.56	9,139	7,052	21,068	13.50	1,561
2018	10,405.16	2,861	2,208	8,197	14.50	565
2019	20,626.43	4,641	3,581	17,045	15.50	1,100
2020	74,595.48	13,054	10,073	64,522	16.50	3,910
2021	355,192.69	44,399	34,260	320,933	17.50	18,339
2022	35,793.96	2,685	2,072	33,722	18.50	1,823
2023	40,672.67	1,017	785	39,888	19.50	2,046
	759,062.66	187,597	144,758	614,305		42,424

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.5 5.59

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 391.00 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 14-L4						
NET SALVAGE PERCENT.. 0						
2001	22,361.85	21,382	20,679	1,683	1.03	1,634
2006	73,113.90	65,766	63,602	9,512	1.96	4,853
2011	128,391.92	105,127	101,668	26,724	2.77	9,648
2012	73,865.31	57,851	55,948	17,917	3.18	5,634
2013	62,726.96	46,236	44,715	18,012	3.75	4,803
2014	3,075.33	2,098	2,029	1,046	4.43	236
2016	2,423.80	1,351	1,307	1,117	5.96	187
2017	8,526.46	4,163	4,026	4,500	6.81	661
2018	927,895.26	385,262	372,587	555,308	7.75	71,653
2019	299,081.56	101,867	98,516	200,566	8.71	23,027
2020	26,190.18	6,948	6,719	19,471	9.69	2,009
	1,627,652.53	798,051	771,796	855,857		124,345
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						6.9 7.64

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 392.00 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2012	58,391.33	26,860	26,798	31,593	13.50	2,340
2017	2,199.71	572	571	1,629	18.50	88
2018	46,760.40	10,287	10,263	36,497	19.50	1,872
	107,351.44	37,719	37,632	69,719		4,300
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						16.2 4.01

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 393.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2006	53,495.95	46,809	49,210	4,286	2.50	1,714
2007	5,060.13	4,175	4,389	671	3.50	192
2008	2,776.47	2,152	2,262	514	4.50	114
2009	378.54	274	288	91	5.50	17
2010	61,467.53	41,491	43,619	17,849	6.50	2,746
2012	58,472.38	33,622	35,346	23,126	8.50	2,721
2013	28,453.57	14,938	15,704	12,750	9.50	1,342
2014	40,133.99	19,064	20,042	20,092	10.50	1,914
2015	62,657.78	26,630	27,996	34,662	11.50	3,014
2016	105,803.20	39,676	41,711	64,092	12.50	5,127
2017	7,458.66	2,424	2,548	4,911	13.50	364
2018	94,551.82	26,002	27,335	67,217	14.50	4,636
2019	14,014.13	3,153	3,315	10,699	15.50	690
2020	193,729.12	33,903	35,642	158,087	16.50	9,581
2021	102,471.06	12,809	13,466	89,005	17.50	5,086
2022	178,605.83	13,395	14,082	164,524	18.50	8,893
2023	291,443.11	7,286	7,659	283,784	19.50	14,553

1,300,973.27 327,803 344,614 956,359 62,704

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.3 4.82

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 394.00 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2009	41,773.44	40,381	37,165	4,608	0.50	4,608
2010	31,269.93	28,143	25,902	5,368	1.50	3,579
2011	16,841.59	14,035	12,917	3,925	2.50	1,570
2012	13,442.75	10,306	9,485	3,958	3.50	1,131
2013	5,917.50	4,142	3,812	2,106	4.50	468
2014	51,523.14	32,631	30,033	21,490	5.50	3,907
2015	14,895.30	8,441	7,769	7,126	6.50	1,096
2016	65,493.26	32,747	30,139	35,354	7.50	4,714
2017	48,566.17	21,045	19,369	29,197	8.50	3,435
2018	28,248.23	10,358	9,533	18,715	9.50	1,970
2019	57,097.59	17,129	15,766	41,332	10.50	3,936
2020	32,405.64	7,561	6,959	25,447	11.50	2,213
2021	11,284.32	1,881	1,731	9,553	12.50	764
	418,758.86	228,800	210,580	208,179		33,391

