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BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION  
OF SUEZ WATER IDAHO INC. FOR  
AUTHORITY TO INCREASE ITS RATES  
AND CHARGES FOR WATER SERVICE  
IN THE STATE OF IDAHO

Case No. SUZ-W-20-02

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

DIRECT TESTIMONY OF DANE WATSON

SEPTEMBER 2020

**DIRECT TESTIMONY**  
**OF**  
**DANE A. WATSON, PE CDP**  
**ON BEHALF OF**  
**SUEZ WATER IDAHO INC.**



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## **LIST OF EXHIBITS**

EXHIBIT No. 13 Schedule 1	Dane Watson, List of Testimony
EXHIBIT No. 13, Schedule 2	SUEZ Water Idaho Depreciation Rate Study (December 31, 2019)

1       **EXECUTIVE SUMMARY OF DIRECT TESTIMONY OF DANE A. WATSON**

2           SUEZ Water Idaho Inc. ("SUEZ Water Idaho" or "Company") engaged  
3 Alliance Consulting Group to conduct a depreciation study of the Company's  
4 depreciable assets for its statewide water operations as of December 31, 2019.  
5 This is the Company's first comprehensive depreciation study. The existing  
6 depreciation rates currently used by the Company for many accounts have been  
7 in place since 1980, and were based on a National Utility Commissioner's report  
8 regarding small water companies. The Company's existing depreciation rates do  
9 not reflect net salvage value, as best as can be determined. This depreciation  
10 study follows the Idaho Public Utilities Commission ("IPUC") precedent for straight  
11 line, depreciation, average life broad group, remaining life technique.

12           In my opinion, the accrual rates recommended in the study and summarized  
13 in this testimony are reasonable and should be adopted by the Commission.



1

## I. INTRODUCTION

2 **Q. Please state your name, position and business address.**

3 A. My name is Dane A. Watson. I am a Partner in Alliance Consulting Group  
4 ("Alliance"). Alliance provides consulting and expert services to the utility  
5 industry. My business address is 101 E. Park Blvd, Suite 220, Plano, Texas  
6 75074.

7 **Q. What is your educational background?**

8 A. I hold a Bachelor of Science degree in Electrical Engineering from the  
9 University of Arkansas at Fayetteville and a Master's Degree in Business  
10 Administration from Amberton University.

11 **Q. Do you hold any special certification as a depreciation expert?**

12 A. Yes. The Society of Depreciation Professionals ("Society") has established  
13 national standards for depreciation professionals. The Society administers  
14 an examination and has certain required qualifications to become certified  
15 in this field. I have met all requirements and am a Certified Depreciation  
16 Professional ("CDP").

17 **Q. Please outline your experience in the field of depreciation.**

18 A. Since graduating from college in 1985, I have worked in the area of  
19 depreciation and valuation. I founded Alliance in 2004 and am responsible  
20 for conducting depreciation, valuation, and certain accounting-related  
21 studies for utilities in various industries. My duties related to depreciation  
22 studies include the assembly and analysis of historical and simulated data,  
23 conducting field reviews, determining service life and net salvage estimates,

1 calculating annual depreciation, presenting recommended depreciation  
2 rates to utility management for its consideration, and supporting such rates  
3 before regulatory bodies.

4 Previously, I was employed from 1985 to 2004 with Texas Utilities  
5 ("TXU"), a large electric and gas utility that served approximately 3.7 million  
6 customers in Texas. During those years, TXU moved from being a vertically  
7 integrated utility to a regulated electric transmission and distribution  
8 company with other separate companies. The electric transmission and  
9 distribution assets that were part of TXU are now known as Oncor Electric  
10 Delivery is the largest electric utility in Texas. During my tenure with TXU, I  
11 was responsible for, among other things, conducting valuation and  
12 depreciation studies for the domestic TXU companies. During that time, I  
13 also served as Manager of Property Accounting Services and Records  
14 Management in addition to my depreciation responsibilities.

15 I have twice been Chair of the Edison Electric Institute ("EEI")  
16 Property Accounting and Valuation Committee and have been Chairman of  
17 EEI's Depreciation and Economic Issues Subcommittee. I am a Registered  
18 Professional Engineer in the State of Texas and a Certified Depreciation  
19 Professional. I am a Senior Member of the Institute of Electrical and  
20 Electronics Engineers ("IEEE") and served for several years as an officer of  
21 the Executive Board of the Dallas Section of IEEE as well as national and  
22 worldwide offices. I have served as President of the SDP twice.



1   **Q.     Have you previously testified before any regulatory bodies?**

2   A.     Yes. In my 35-year career, I have conducted depreciation studies, filed  
3           written testimony and/or testified in more than 250 cases before more than  
4           thirty-five different state and regulatory agencies across the United States.  
5           I also appeared in Federal Energy Regulatory Commission Docket No. 02-  
6           7-00 as an industry panelist on asset retirement obligations. This is my first  
7           appearance before this Commission. A list of the cases in which I filed  
8           testimony over the course of my career is shown in Exhibit No. 13, Schedule  
9           1.

10                           **II.    PURPOSE OF DIRECT TESTIMONY**

11   **Q.     What is the purpose of your direct testimony in this proceeding?**

12   A.     In this testimony, I sponsor and support the depreciation study performed  
13           for SUEZ Water Idaho for water assets ("SUEZ Water Idaho Depreciation  
14           Study," "Depreciation Study," or "Study"). I also describe the methods and  
15           conclusions of the Study. The Study, which is as Exhibit 13, Schedule 2,  
16           provides the basis for the depreciation rates used to determine the  
17           depreciation expense for SUEZ Water Idaho's assets included in this  
18           docket.

19   **Q.     Did you prepare any exhibits in connection with your testimony?**

20   A.     Yes. I prepared or supervised the preparation of the two exhibits listed in  
21           the table of contents.

1   **Q.    What is the definition of depreciation used by public utilities?**

2    A.    The most widely recognized utility accounting definition of depreciation is  
3           that of the American Institute of Certified Public Accountants, which states:

4                       Depreciation accounting is a system of  
5                       accounting which aims to distribute the cost or  
6                       other basic value of tangible capital assets, less  
7                       salvage (if any), over the estimated useful life of  
8                       the unit (which may be a group of assets) in a  
9                       systematic and rational manner. It is a process  
10                      of allocation, not of valuation.<sup>1</sup>

11           Depreciation expense is systematically allocated to accounting periods over  
12           the life of the properties. The amount allocated to any one accounting  
13           period does not necessarily represent the loss or decrease in value that will  
14           occur during a particular period. Thus, depreciation is considered an  
15           expense or cost to provide for the loss in service value, rather than a loss  
16           or decrease in market value. The utility accrues depreciation based on the  
17           original cost of all property included in each depreciable plant account.  
18           Public utilities maintain a depreciation reserve (also known as accumulated  
19           depreciation) on a group basis, meaning that groups are created at a plant  
20           account or subaccount level. Depreciation expense is charged on a  
21           monthly basis to each group's depreciation reserve using the depreciation  
22           accrual rates approved by the regulatory body. When an asset retires  
23           (before, after, or right at the average service life), the full cost of the  
24           retirement is subtracted from the depreciation reserve. Because the  
25           depreciation rate is based on an average life, the individual asset is

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<sup>1</sup> Accounting Research Bulletin No. 43, Chapter 9, Paragraph 5 (June 1953).



1       assumed to be fully depreciated at retirement. Any gross salvage for an  
2       asset is added to the accumulated depreciation whereas any cost of  
3       removal is deducted from the depreciation reserve. This methodology has  
4       been approved by the Idaho Public Utilities Commission ("IPUC" or  
5       "Commission") for SUEZ Water as well as other regulated entities under its  
6       jurisdiction. Thus, in accounting for regulated entities, the full cost of  
7       depreciable property on retirement, less the net salvage amount, if any, is  
8       charged to the depreciation reserve.

9       **Q. Is there a standard approach to conducting a depreciation study?**

10      A. Yes. Generally there are four phases in performing a depreciation study:  
11      data collection, analysis, evaluation, and calculation. Data collection entails  
12      the gathering of historical investment and retirement activity including  
13      salvage and cost of removal experience. Analysis involves the  
14      determination of mortality characteristics using the data gathered in the first  
15      phase. Evaluation requires an understanding of history, accounting  
16      practices and gives consideration to the Utility's plans and expectations.  
17      The calculation phase utilizes the information and determinations made in  
18      the first three phases and results in the development of recommended  
19      depreciation rates.

20      **Q. What are mortality characteristics?**

21      A. Mortality characteristics are the basic parameters that determine  
22      depreciation rates. For this discussion, mortality characteristics include

1 average service life, Iowa-type retirement dispersion curves,<sup>2</sup> and net  
2 salvage allowance.

3 **Q. What is a retirement dispersion curve?**

4 A. Retirement dispersion recognizes that individual assets within groups have  
5 different lives, *i.e.*, assets within the group will retire at a differing age. A  
6 retirement dispersion curve models how retirements occur by age around  
7 the average service life for each group of assets. Standard dispersion  
8 patterns, such as retirement dispersion curves, are useful because they  
9 make it possible to calculate the remaining life of existing property and allow  
10 comparison of life characteristics. In this study, I used the Iowa curve  
11 retirement dispersion, which is used both at this Commission and other  
12 regulated bodies across the utility industry.

13 **Q. What is an observed survivor curve?**

14 A. An observed survivor curve is a plot, or graph, of the recorded retirement  
15 and survivor history of an organization's assets on a group basis as a  
16 function of age. The groups are defined by the Company's plant accounts.  
17 Using Company specific history for each plant account, the observed curve  
18 is essentially a graphical representation of history.

19 **Q. How is the observed survivor curve useful?**

20 A. The observed survivor curve is useful because the area underneath the  
21 survivor curve is, by definition, equal to average service life. So, if an analyst

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<sup>2</sup> As described in more detail later in this testimony, Iowa-type curves are observed survivor curves created by the Engineering Research Institute to provide definitions of retirement dispersion.



1 can determine a survivor curve that matches a particular utility asset  
2 experience and expectations, such as the Iowa-type curves discussed later  
3 in this testimony, the analyst can estimate the average service life of the  
4 asset.

5 **Q. How are observed survivor curves used in depreciation studies?**

6 A. Observed survivor curves are commonly used in depreciation studies. The  
7 observed survivor curves derived from a particular utility's history are  
8 matched to generalized known curves, such as the Iowa-type curves, to  
9 provide an estimate of average service life, assuming there is sufficient  
10 history to analyze

11 **Q. What are Iowa-type curves?**

12 A. The Iowa-type curves were devised empirically by the Engineering  
13 Research Institute at what is now Iowa State University to provide a set of  
14 standard definitions of retirement dispersion. Through common usage,  
15 revalidation and regulatory acceptance, these curves have become a widely  
16 accepted descriptive standard for the life characteristics of industrial  
17 property. The Engineering Research Institute collected dated retirement  
18 information on many types of industrial and utility property and devised  
19 empirical curves that matched the range of patterns found. A total of 18  
20 curves were defined. There were six left-skewed, seven symmetrical and  
21 five right-skewed curves, varying from wide to narrow dispersion patterns.  
22 The Iowa-curve naming convention allows the analyst to relate easily to the  
23 patterns. The left-skewed curves are known as the "L series", the

symmetrical as the “S series” and the right-skewed as the “R series.” A number identifies the range of dispersion. A low number represents a wide pattern and a high number a narrow pattern. The combination of one letter and one number defines a unique dispersion pattern. The Iowa curves have been used across the utility industry in North America for approximately 90 years.

**Q. Are there standard methods of analysis in a depreciation study?**

A. Yes. There are several standard methods of analysis that can be used in a depreciation study. The method that applies to a particular study depends on the type of property being analyzed and the level of detail maintained by the utility in its continuing property records<sup>3</sup>.

**Q. Can you explain what you mean by type of property and level of detail maintained by a utility?**

A. Certainly. Different methods of analysis are used for different types of property. The methods of analysis depend on whether or not the Company has aged data where the age of retired assets is known. If the age of retirements is known, the property can be analyzed via actuarial analysis in the same way human mortality is studied. Actuarial analysis evaluates historical asset retirement experience where vintage data is available and sufficient retirement activity was present. If the age of retirements is unknown, then the Simulated Plant Record ("SPR,") method is used to evaluate the historical records of a particular plant account. In the case of

<sup>3</sup> See Exhibit 13, Schedule 2, pages 8-12.

1 SUEZ Idaho, both approaches were used, because aged records were only  
2 available from 2011-2019, with no prior history available.

3 **Q. Is there a standard system of calculating depreciation rates for a**  
4 **utility?**

5 A. Yes. A depreciation system is comprised of a method, procedure, and  
6 technique. The predominant method utilized in the utility industry is the  
7 straight-line method. There are two general procedures, average life (or  
8 broad) group ("ALG") and equal life group. And there are two techniques,  
9 whole-life and remaining life. The procedure and technique to use in a  
10 depreciation study are typically selected by a particular utility based on  
11 Commission precedent and accounting records available. The depreciation  
12 rates determined by a study must then be approved by the appropriate  
13 regulatory agencies. The IPUC has approved depreciation studies using  
14 the straight line, average life, broad group, remaining life depreciation  
15 system in several cases that I have researched.<sup>4</sup> The ALG procedure and  
16 remaining-life technique are most commonly used and approved.<sup>5</sup>, and  
17 were therefore used in the SUEZ Water Idaho Study. In this system, the  
18 annual depreciation expense for each group of assets is computed by  
19 dividing the original cost of the asset, less allocated depreciation reserve,  
20 less estimated net salvage by the asset's respective average life group

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<sup>4</sup> See cases PAC-E-18-08, PAC-E-13-02, INT-G-02-04, INT-G-14-02, AVU-E-18-03, AVU-G-18-02, AVU-E-07-11, AVU-G-07-03, IPC-E-03-07, and IPC-E-16-23. . While this is not an exhaustive list of cases, the depreciation system used in the proceedings mentioned were consistent over nearly a 20 year period.

<sup>5</sup> Id.



1 remaining life. The resulting annual accrual amounts of all depreciable  
2 property within an asset group are accumulated, and then the total accrual  
3 amount is divided by the original cost of all the depreciable property in that  
4 asset group to determine the depreciation rate. The calculated remaining  
5 lives and annual depreciation accrual rates are based on attained ages of  
6 plant in service, the estimated service life, and the net salvage  
7 characteristics of each depreciable group.

8 **Q. Please summarize conclusions.**

9 A. The SUEZ Idaho Water depreciation study incorporates the straight line,  
10 average life broad group, remaining life depreciation system approved in  
11 many other Idaho proceedings. Based on SUEZ Idaho's specific  
12 characteristics, history, and future expectations, this depreciation study  
13 models Company specific expectations to develop the proposed  
14 depreciation rates.

15 **III. SUEZ WATER IDAHO DEPRECIATION STUDY**

16 **Q. Did you prepare the SUEZ Water Idaho Depreciation Study?**

17 A. Yes. The Study, attached as Exhibit No. 13, Schedule 2, analyzes the life  
18 for the property groups associated with all SUEZ Water Idaho assets, as of  
19 December 31, 2019. Net salvage was incorporated into the Study, based  
20 on common industry practices and precedent from this Commission<sup>6</sup>.

21 **Q. What groups of property is included in the depreciation study?**

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<sup>6</sup> Id.

1 A. There are six general classes, or functional groups: Structures, Source of  
2 Supply Plant, Pumping Plant, Water Treatment Plant, Transmission and  
3 Distribution Plant, and General Plant used to treat and deliver water.

4 **Q. What definition of “depreciation” have you used for the purposes of**  
5 **conducting a depreciation study and preparing your testimony?**

6 A. In the Study and this testimony, I use the term “depreciation” in the  
7 accounting sense; that is, a system of accounting that distributes the cost  
8 of assets, less net salvage (if any), over the estimated useful life of the  
9 assets in a systematic and rational manner. Depreciation is a process of  
10 allocation, not valuation. Depreciation expense is systematically allocated  
11 to accounting periods over the life of the properties. The amount allocated  
12 to any one accounting period does not necessarily represent the loss or  
13 decrease in value that will occur during that particular period. Thus,  
14 depreciation is considered an expense or cost, rather than a loss or  
15 decrease in value. In the context of utilities, the utility accrues depreciation  
16 expense by applying approved depreciation rates to the original cost of all  
17 property included in each depreciable plant account. Upon retirement, the  
18 full cost of depreciable property, less the net salvage amount, if any, is  
19 charged to the depreciation reserve. This definition and concept of  
20 “depreciation” is consistent with the definition discussed earlier in this  
21 testimony and industry practices.<sup>7</sup>

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<sup>7</sup> See Exhibit No. 13, Schedule 2, page 5.

1   **Q.   Please describe the approach taken in the depreciation study**  
2       **undertaken for this case.**

3   A.   I conducted the Depreciation Study in four phases, as described in the  
4       Detailed Discussion portion of the Study. Exhibit Np. 13, Schedule 2 at 15-  
5       17. The four phases are: Data Collection, Analysis, Evaluation, and  
6       Calculation. During the initial phase of the study, I collected historical data  
7       to be used in the analysis. After the data was assembled, I performed  
8       analyses to determine the life and net salvage percentage for the different  
9       property groups being studied. As part of this process, I conferred with field  
10      personnel, engineers, and managers responsible for the installation,  
11      operation, and removal of the assets to gain their input into the operation,  
12      maintenance, and salvage of the assets. The information obtained from  
13      field personnel, engineers, and managerial personnel, combined with the  
14      study results, were then evaluated to determine how the results of the  
15      historical asset activity analysis, in conjunction with the Utility's expected  
16      future plans, should be applied. Using all of these resources, I then  
17      calculated the depreciation rate for each account.

18   **Q.   What depreciation system did you use to calculate the proposed**  
19       **depreciation rates for SUEZ Water Idaho?**

20   A.   I used the straight-line depreciation method, average life group (ALG)  
21       procedure, and remaining life technique to calculate the proposed  
22       depreciation and amortization accrual amounts and rates for SUEZ Water  
23       Idaho.





1 A. The account level depreciation rates were developed based on the  
2 depreciable plant on the books of SUEZ Water Idaho as of December 31,  
3 2019.

4 **Q. Please summarize the results of the depreciation study.**

5 A. The Study results in a total increase of approximately \$13,000 in annual  
6 depreciation compared to the depreciation rates currently in effect. Table 1  
7 below summarizes the increase in annual accrual by utility function. This is  
8 a change of 0.10 percent from the Company's existing depreciation rates.