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.2 7.97

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 395.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 22-R2						
NET SALVAGE PERCENT.. 0						
1986	7,525.00	7,365	7,525			
1992	10,000.00	9,261	10,000			
1993	93,533.45	85,864	93,533			
2002	72,784.90	57,427	72,785			
2011	345,636.00	190,964	246,202	99,434	10.12	9,825
2015	3,257.24	1,326	1,710	1,547	12.38	125
2018	19,634.12	5,541	7,143	12,491	13.99	893
9999	10,000.00-	6,477-	7,946-	2,054-		196-
	542,370.71	351,271	430,952	111,419		10,647
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						10.5 1.96

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2009	395,325.89	382,150	373,144	22,182	0.50	22,182
2010	144,621.29	130,159	127,092	17,529	1.50	11,686
2011	7,975.30	6,646	6,489	1,486	2.50	594
2012	3,344.78	2,564	2,504	841	3.50	240
2013	263,689.84	184,583	180,233	83,457	4.50	18,546
2014	98,016.16	62,077	60,614	37,402	5.50	6,800
2016	172,002.57	86,001	83,974	88,029	7.50	11,737
2017	13,811.63	5,985	5,844	7,968	8.50	937
2018	12,412.19	4,551	4,444	7,968	9.50	839
2019	7,055.35	2,117	2,067	4,988	10.50	475
2020	666,834.19	155,592	151,925	514,909	11.50	44,775
2021	34,544.77	5,758	5,622	28,923	12.50	2,314
2022	1,316,570.40	131,657	128,555	1,188,015	13.50	88,001
2023	1,810,693.79	60,350	58,928	1,751,766	14.50	120,811
	4,946,898.15	1,220,190	1,191,435	3,755,463		329,937
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						11.4 6.67

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 397.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2018	7,251.74	2,659	2,918	4,334	9.50	456
2019	123,994.70	37,198	40,815	83,180	10.50	7,922
2020	138,334.00	32,277	35,416	102,918	11.50	8,949
2021	175,934.86	29,323	32,175	143,760	12.50	11,501
2022	436,000.00	43,600	47,840	388,160	13.50	28,753
2023	384,936.61	12,830	14,078	370,859	14.50	25,576
9999	29,000.00-	3,615-	3,967-	25,033-		1,904-
	1,237,451.91	154,272	169,275	1,068,177		81,253
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						13.1 6.57

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

ACCOUNT 398.00 OTHER TANGIBLE PLANT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2019	14,231.50	2,562	2,222	12,010	20.50	586
	14,231.50	2,562	2,222	12,010		586
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						20.5 4.12