**SUEZ Water Idaho  
Annual Accrual Comparison – Table 1**

Description	Existing Accrual	Proposed Accrual	Difference
Structures and Improvements	604,400	740,867	136,467
Source of Supply Plant	319,862	203,918	(115,943)
Pumping Plant	1,527,045	1,406,400	(120,644)
Water Treatment Plant	1,614,329	749,618	(864,711)
Transmission and Distribution Plant	7,352,115	8,294,660	942,545
General Plant Depreciated	16,053	10,653	(5,401)
General Plant Amortized	1,408,087	1,357,501	(50,586)
General Plant True-Up	0	90,983	90,983
Grand Total	12,841,891	12,854,600	12,709

9 **Q. Please summarize the depreciation study results with respect to**  
10 **depreciation rates.**

11 A. Table 2 shows the depreciation rates recommended in the study for each  
12 account.

**SUEZ Water Idaho  
Depreciation Rates – Table 2**

Account	Description	Proposed Rate
Structures and Improvements		

Account	Description	Proposed Rate
304.2	Pumping	2.62%
304.3	Treatment	2.38%
304.4	Transmission and Distribution	2.89%
304.5	Offices	2.73%
Source of Supply		
305.2	Collecting and Impounding Reservoirs	1.67%
306.2	Lake River and Other Intakes	1.68%
307.2	Wells and Springs	1.74%
309.2	Supply Mains	1.30%
Pumping Equipment		
310.2	Power Production Equipment	4.25%
311.2	Pumping Equipment	4.65%
311.3	Treatment Equipment	4.65%
311.4	Transmission and Distribution Equipment	4.65%
Treatment Plant		
320.3	Water Treatment Equipment	2.62%
320.3	Treatment Membranes New Additions Only	12.50%
Transmission and Distribution Plant		
330.4	Distribution Reservoirs and Standpipes	2.13%
331.4	Transmission and Distribution Mains	2.02%
333.4	Services	2.96%
334.4	Meters and Meter Installations	5.36%
335.4	Hydrants	2.47%
General Plant Depreciated		
341.5	Transportation Equipment	9.49%
345.5	Power Operated Equipment	8.78%
General Plant Amortized		
340.5	Software- Lighthouse	10.00%
340.5	Computer Hardware	20.00%
340.5	Computer Software	20.00%
340.5	Office Furniture and Fixtures	6.67%
342.5	Stores Equipment	4.76%
343.5	Tools, Shop and Garage Equipment	5.88%



Account	Description	Proposed Rate
344.5	Laboratory Equipment	10.00%
346.5	Communication Equipment	5.53%
347.5	Miscellaneous Equipment	6.67%
348.5	Master Plan	10.00%
348.5	Other Tangible Plant	2.00%

1    **Q.    What factors influence the depreciation rate for an account?**

2    A.    The primary factors that influence the depreciation rate for an account are  
3            1) the remaining investment to be recovered in the account, 2) the  
4            depreciable life of the account, and 3) the net salvage for the account.

5    **Q.    Can you explain why the depreciation rates proposed in the**  
6            **depreciation study differ from the depreciation rates currently used by**  
7            **SUEZ?**

8    A.    The rates currently used by SUEZ Idaho are not based on a comprehensive  
9            depreciation study. The existing rates originate from a 1980s NARUC study  
10           on the lives used for small water companies. No Company specific review  
11           using life and net salvage analysis has occurred to my knowledge. This is  
12           the first formal depreciation study for SUEZ Idaho to review depreciation  
13           parameters and rates for the Company. Current rates do not incorporate  
14           the factors: 1) the remaining investment to be recovered in the account, 2)  
15           the depreciable life of the account, and 3) the net salvage for the account  
16           discussed above.

17   **Q.    What factors influenced the proposed depreciation rates for SUEZ**  
18           **water in your depreciation study?**

1 A. The remaining unrecovered investment in the account, the life of the  
2 account, and net salvage estimated for the account all impact the proposed  
3 depreciation rates for SUEZ Water. The proposed depreciation rates,  
4 supported by the Depreciation Study, differ from those currently used by  
5 SUEZ, but the overall change in depreciation expense is small as seen in  
6 Table 1 above ..

7 Several factors caused this change. The existing rates were based  
8 on a whole life model, and the proposed rates use the remaining life  
9 depreciation system. In general, the remaining lives of the assets studied  
10 in the Depreciation Study were longer than previously used. Of the 32  
11 accounts analyzed, twelve (12) accounts had longer lives, 6 accounts had  
12 shorter lives, and 14 accounts remained unchanged. Of the 7 accounts that  
13 had longer lives the largest increases were: Account 309.2 Supply Mains,  
14 Account 331.4 Transmission and Distribution Mains, and Account 333.4  
15 Services, all with an increase of 20 years. Accounts with the greatest  
16 decreases in lives were: Account 334.4 Meters with a decrease of 21 years,  
17 and Account 304.4 Transmission and Distribution Structures which had a  
18 decrease of 11 years.

19 In addition, negative net salvage was incorporated in accrual rates  
20 for the first time. When the current rates were adopted, no net salvage  
21 (positive or negative) was included in the computation of the rate.

1   **Q.   What method did you use to analyze historical data to determine life**  
2           **characteristics?**

3   **A.**   In much the same manner as human mortality is analyzed by actuaries,  
4           depreciation analysts use models of property mortality characteristics that  
5           have been validated in research and empirical applications. For those  
6           accounts where aged retirements were available in sufficient quantities,  
7           actuarial analysis was used; for accounts with limited historical retirements,  
8           I relied on the simulated plant record balances method. For all life  
9           selections, I incorporated professional judgment and information provided  
10          by Company subject matter experts. Further discussion on the selection of  
11          lives for each account is found in the life analysis section of Exhibit No. 13,  
12          Schedule 2. See Exhibit No, 13, Schedule 2 at pages 8-12. The remaining  
13          life, by account, is shown in Appendices A and A-1 of my Exhibit No. 13,  
14          Schedule 2. Graphs and tables supporting the actuarial analysis along with  
15          the chosen Iowa Curves used to determine the average service lives for  
16          analyzed accounts are found in the Life Analysis section of Exhibit No. 13,  
17          Schedule 2. A summary of the average service life and chosen Iowa curve  
18          for each account is shown in Table 3.

19                           **SUEZ Water Idaho**  
20                           **Depreciable Lives - Table 3**  
21

Account	Description	Life	Curve
Structures and Improvements			
304.2	Pumping	43	R1
304.3	Treatment	48	R2
304.4	Transmission and Distribution	39	R3
304.5	Offices	42	R2



Account	Description	Life	Curve
Source of Supply			
305.2	Collecting and Impounding Reservoirs	50	R2
306.2	Lake River and Other Intakes	50	R2
307.2	Wells and Springs	50	R1
309.2	Supply Mains	70	R2.5
Pumping Equipment			
310.2	Power Production Equipment	19	R3
311.2	Pumping Equipment	20	R1
311.3	Treatment Equipment	20	R1
311.4	Transmission and Distribution Equipment	20	R1
Treatment Plant			
320.3	Water Treatment Equipment	25	R2
320.3	Treatment Membranes	8	S6
Transmission and Distribution Plant			
330.4	Distribution Reservoirs and Standpipes	50	R2
331.4	Transmission and Distribution Mains	65	R2.5
333.4	Services	60	R2.5
334.4	Meters and Meter Installations	19	R1
335.4	Hydrants	40	R4
General Plant Depreciated			
341.5	Transportation Equipment	15	L2
345.5	Power Operated Equipment	18	L5
General Plant Amortized			
340.5	Software- Lighthouse	10	SQ
340.5	Computer Hardware	5	SQ
340.5	Computer Software	5	SQ
340.5	Office Furniture and Fixtures	15	SQ
342.5	Stores Equipment	21	SQ
343.5	Tools, Shop and Garage Equipment	17	SQ
344.5	Laboratory Equipment	10	SQ
346.5	Communication Equipment	19	SQ
347.5	Miscellaneous Equipment	15	SQ
348.5	Master Plan	10	SQ
348.5	Other Tangible Plant	50	SQ



obsolescence, business planning, known causes of retirement, and changes in expected future utilization.

The depreciation calculation uses a useful life applied to a vintage versus the entire account. The depreciation recovery is complete when the vintage accumulated depreciation is equal to the vintage plant adjusted for estimated salvage and removal costs.

**Q. Has vintage group amortization been adopted by other utilities?**

A. Yes. Since allowed by FERC in 1997, most utilities I work with have adopted general plant amortization in electric, gas, water and wastewater industries. The Company will no longer have no maintain detailed inventories of this equipment, and assets will be retired upon reaching an age equal to the average service life of each plant account.

The adoption of Vintage Group Amortization is discussed in more detail in the Life Analysis section of my Exhibit No. 13, Schedule 2 and detailed computations for amortization expense and recovery of the difference in book reserve versus theoretical reserve are shown in Appendix A-1.

**Q. What is net salvage?**

A. As discussed more fully in the study itself, net salvage is the difference between the gross salvage (what the asset was sold for) and the removal cost (cost to remove and dispose of the asset). Salvage and removal cost percentages are calculated by dividing the current cost of salvage or removal by the original installed cost of the asset.





A summary of the average service life and chosen lowa curve for each account is shown in Table 4.

**SUEZ Water Idaho  
Net Salvage Percentages - Table 4**

Account	Description	Proposed Net Salvage %
<b>Structures and Improvements</b>		
304.2	Pumping	-10%
304.3	Treatment	-10%
304.4	Transmission and Distribution	-10%
304.5	Offices	-10%
<b>Source of Supply</b>		
305.2	Collecting and Impounding Reservoirs	0%
306.2	Lake River and Other Intakes	0%
307.2	Wells and Springs	-10%
309.2	Supply Mains	0%
<b>Pumping Equipment</b>		
310.2	Power Production Equipment	0%
311.2	Pumping Equipment	-15%
311.3	Treatment Equipment	-15%
311.4	Transmission and Distribution Equipment	-15%
<b>Treatment Plant</b>		
320.3	Water Treatment Equipment	-10%
320.3	Treatment Membranes	0%
<b>Transmission and Distribution Plant</b>		
330.4	Distribution Reservoirs and Standpipes	-5%
331.4	Transmission and Distribution Mains	-30%
333.4	Services	-75%
334.4	Meters and Meter Installations	0%
335.4	Hydrants	0%
<b>General Plant Depreciated</b>		
341.5	Transportation Equipment	5%
345.5	Power Operated Equipment	5%
<b>General Plant Amortized</b>		





1 additions are planned to that account. The Lighthouse software has a 10  
2 year average service life, and the Company requested the depreciation  
3 accrual of that group continue at current rates until the assets are fully  
4 accrued, sometime in 2021.

5 **Q. Does the reallocation of the depreciation reserve change the total**  
6 **reserve?**

7 A. No. The depreciation reserve represents the amounts that customers have  
8 contributed to the return of the investment. The reallocation process does  
9 not change the total reserve for each function; it simply reallocates the  
10 reserve between accounts within each function. Schedule No. 13,  
11 Schedule 2, Appendix F shows a comparison between the book  
12 depreciation reserves and the reallocated reserves.

13 **Q. Is depreciation reserve reallocation a sound depreciation practice?**

14 A. Yes. The practice of depreciation reserve allocation is widely recognized  
15 and commonly practiced as part of a comprehensive depreciation study for  
16 the purposes of setting regulated rates where changes in services lives  
17 result in an imbalance between the theoretical and book reserve.<sup>10</sup> With  
18 respect to SUEZ Water, my depreciation study demonstrates that there  
19 have been significant changes in the life of the property since the existing  
20 depreciation rates were established. These changes have created  
21 imbalances between the theoretical and the book reserve for various

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<sup>10</sup> *Public Utility Depreciation Practices*, NARUC (1968), p. 48; *Public Utility Depreciation Practices*, NARUC (1996), p. 188.

1 accounts within each function making the reallocation of the depreciation  
2 reserve appropriate in this instance.

3 **Q. How does the company propose to implement the reallocation of its**  
4 **depreciation reserve if its proposed rates are approved?**

5 A. When the proposed depreciation rates are approved, the Company  
6 proposes to reallocate the reserves on its books to match the allocation  
7 performed in this study.

8 **IV. CONCLUSION**

9 **Q. What account depreciation rates are you proposing, and how do they**  
10 **compare with the current rates?**

11 A. The proposed depreciation rates for each account are listed previously in  
12 my testimony in Table 2. The current and proposed depreciation rates, and  
13 my underlying calculations used to support my recommendations, are  
14 included in Appendix B of Exhibit No. 13, Schedule 2.

15 **Q. Do you have any concluding remarks?**

16 A. Yes. The Depreciation Study and analysis performed under my supervision  
17 fully supports setting depreciation rates at the level i have indicated in my  
18 testimony and underlying Depreciation study. The company should  
19 continue to periodically review the annual depreciation rates for its property.  
20 In this way, all customers will be charged for their appropriate share of the  
21 capital expended for their benefit. The Depreciation Study describes the  
22 extensive analysis performed and the resulting rates that are now  
23 appropriate for Company property. In my opinion, the Company's

1 depreciation rates should be set consistent with my recommendations in  
2 order to allow recovery of the Company's total investment in property over  
3 the estimated remaining life of the assets.

4 **Q. Does this conclude your direct testimony?**

5 **A. Yes.**



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BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION  
OF SUEZ WATER IDAHO INC. FOR  
AUTHORITY TO INCREASE ITS RATES  
AND CHARGES FOR WATER SERVICE  
IN THE STATE OF IDAHO

Case No. SUZ-W-20-02

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

EXHIBIT 13 TO ACCOMPANY THE  
DIRECT TESTIMONY OF DANE WATSON

<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Texas, New Mexico	Federal Energy Regulatory Commission	ER20-277-000	Southwestern Public Service Company	2019	Electric Production and General Plant Depreciation Study
Alaska	Regulatory Commission of Alaska	U-19-086	Alaska Electric Light and Power	2019	Electric Depreciation Study
Delaware	Delaware Public Service Commission	19-0615	Suez Water Delaware	2019	Water Depreciation Study
Texas	Public Utility Commission of Texas	49831	Southwestern Public Service Company	2019	Electric Depreciation Study
New Mexico	New Mexico Public Regulation Commission	19-00170-UT	Southwestern Public Service Company	2019	Electric Depreciation Study
Georgia	Georgia Public Service Commission	42516	Georgia Power Company	2019	Electric Depreciation Study
Georgia	Georgia Public Service Commission	42315	Atlanta Gas Light	2019	Gas Depreciation Study
Arizona	Arizona Corporation Commission	G-01551A-19-0055	Southwest Gas Corporation	2019	Gas Removal Cost Study
New Hampshire	New Hampshire Public Service Commission	DE 19-064	Liberty Utilities	2019	Electric Distribution and General
New Jersey	New Jersey Board of Public Utilities	GR19040486	Elizabethtown Natural Gas	2019	Gas Depreciation Study
Texas	Public Utility Commission of Texas	49421	CenterPoint Houston Electric LLC	2019	Electric Depreciation Study
North Carolina	North Carolina Utilities Commission	Docket No. G-9, Sub 743	Piedmont Natural Gas	2019	Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	U-18-121	Municipal Power and Light City of Anchorage	2018	Electric Depreciation Study



<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Various	FERC	RP19-352-000	Sea Robin	2018	Gas Depreciation Study
Texas New Mexico	Federal Energy Regulatory Commission	ER19-404-000	Southwestern Public Service Company	2018	Electric Transmission Depreciation Study
California	Federal Energy Regulatory Commission	ER19-221-000	San Diego Gas and Electric	2018	Electric Transmission Depreciation Study
Kentucky	Kentucky Public Service Commission	2018-00281	Atmos Kentucky	2018	Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	U-18-054	Matanuska Electric Coop	2018	Electric Generation Depreciation Study
California	California Public Utilities Commission	A17-10-007	San Diego Gas and Electric	2018	Electric and Gas Depreciation Study
Texas	Public Utility Commission of Texas	48401	Texas New Mexico Power	2018	Electric Depreciation Study
Nevada	Public Utility Commission of Nevada	18-05031	Southwest Gas	2018	Gas Depreciation Study
Texas	Public Utility Commission of Texas	48231	Oncor Electric Delivery	2018	Depreciation Rates
Texas	Public Utility Commission of Texas	48371	Entergy Texas	2018	Electric Depreciation Study
Kansas	Kansas Corporation Commission	18-KCPE-480-RTS	Kansas City Power and Light	2018	Electric Depreciation Study
Arkansas	Arkansas Public Service Commission	18-027-U	Liberty Pine Bluff Water	2018	Water Depreciation Study
Kentucky	Kentucky Public Service Commission	2017-00349	Atmos KY	2018	Gas Depreciation Rates



<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Tennessee	Tennessee Public Utility Commission	18-00017	Chattanooga Gas	2018	Gas Depreciation Study
Texas	Railroad Commission of Texas	10679	Si Energy	2018	Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	U-17-104	Anchorage Water and Wastewater	2017	Water and Waste Water Depreciation Study
Michigan	Michigan Public Service Commission	U-18488	Michigan Gas Utilities Corporation	2017	Gas Depreciation Study
Texas	Railroad Commission of Texas	10669	CenterPoint South Texas	2017	Gas Depreciation Study
Arkansas	Arkansas Public Service Commission	17-061-U	Empire District Electric Company	2017	Depreciation Rates for New Wind Generation
Kansas	Kansas Corporation Commission	18-EPDE-184-PRE	Empire District Electric Company	2017	Depreciation Rates for New Wind Generation
Oklahoma	Oklahoma Corporation Commission	PUD 201700471	Empire District Electric Company	2017	Depreciation Rates for New Wind Generation
Missouri	Missouri Public Service Commission	EO-2018-0092	Empire District Electric Company	2017	Depreciation Rates for New Wind Generation
Michigan	Michigan Public Service Commission	U-18457	Upper Peninsula Power Company	2017	Electric Depreciation Study
Florida	Florida Public Service Commission	20170179-GU	Florida City Gas	2017	Gas Depreciation Study
Michigan	FERC	ER18-56-000	Consumers Energy	2017	Electric Depreciation Study
Missouri	Missouri Public Service Commission	GR-2018-0013	Liberty Utilities	2017	Gas Depreciation Study
Michigan	Michigan Public Service Commission	U-18452	SEMCO	2017	Gas Depreciation Study

<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Texas	Public Utility Commission of Texas	47527	Southwestern Public Service Company	2017	Electric Production Depreciation Study
MultiState	FERC	ER17-1664	American Transmission Company	2017	Electric Depreciation Study
Alaska	Regulatory Commission of Alaska	U-17-008	Municipal Power and Light City of Anchorage	2017	Generating Unit Depreciation Study
Mississippi	Mississippi Public Service Commission	2017-UN-041	Atmos Energy	2017	Gas Depreciation Study
Texas	Public Utility Commission of Texas	46957	Oncor Electric Delivery	2017	Electric Depreciation Study
Oklahoma	Oklahoma Corporation Commission	PUD 201700078	CenterPoint Oklahoma	2017	Gas Depreciation Study
New York	FERC	ER17-1010-000	New York Power Authority	2017	Electric Depreciation Study
Texas	Railroad Commission of Texas	GUD 10580	Atmos Pipeline Texas	2017	Gas Depreciation Study
Texas	Railroad Commission of Texas	GUD 10567	CenterPoint Texas	2016	Gas Depreciation Study
MultiState	FERC	ER17-191-000	American Transmission Company	2016	Electric Depreciation Study
New Jersey	New Jersey Board of Public Utilities	GR16090826	Elizabethtown Natural Gas	2016	Gas Depreciation Study
North Carolina	North Carolina Utilities Commission	Docket G-9 Sub 77H	Piedmont Natural Gas	2016	Gas Depreciation Study
Michigan	Michigan Public Service Commission	U-18195	Consumers Energy/DTE Electric	2016	Ludington Pumped Storage Depreciation Study