PART III. EXPERIENCED AND ESTIMATED NET SALVAGE

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED AND ESTIMATED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2019 TRANSACTION YEAR				
354.20	3,076.09	27,531.06		27,531.06-
354.30		61,135.00		61,135.00-
354.40	913,340.30	1,985.51		1,985.51-
354.70	3,125.06	18,075.18		18,075.18-
355.00		9,730.05		9,730.05-
360.10	55,943.69	245,202.29		245,202.29-
361.10	352,132.81	1,038,558.77		1,038,558.77-
361.20	1,170.55	109,567.01		109,567.01-
363.00	5,384.61	150,830.30		150,830.30-
364.00	3,202.68	239.58		239.58-
370.00	1,108.89			
371.00	5,188.39	141,438.05		141,438.05-
380.00	36,603.24	214,843.19		214,843.19-
381.00	2,120.40			
389.10		5,681.56		5,681.56-
390.00	67,403.59			
391.00		6,028.96		6,028.96-
393.00	60,983.28	1,931.40		1,931.40-
394.00	26,823.05	5,593.49		5,593.49-
395.00		2,048.24		2,048.24-
396.00	48,155.78	1,897.96		1,897.96-
397.00	141,002.08	5,512.61		5,512.61-
398.00		1,251.49		1,251.49-
	1,726,764.49	2,049,081.70		2,049,081.70-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED AND ESTIMATED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TRANSACTION YEAR				
354.20	3,007.76	18,802.35		18,802.35-
354.30	39,414.10	73,614.29		73,614.29-
354.40	120,604.23	29,899.13		29,899.13-
354.70	6,910.37	246.65		246.65-
355.00		23,920.78		23,920.78-
360.10	40,213.82	186,669.20		186,669.20-
361.10	361,924.39	323,715.46		323,715.46-
361.20	22,020.95	34,151.69		34,151.69-
363.00	128,735.68	76,222.67		76,222.67-
371.00	144,361.10	273,771.37		273,771.37-
380.00	92,274.49	652,150.29		652,150.29-
391.00	31,332.59	10.19		10.19-
393.00		5,643.88		5,643.88-
394.00	10,122.79	1,075.22		1,075.22-
395.00	7,833.15			
396.00	234,211.01	52,578.21		52,578.21-
397.00		9,909.72	1,369.21	8,540.51-
	1,242,966.43	1,762,381.10	1,369.21	1,761,011.89-
2021 TRANSACTION YEAR				
354.30	7,989.66	20,176.30		20,176.30-
354.40	11,481.83	28,995.08		28,995.08-
354.70	2,875.51	11,677.96		11,677.96-
355.00		1,253.37		1,253.37-
360.10	11,013.00	147,595.80		147,595.80-
361.10	796,849.84	245,041.20		245,041.20-
361.20	83,125.55	20,315.71		20,315.71-
363.00	414,022.10	105,836.92	159.00	105,677.92-
364.00	6,151.40			
371.00	16,177.71	206,559.57		206,559.57-
380.00	231,513.16	269,030.45		269,030.45-
381.00		90.22		90.22-
390.00		3,619.09		3,619.09-
394.00	1,401.00	1,113.04		1,113.04-
396.00		4,528.34		4,528.34-
397.00	20,048.36	4,676.57	87.00	4,589.57-
	1,602,649.12	1,070,509.62	246.00	1,070,263.62-

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS GENERAL OPERATIONS

EXPERIENCED AND ESTIMATED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2022 TRANSACTION YEAR				
354.20	15,702.45	1,884.29		1,884.29-
354.30	26,680.07	3,201.61		3,201.61-
354.40	199,172.52	23,900.70		23,900.70-
354.70	28,082.13	3,369.86		3,369.86-
355.00	96,801.74	8,712.16		8,712.16-
360.10	325,168.00	198,352.48		198,352.48-
361.10	599,713.73	365,825.38		365,825.38-
361.20	26,444.42	36,228.86		36,228.86-
363.00	61,602.50	44,353.80		44,353.80-
364.00	9,014.72			
371.00	187,895.88	176,622.13		176,622.13-
380.00	631,925.26	297,004.87		297,004.87-
393.00	16,369.00	1,145.83		1,145.83-
394.00	54,586.97	6,004.57		6,004.57-
396.00	239,917.65	52,781.88		52,781.88-
397.00	86,974.00	6,088.18		6,088.18-
	2,606,051.04	1,225,476.60		1,225,476.60-
2023 TRANSACTION YEAR				
354.20	28,594.89	3,431.39		3,431.39-
354.30	63,016.07	7,561.93		7,561.93-
354.40	97,815.99	11,737.92		11,737.92-
354.70	11,381.64	1,365.80		1,365.80-
355.00	185,235.51	16,671.20		16,671.20-
360.10	406,540.73	247,989.85		247,989.85-
361.10	714,007.17	435,544.37		435,544.37-
361.20	22,844.03	31,296.32		31,296.32-
363.00	59,957.12	43,169.13		43,169.13-
364.00	8,773.94			
371.00	189,048.21	177,705.32		177,705.32-
380.00	964,355.55	453,247.11		453,247.11-
393.00	24,989.41	1,749.26		1,749.26-
394.00	62,682.15	6,895.04		6,895.04-
396.00	136,391.00	30,006.02		30,006.02-
397.00	28,995.39	2,029.68		2,029.68-
	3,004,628.80	1,470,400.34		1,470,400.34-
TOTAL	10,183,059.88	7,577,849.36	1,615.21	7,576,234.15-