<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Alabama	FERC	ER16-2313-000	SEGCO	2016	Electric Depreciation Study
Alabama	FERC	ER16-2312-000	Alabama Power Company	2016	Electric Depreciation Study
Michigan	Michigan Public Service Commission	U-18127	Consumers Energy	2016	Natural Gas Depreciation Study
Mississippi	Mississippi Public Service Commission	2016 UN 267	Willmut Natural Gas	2016	Natural Gas Depreciation Study
Iowa	Iowa Utilities Board	RPU-2016-0003	Liberty-Iowa	2016	Natural Gas Depreciation Study
Illinois	Illinois Commerce Commission	GRM #16-208	Liberty-Illinois	2016	Natural Gas Depreciation Study
Kentucky	FERC	RP16-097-000	KOT	2016	Natural Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	U-16-067	Alaska Electric Light and Power	2016	Generating Unit Depreciation Study
Florida	Florida Public Service Commission	160170-EI	Gulf Power	2016	Electric Depreciation Study
California	California Public Utilities Commission	A 16-07-002	California American Water	2016	Water and Waste Water Depreciation Study
Arizona	Arizona Corporation Commission	G-01551A-16-0107	Southwest Gas	2016	Gas Depreciation Study
Texas	Public Utility Commission of Texas	45414	Sharyland	2016	Electric Depreciation Study
Colorado	Colorado Public Utilities Commission	16A-0231E	Public Service Company of Colorado	2016	Electric Depreciation Study



<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Multi-State NE US	FERC	16-453-000	Northeast Transmission Development, LLC	2015	Electric Depreciation Study
Arkansas	Arkansas Public Service Commission	15-098-U	CenterPoint Arkansas	2015	Gas Depreciation Study and Cost of Removal Study
New Mexico	New Mexico Public Regulation Commission	15-00296-UT	Southwestern Public Service Company	2015	Electric Depreciation Study
Atmos Energy Corporation	Tennessee Regulatory Authority	14-00146	Atmos Tennessee	2015	Natural Gas Depreciation Study
New Mexico	New Mexico Public Regulation Commission	15-00261-UT	Public Service Company of New Mexico	2015	Electric Depreciation Study
Hawaii	NA	NA	Hawaii American Water	2015	Water/Wastewater Depreciation Study
Kansas	Kansas Corporation Commission	16-ATMG-079-RTS	Atmos Kansas	2015	Gas Depreciation Study
Texas	Public Utility Commission of Texas	44704	Entergy Texas	2015	Electric Depreciation Study
Alaska	Regulatory Commission of Alaska	U-15-089	Fairbanks Water and Wastewater	2015	Water and Waste Water Depreciation Study
Arkansas	Arkansas Public Service Commission	15-031-U	Source Gas Arkansas	2015	Underground Storage Gas Depreciation Study
New Mexico	New Mexico Public Regulation Commission	15-00139-UT	Southwestern Public Service Company	2015	Electric Depreciation Study
Texas	Public Utility Commission of Texas	44746	Wind Energy Transmission Texas	2015	Electric Depreciation Study
Colorado	Colorado Public Utilities Commission	15-AL-0299G	Atmos Colorado	2015	Gas Depreciation Study

<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Arkansas	Arkansas Public Service Commission	15-011-U	Source Gas Arkansas	2015	Gas Depreciation Study
Texas	Railroad Commission of Texas	GUD 10432	CenterPoint- Texas Coast Division	2015	Gas Depreciation Study
Kansas	Kansas Corporation Commission	15-KCPE-116-RTS	Kansas City Power and Light	2015	Electric Depreciation Study
Alaska	Regulatory Commission of Alaska	U-14-120	Alaska Electric Light and Power	2014-2015	Electric Depreciation Study
Texas	Public Utility Commission of Texas	43950	Cross Texas Transmission	2014	Electric Depreciation Study
New Mexico	New Mexico Public Regulation Commission	14-00332-UT	Public Service of New Mexico	2014	Electric Depreciation Study
Texas	Public Utility Commission of Texas	43695	Xcel Energy	2014	Electric Depreciation Study
Multi State – SE US	FERC	RP15-101	Florida Gas Transmission	2014	Gas Transmission Depreciation Study
California	California Public Utilities Commission	A.14-07-006	Golden State Water	2014	Water and Waste Water Depreciation Study
Michigan	Michigan Public Service Commission	U-17653	Consumers Energy Company	2014	Electric and Common Depreciation Study
Colorado	Public Utilities Commission of Colorado	14AL-0660E	Public Service of Colorado	2014	Electric Depreciation Study
Wisconsin	Wisconsin	05-DU-102	WE Energies	2014	Electric, Gas, Steam and Common Depreciation Studies



<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Texas	Public Utility Commission of Texas	42469	Lone Star Transmission	2014	Electric Depreciation Study
Nebraska	Nebraska Public Service Commission	NG-0079	Source Gas Nebraska	2014	Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	U-14-055	TDX North Slope Generating	2014	Electric Depreciation Study
Alaska	Regulatory Commission of Alaska	U-14-054	Sand Point Generating LLC	2014	Electric Depreciation Study
Alaska	Regulatory Commission of Alaska	U-14-045	Matanuska Electric Coop	2014	Electric Generation Depreciation Study
Texas, New Mexico	Public Utility Commission of Texas	42004	Southwestern Public Service Company	2013-2014	Electric Production, Transmission, Distribution and General Plant Depreciation Study
New Jersey	New Jersey Board of Public Utilities	GR13111137	South Jersey Gas	2013	Gas Depreciation Study
Various	FERC	RP14-247-000	Sea Robin	2013	Gas Depreciation Study
Arkansas	Arkansas Public Service Commission	13-078-U	Arkansas Oklahoma Gas	2013	Gas Depreciation Study
Arkansas	Arkansas Public Service Commission	13-079-U	Source Gas Arkansas	2013	Gas Depreciation Study
California	California Public Utilities Commission	Proceeding No.: A.13-11-003	Southern California Edison	2013	Electric Depreciation Study
North Carolina/South Carolina	FERC	ER13-1313	Progress Energy Carolina	2013	Electric Depreciation Study



<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Wisconsin	Public Service Commission of Wisconsin	4220-DU-108	Northern States Power Company - Wisconsin	2013	Electric, Gas and Common Transmission, Distribution and General
Texas	Public Utility Commission of Texas	41474	Sharyland	2013	Electric Depreciation Study
Kentucky	Kentucky Public Service Commission	2013-00148	Atmos Energy Corporation	2013	Gas Depreciation Study
Minnesota	Minnesota Public Utilities Commission	13-252	Allete Minnesota Power	2013	Electric Depreciation Study
New Hampshire	New Hampshire Public Service Commission	DE 13-063	Liberty Utilities	2013	Electric Distribution and General
Texas	Railroad Commission of Texas	10235	West Texas Gas	2013	Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	U-12-154	Alaska Telephone Company	2012	Telecommunications Utility
New Mexico	New Mexico Public Regulation Commission	12-00350-UT	Southwestern Public Service Company	2012	Electric Depreciation Study
Colorado	Colorado Public Utilities Commission	12AL-1269ST	Public Service Company of Colorado	2012	Gas and Steam Depreciation Study
Colorado	Colorado Public Utilities Commission	12AL-1268G	Public Service Company of Colorado	2012	Gas and Steam Depreciation Study
Alaska	Regulatory Commission of Alaska	U-12-149	Municipal Power and Light City of Anchorage	2012	Electric Depreciation Study
Texas	Texas Public Utility Commission	40824	Xcel Energy	2012	Electric Depreciation Study
South Carolina	Public Service Commission of South Carolina	Docket 2012-384-E	Progress Energy Carolina	2012	Electric Depreciation Study

<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Alaska	Regulatory Commission of Alaska	U-12-141	Interior Telephone Company	2012	Telecommunications Utility
Michigan	Michigan Public Service Commission	U-17104	Michigan Gas Utilities Corporation	2012	Gas Depreciation Study
North Carolina	North Carolina Utilities Commission	E-2 Sub 1025	Progress Energy Carolina	2012	Electric Depreciation Study
Texas	Texas Public Utility Commission	40606	Wind Energy Transmission Texas	2012	Electric Depreciation Study
Texas	Texas Public Utility Commission	40604	Cross Texas Transmission	2012	Electric Depreciation Study
Minnesota	Minnesota Public Utilities Commission	12-858	Northern States Power Company - Minnesota	2012	Electric, Gas and Common Transmission, Distribution and General
Texas	Railroad Commission of Texas	10170	Atmos Mid-Tex	2012	Gas Depreciation Study
Texas	Railroad Commission of Texas	10174	Atmos West Texas	2012	Gas Depreciation Study
Texas	Railroad Commission of Texas	10182	CenterPoint Beaumont/ East Texas	2012	Gas Depreciation Study
Kansas	Kansas Corporation Commission	12-KCPE-764-RTS	Kansas City Power and Light	2012	Electric Depreciation Study
Nevada	Public Utility Commission of Nevada	12-04005	Southwest Gas	2012	Gas Depreciation Study
Texas	Railroad Commission of Texas	10147, 10170	Atmos Mid-Tex	2012	Gas Depreciation Study
Kansas	Kansas Corporation Commission	12-ATMG-564-RTS	Atmos Kansas	2012	Gas Depreciation Study



<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Texas	Texas Public Utility Commission	40020	Lone Star Transmission	2012	Electric Depreciation Study
Michigan	Michigan Public Service Commission	U-16938	Consumers Energy Company	2011	Gas Depreciation Study
Colorado	Public Utilities Commission of Colorado	11AL-947E	Public Service of Colorado	2011	Electric Depreciation Study
Texas	Texas Public Utility Commission	39896	Entergy Texas	2011	Electric Depreciation Study
MultiState	FERC	ER12-212	American Transmission Company	2011	Electric Depreciation Study
California	California Public Utilities Commission	A1011015	Southern California Edison	2011	Electric Depreciation Study
Mississippi	Mississippi Public Service Commission	2011-UN-184	Atmos Energy	2011	Gas Depreciation Study
Michigan	Michigan Public Service Commission	U-16536	Consumers Energy Company	2011	Wind Depreciation Rate Study
Texas	Public Utility Commission of Texas	38929	Oncor	2011	Electric Depreciation Study
Texas	Railroad Commission of Texas	10038	CenterPoint South TX	2010	Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	U-10-070	Inside Passage Electric Cooperative	2010	Electric Depreciation Study
Texas	Public Utility Commission of Texas	36633	City Public Service of San Antonio	2010	Electric Depreciation Study
Texas	Texas Railroad Commission	10000	Atmos Pipeline Texas	2010	Gas Depreciation Study
Multi State – SE US	FERC	RP10-21-000	Florida Gas Transmission	2010	Gas Depreciation Study
Maine/ New Hampshire	FERC	10-896	Granite State Gas Transmission	2010	Gas Depreciation Study



<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Texas	Public Utility Commission of Texas	38480	Texas New Mexico Power	2010	Electric Depreciation Study
Texas	Public Utility Commission of Texas	38339	CenterPoint Electric	2010	Electric Depreciation Study
Texas	Texas Railroad Commission	10041	Atmos Amarillo	2010	Gas Depreciation Study
Georgia	Georgia Public Service Commission	31647	Atlanta Gas Light	2010	Gas Depreciation Study
Texas	Public Utility Commission of Texas	38147	Southwestern Public Service	2010	Electric Technical Update
Alaska	Regulatory Commission of Alaska	U-09-015	Alaska Electric Light and Power	2009-2010	Electric Depreciation Study
Alaska	Regulatory Commission of Alaska	U-10-043	Utility Services of Alaska	2009-2010	Water Depreciation Study
Michigan	Michigan Public Service Commission	U-16055	Consumers Energy/DTE Energy	2009-2010	Ludington Pumped Storage Depreciation Study
Michigan	Michigan Public Service Commission	U-16054	Consumers Energy	2009-2010	Electric Depreciation Study
Michigan	Michigan Public Service Commission	U-15963	Michigan Gas Utilities Corporation	2009	Gas Depreciation Study
Michigan	Michigan Public Service Commission	U-15989	Upper Peninsula Power Company	2009	Electric Depreciation Study
Texas	Railroad Commission of Texas	9869	Atmos Energy	2009	Shared Services Depreciation Study
Mississippi	Mississippi Public Service Commission	09-UN-334	CenterPoint Energy Mississippi	2009	Gas Depreciation Study
Texas	Railroad Commission of Texas	9902	CenterPoint Energy Houston	2009	Gas Depreciation Study

<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Colorado	Colorado Public Utilities Commission	09AL-299E	Public Service Company of Colorado	2009	Electric Depreciation Study
Louisiana	Louisiana Public Service Commission	U-30689	Cleco	2008	Electric Depreciation Study
Texas	Public Utility Commission of Texas	35763	Southwestern Public Service Company	2008	Electric Production, Transmission, Distribution and General Plant Depreciation Study
Wisconsin	Wisconsin	05-DU-101	WE Energies	2008	Electric, Gas, Steam and Common Depreciation Studies
North Dakota	North Dakota Public Service Commission	PU-07-776	Northern States Power Company - Minnesota	2008	Net Salvage
New Mexico	New Mexico Public Regulation Commission	07-00319-UT	Southwestern Public Service Company	2008	Testimony – Depreciation
Multiple States	Railroad Commission of Texas	9762	Atmos Energy	2007-2008	Shared Services Depreciation Study
Minnesota	Minnesota Public Utilities Commission	E015/D-08-422	Minnesota Power	2007-2008	Electric Depreciation Study
Texas	Public Utility Commission of Texas	35717	Oncor	2008	Electric Depreciation Study
Texas	Public Utility Commission of Texas	34040	Oncor	2007	Electric Depreciation Study
Michigan	Michigan Public Service Commission	U-15629	Consumers Energy	2006-2009	Gas Depreciation Study
Colorado	Colorado Public Utilities Commission	06-234-EG	Public Service Company of Colorado	2006	Electric Depreciation Study



<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Arkansas	Arkansas Public Service Commission	06-161-U	CenterPoint Energy – Arkla Gas	2006	Gas Distribution Depreciation Study and Removal Cost Study
Texas, New Mexico	Public Utility Commission of Texas	32766	Southwestern Public Service Company	2005-2006	Electric Production, Transmission, Distribution and General Plant Depreciation Study
Texas	Railroad Commission of Texas	9670/9676	Atmos Energy Corp	2005-2006	Gas Distribution Depreciation Study
Texas	Railroad Commission of Texas	9400	TXU Gas	2003-2004	Gas Distribution Depreciation Study
Texas	Railroad Commission of Texas	9313	TXU Gas	2002	Gas Distribution Depreciation Study
Texas	Railroad Commission of Texas	9225	TXU Gas	2002	Gas Distribution Depreciation Study
Texas	Public Utility Commission of Texas	24060	TXU	2001	Line Losses
Texas	Public Utility Commission of Texas	23640	TXU	2001	Line Losses
Texas	Railroad Commission of Texas	9145-9148	TXU Gas	2000-2001	Gas Distribution Depreciation Study
Texas	Public Utility Commission of Texas	22350	TXU	2000-2001	Electric Depreciation Study, Unbundling
Texas	Railroad Commission of Texas	8976	TXU Pipeline	1999	Pipeline Depreciation Study
Texas	Public Utility Commission of Texas	20285	TXU	1999	Fuel Company Depreciation Study



<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Texas	Public Utility Commission of Texas	18490	TXU	1998	Transition to Competition
Texas	Public Utility Commission of Texas	16650	TXU	1997	Customer Complaint
Texas	Public Utility Commission of Texas	15195	TXU	1996	Mining Company Depreciation Study
Texas	Public Utility Commission of Texas	12160	TXU	1993	Fuel Company Depreciation Study
Texas	Public Utility Commission of Texas	11735	TXU	1993	Electric Depreciation Study

**SUEZ WATER IDAHO**  
**WATER UTILITY**  
**DEPRECIATION RATE STUDY**  
**AT DECEMBER 31, 2019**



<http://www.utilityalliance.com>

**SUEZ WATER IDAHO  
DEPRECIATION RATE STUDY  
EXECUTIVE SUMMARY**

Suez Water Idaho ("Suez" or "Company" or "Utility") engaged Alliance Consulting Group to conduct a depreciation study of the Company's depreciable assets as of December 31, 2019. This study recommends an increase of approximately \$13 thousand in annual depreciation compared to the depreciation rates currently in effect. There are two offsetting primary drivers of the slight increase: first, the longer average service life recommendation for the Company's largest accounts, Account 331.4 and Account 333.4, which comprise approximately 63% of the Company's plant in service at December 31, 2019; and second, the incorporation of negative net salvage in the accrual rates.

For Suez, the life indications for the majority of the asset accounts stayed the same. Of the 32 accounts analyzed, 12 accounts had longer lives, 6 accounts had shorter lives, and 14 accounts remained unchanged. Of the 7 accounts that had longer lives the largest increases were Account 309.2 Supply Mains and Account 333.4 Services, both of which had an increase of 20 years. Account 331.4 Transmission and Distribution Mains had an increase of 15 years in life. Accounts with the greatest decreases in lives were Account 334.4 Meters, with a decrease of 21 years, and Account 304.4 Transmission and Distribution Structures, with a decrease of 11 years.

Appendix A provides the calculation of the recommended depreciation rates. Appendix A-1 provides the calculation of the recommended amortization rates for the amortized general plant accounts and the general plant reserve true-up. Appendix B provides the comparison in depreciation expense for from existing annual accrual to proposed annual accrual. Appendix C provides the mortality characteristics (life, curve, salvage, and net salvage) for the accounts analyzed. Appendix D provides the net salvage history for all accounts. Appendix E shows compares the Company's book accumulated depreciation to the reallocated depreciation reserves.



**SUEZ WATER IDAHO  
DEPRECIATION RATE STUDY  
AT DECEMBER 31, 2019  
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## **PURPOSE**

The purpose of this study is to develop depreciation rates for the specified water depreciable property as recorded on Suez's books at December 31, 2019. The account-based depreciation rates were designed to recover the total remaining undepreciated investment for the analyzed accounts, adjusted for net salvage, over the remaining life of the property on a straight-line basis.

Suez serves approximately 240,000 people in the City of Boise and adjacent areas. Suez owns and operates the water system infrastructure including 2 surface water treatment plants, 5 groundwater treatment systems, 80 wells, 45 booster pump stations, 36 storage tanks, and over 1,400 miles of transmission and distribution mains.

Suez owns source of supply plant, pumping plant, water treatment plant, transmission and distribution plant, and various other general plant assets. The public's investment in these water assets is nearly \$474 million. This is the first formal depreciation study for Suez.

## STUDY RESULTS

Overall depreciation rates for the specific depreciable property analyzed and included in this study are shown in Appendix A and A-1. For Suez assets, these rates translate into an annual depreciation expense of \$12.9 million based on Suez's depreciable investment at December 31, 2019. The annual equivalent depreciation expense calculated by the same method using the approved rates was \$12.8 million. The proposed increase is \$13 thousand, a change of 0.10 percent from current depreciation rates. Appendix A and A-1 demonstrate the development of the annual depreciation and amortization rates and annual accruals by account. Appendix B presents a comparison of approved rates and accrual amounts versus proposed rates and accrual amounts by account. Appendix C presents a summary of life and net salvage estimates by account. Appendix D shows the net salvage history for all accounts. A summary of results is shown in the table below. Appendix E shows a comparison of the reallocated depreciation reserve compared to the book reserve.

### SUEZ WATER IDAHO

Function	Current Accrual Amount \$	Proposed Accrual Amount \$	Difference Accrual \$
Structures	604,400	740,867	136,467
Source of Supply	319,862	203,918	(115,943)
Pumping	1,527,045	1,406,400	(120,644)
Treatment	1,614,329	749,618	(864,711)
Transmission and Distribution	7,352,115	8,294,660	942,545
General Depreciated	16,053	10,653	(5,401)
General Amortized	1,408,087	1,357,501	(50,586)
General Amortized Reserve True Up	0	90,983	90,983
Total	12,841,891	12,854,600	12,709



## **GENERAL DISCUSSION**

### **Definition**

The term "depreciation" as used in this study is considered in the accounting sense, that is, a system of accounting that distributes the cost of assets, less net salvage (if any), over the estimated useful life of the assets in a systematic and rational manner. It is a process of allocation, not valuation. This expense is systematically allocated to accounting periods over the life of the properties. The amount allocated to any one accounting period does not necessarily represent the loss or decrease in value that will occur during that particular period. The Company accrues depreciation on the basis of the original cost of all depreciable property included in each functional property group. On retirement the full cost of depreciable property, less the net salvage value, is charged to the depreciation reserve.

### **Basis of Depreciation Estimates**

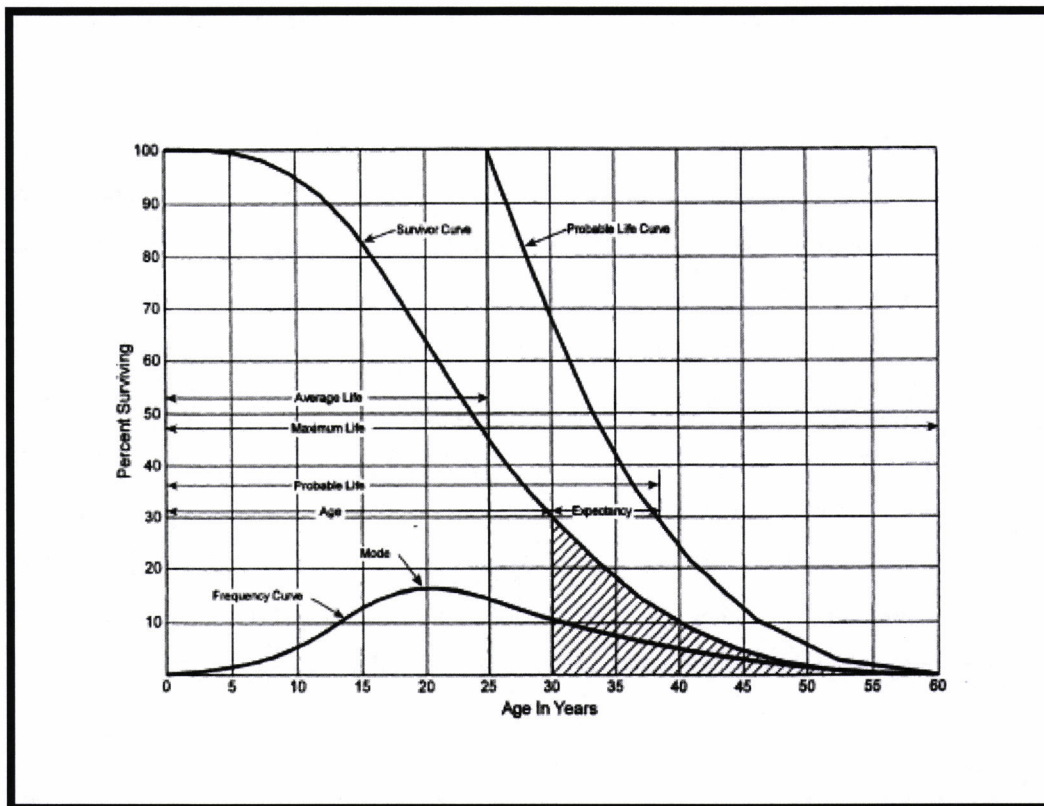
The straight-line, broad (average) life group, remaining-life depreciation system was employed to calculate annual and accrued depreciation in this study. In this system, the annual depreciation expense for each group is computed by dividing the original cost of the asset less allocated depreciation reserve less estimated net salvage by its respective average life group remaining life. The resulting annual accrual amounts of all depreciable property within a function were accumulated, and the total was divided by the original cost of all functional depreciable property to determine the depreciation rate. The calculated remaining lives and annual depreciation accrual rates were based on attained ages of plant in service and the estimated service life and salvage characteristics of each depreciable group. The computations of the annual functional depreciation rates and remaining lives are shown in Appendix A and A-1.

Actuarial analysis was used with each account within a function where sufficient data were available, and judgment was used to some degree on all accounts.

### **Survivor Curves**

To fully understand depreciation projections in a regulated utility setting, there must be a basic understanding of survivor curves. Individual property units within a group do not

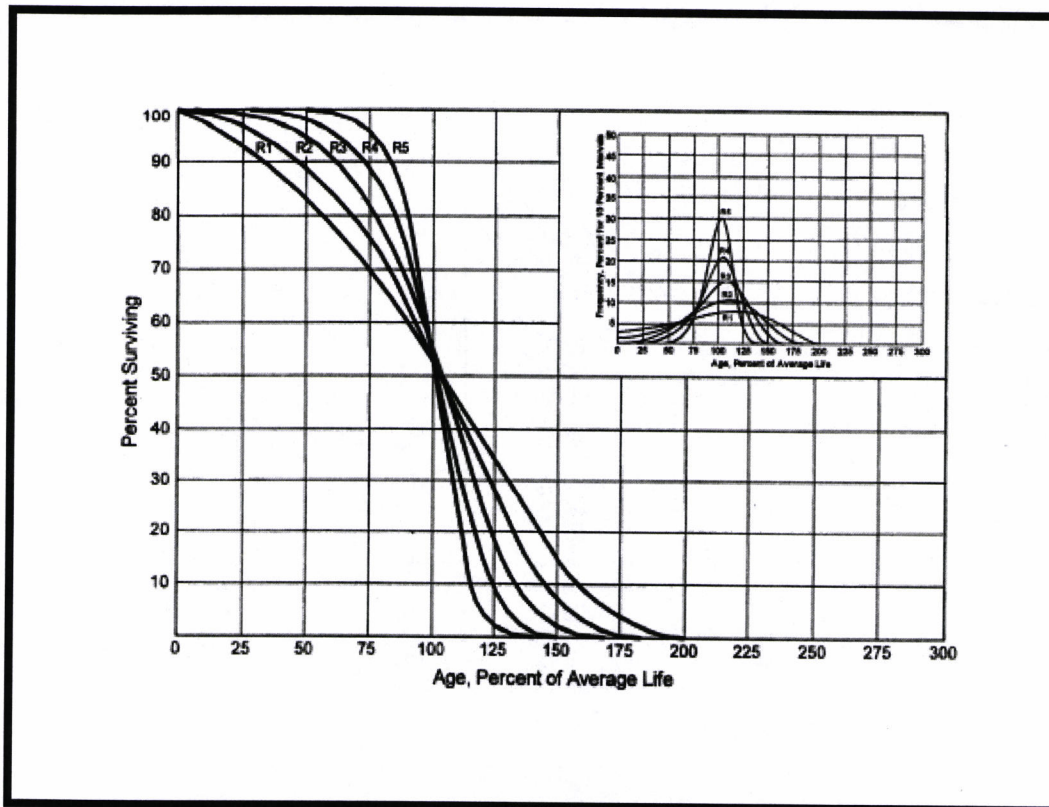
normally have identical lives or investment amounts. The average life of a group can be determined by first constructing a survivor curve which is plotted as a percentage of the units surviving at each age. A survivor curve represents the percentage of property remaining in service at various age intervals. The Iowa Curves are the result of an extensive investigation of life characteristics of physical property made at Iowa State College Engineering Experiment Station in the first half of the prior century. Through common usage, revalidation and regulatory acceptance, these curves have become a descriptive standard for the life characteristics of industrial property. An example of an Iowa Curve is shown below.



There are four families in the Iowa Curves that are distinguished by the relation of the age at the retirement mode (largest annual retirement frequency) and the average life. For distributions with the mode age greater than the average life, an "R" designation (i.e., Right



modal) is used. The family of "R" moded curves is shown below.



Similarly, an "S" designation (i.e., Symmetric modal) is used for the family whose mode age is symmetric about the average life. An "L" designation (i.e., Left modal) is used for the family whose mode age is less than the average life. A special case of left modal dispersion is the "O" or origin modal curve family. Within each curve family, numerical designations are used to describe the relative magnitude of the retirement frequencies at the mode. A "6" indicates that the retirements are not greatly dispersed from the mode (i.e., high mode frequency) while a "1" indicates a large dispersion about the mode (i.e., low mode frequency). For example, a curve with an average life of 30 years and an "L3" dispersion is a moderately dispersed, left modal curve that can be designated as a 30 L3 Curve. An SQ, or square, survivor curve occurs where no dispersion is present (i.e., units of common age retire simultaneously).

Most property groups can be closely fitted to one Iowa Curve with a unique average



service life. The blending of judgment concerning current conditions and future trends along with the matching of historical data permits the depreciation analyst to make an informed selection of an account's average life and retirement dispersion pattern.

### **Actuarial Analysis**

Actuarial analysis (retirement rate method) was used in evaluating historical asset retirement experience where vintage data were available and sufficient retirement activity was present. In actuarial analysis, interval exposures (total property subject to retirement at the beginning of the age interval, regardless of vintage) and age interval retirements are calculated. The complement of the ratio of interval retirements to interval exposures establishes a survivor ratio. The survivor ratio is the fraction of property surviving to the end of the selected age interval, given that it has survived to the beginning of that age interval. Survivor ratios for all of the available age intervals were chained by successive multiplications to establish a series of survivor factors, collectively known as an observed life table. The observed life table shows the experienced mortality characteristic of the account and may be compared to standard mortality curves such as the Iowa Curves. Where data were available, accounts were analyzed using this method. Placement bands were used to illustrate the composite history over a specific era, and experience bands were used to focus on retirement history for all vintages during a set period. The results from these analyses for those accounts which had data sufficient to be analyzed using this method are shown in the Life Analysis section of this report. Actuarial transactions were available from 2011-2019, which may be insufficient for longer lived accounts. In such cases, another life analysis method may be used.

### **Simulated Plant Record Procedure**

The SPR - Balances approach is one of the commonly accepted approaches to analyze mortality characteristics of utility property. SPR was applied to several accounts within the Distribution function due to the unavailability of sufficient vintaged transactional data. In this method, an Iowa Curve and average service life are selected as a starting point of the analysis and its survivor factors applied to the actual annual additions to give a

sequence of annual balance totals. These simulated balances are compared with the actual balances by using both graphical and statistical analysis. Through multiple comparisons, the mortality characteristics (as defined by an average life and Iowa Curve) that are the best match to the property in the account can be found.

The Conformance Index (CI) is one measure used to evaluate various SPR analyses. CIs are also used to evaluate the "goodness of fit" between the actual data and the Iowa Curve being referenced. The sum of squares difference (SSD) is a summation of the difference between the calculated balances and the actual balances for the band or study year being analyzed. This difference is squared and then summed to arrive at the SSD.

$$SSD = \sum_i^n (\text{Calculated Balance}_i - \text{Observed Balance}_i)^2$$

Where  $n$  is the number of years in the test band.

This calculation can then be used to develop other calculations, which the analyst feels might give a better indication for the "goodness of fit" for the representative curve under consideration. The residual measure (RM) is the square root of the average squared differences as developed above. The residual measure is calculated as follows:

$$RM = \sqrt{\left( \frac{SSD}{n} \right)}$$

The CI is developed from the residual measure and the average observed plant balances for the band or study year being analyzed. The calculation of conformance index is shown below:

$$CI = \frac{\sum_i^n \text{Balances}_i / n}{RM}$$

The retirement experience index (REI) gives an indication of the maturity of the account and is the percent of the property retired from the oldest vintage in the band at the end of the study year. Retirement indices range from zero percent to 100 percent and an REI of 100 percent indicates that a complete curve was used. A retirement index less than 100 percent indicates that the survivor curve was truncated at that point. The originator of the SPR method, Alex Bauhan, suggests ranges of value for the CI and REI. The relationship



for CI proposed by Bauhan is shown below<sup>1</sup>:

CI	Value
Over 75	Excellent
50 to 75	Good
25 to 50	Fair
Under 25	Poor

The relationship for REI proposed by Bauhan<sup>2</sup> is shown below:

REI	Value
Over 75	Excellent
50 to 75	Good
33 to 50	Fair
17 to 33	Poor
Under 17	Valueless

Despite the fact there has not been empirical research to validate Bauhan's conclusions, depreciation analysts have used these measures in analyzing SPR results for nearly 60 years, since the SPR method was developed.

Each of these statistics provides the analyst with a different perspective of the comparison between a band of simulated or calculated balances and the observed or actual balances in the account being studied. Although one statistic is not necessarily superior over the others, the conformance index is the one many analysts use in depreciation studies. The depreciation analyst should carefully weigh the data from REIs to ensure that a mature curve is being used to estimate life.

Statistics are useful in analyzing mortality characteristics of accounts as well as determining a range of service lives to be analyzed using the detailed graphical method. However, these statistics boil all the information down to one, or at most, a few numbers for comparison. Visual matching through comparison between actual and calculated balances expands the analysis by permitting the analyst to view many points of data at a time. The goodness of fit should be visually compared to plots of other Iowa Curve dispersions and

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<sup>1</sup> PUBLIC UTILITY DEPRECIATION PRACTICES, p. 96, National Association of Regulatory Utility Commissioners (1996).

<sup>2</sup> PUBLIC UTILITY DEPRECIATION PRACTICES, p. 97, National Association of Regulatory Utility Commissioners (1996).



average lives for the selection of the appropriate curve and life. Detailed information for each account is shown later in this study and in workpapers.

### **Judgment**

Any depreciation study requires informed judgment by the analyst conducting the study. Knowledge of the property being studied, utilities' policies and procedures, general trends in technology and industry practice, and a sound basis of understanding depreciation theory are needed to apply this informed judgment. Judgment was used in areas such as survivor curve modeling and selection, depreciation method selection, simulated plant record method analysis, and actuarial analysis.

Judgment is not defined as being used in cases where there are specific, significant pieces of information that influence the choice of a life or curve. Those cases would simply be a reflection of specific facts into the analysis. Where there are multiple factors, activities, actions, property characteristics, statistical inconsistencies, implications of applying certain curves, property mix in accounts, or a multitude of other considerations that impact the analysis (potentially in various directions), judgment is used to take all of these factors and synthesize them into a general direction or understanding of the characteristics of the property. Individually, no one factor in these cases may have a substantial impact on the analysis, but, overall, may shed light on the utilization and characteristics of assets. Judgment may also be defined as deduction, inference, wisdom, common sense, or the ability to make sensible decisions. There is no single correct result from statistical analysis; hence, there is no answer absent judgment. At the very least, for example, any analysis requires choosing upon which bands to place more emphasis.

The establishment of appropriate average service lives and retirement dispersions for the Structures, Source of Supply, Pumping, Water Treatment, Transmission and Distribution, General, and Other accounts requires judgment to incorporate the understanding of the operation of the system with the available accounting information analyzed using the Retirement Rate actuarial methods. The appropriateness of lives and curves depends not only on statistical analyses, but also on how well future retirement patterns will match past retirements.

Current applications and trends in use of the equipment also need to be factored into life and survivor curve choices in order for appropriate mortality characteristics to be chosen.

### **Average Life Group Depreciation**

The source of Suez's existing depreciation accruals does not specify a depreciation procedure. In all its other jurisdictions, Suez uses the average life group ("ALG") depreciation procedure. ALG has been adopted at the Idaho Public Utilities Commission for other regulated utilities. At the request of Suez, this study uses the ALG depreciation procedure to group the assets within each account. After an average service life and dispersion were selected for each account, those parameters were used to estimate what portion of the surviving investment of each vintage was expected to retire. The depreciation of the group continues until all investment in the vintage group is retired. ALG groups are defined by their respective account dispersion, life, and salvage estimates. A straight-line rate for each ALG group is calculated by computing a composite remaining life for each group across all vintages within the group, dividing the remaining investment to be recovered by the remaining life to find the annual depreciation expense and dividing the annual depreciation expense by the surviving investment. The resulting rate for each ALG group is designed to recover all retirements less net salvage when the last unit retires. The ALG procedure recovers net book cost over the life of each account by averaging many components.

### **Theoretical Depreciation Reserve**

The book depreciation reserve was derived from Suez records where the provision for depreciation is maintained on a region and plant account level. As a point of comparison, a theoretical depreciation reserve model was computed for each analyzed account. This study used a reserve model that relied on a prospective concept relating future retirement and accrual patterns for property, given current life and salvage estimates. The theoretical reserve of a group is developed from the estimated remaining life, total life of the property group, and estimated net salvage. The theoretical reserve represents the portion of the group cost that would have been accrued if current forecasts were used throughout the life of the group for future depreciation accruals. The computation involves multiplying the vintage balances within the group by the theoretical reserve ratio for each vintage. The average life group method requires an estimate of dispersion and service life to establish how much of each vintage is expected to be retired in each year until all property within the group is retired. Estimated average service lives and dispersion determine the amount within each average life group. The straight-line remaining-life theoretical reserve ratio at any given age ("RR") is calculated as:

$$RR = 1 - \frac{(Average\ Remaining\ Life)}{(Average\ Service\ Life)} * (1 - Net\ Salvage\ Ratio)$$



## DETAILED DISCUSSION

### Depreciation Study Process

This depreciation study encompassed four distinct phases. The first phase involved data collection and field interviews. The second phase was where the initial data analysis occurred. The third phase was where the information and analysis was evaluated. Once the first three stages were complete, the fourth phase began. This phase involved the calculation of depreciation rates and the documenting the corresponding recommendations.

During the Phase 1 data collection process, historical data was compiled from continuing property records and general ledger systems. Data was validated for accuracy by extracting and comparing to multiple financial system sources. Audit of this data was validated against historical data from prior periods, historical general ledger sources, and field personnel discussions. This data was reviewed extensively to put in the proper format for a depreciation study. Further discussion on data review and adjustment is found in the Salvage Considerations Section of this study. Also as part of the Phase I data collection process, numerous discussions were conducted with engineers and field operations personnel to obtain information that would assist in formulating life and salvage recommendations in this study. One of the most important elements of performing a proper depreciation study is to understand how the utility utilizes assets and the environment of those assets. Interviews with engineering and operations personnel are important methods that allow the analyst to obtain information that is beneficial when evaluating the output from the life and net salvage programs in relation to the utility's actual asset utilization and environment. Information that was gleaned in these discussions is found both in the Detailed Discussion of this study in the life analysis and salvage analysis sections and also in workpapers.

Phase 2 is where the actuarial analysis is performed. Phase 2 and 3 overlap to a significant degree. The detailed property records information is used in Phase 2 to develop observed life tables for life analysis. These tables are visually compared to industry standard tables to determine historical life characteristics. It is possible that the analyst would cycle back to this phase based on the evaluation process performed in Phase 3. Net salvage analysis consists of compiling historical salvage and removal data by functional group to determine values and trends in gross salvage and removal cost. This information was then carried forward into Phase 3 for the evaluation process.

Phase 3 is the evaluation process which synthesizes analysis, interviews, and operational characteristics into a final selection of asset lives and net salvage parameters. The historical analysis from Phase 2 is further enhanced by the incorporation of recent or future changes in the characteristics or operations of assets that were revealed in Phase 1. Phases 2 and 3 allow the depreciation analyst to validate the asset characteristics as seen in the accounting transactions with actual Utility operational experience.

Finally, Phase 4 involved the calculation of accrual rates, making recommendations and documenting the conclusions in a final report. The calculation of accrual rates is found in Appendix A and A-1. Recommendations for the various accounts are contained within the Detailed Discussion of this report. The depreciation study flow diagram shown as Figure 1<sup>3</sup> documents the steps used in conducting this study. Depreciation Systems<sup>4</sup>, page 289, documents the same basic processes in performing a depreciation study which are: statistical analysis, evaluation of statistical analysis, discussions with management, forecast assumptions, write logic supporting forecasts and estimation, and write final report.

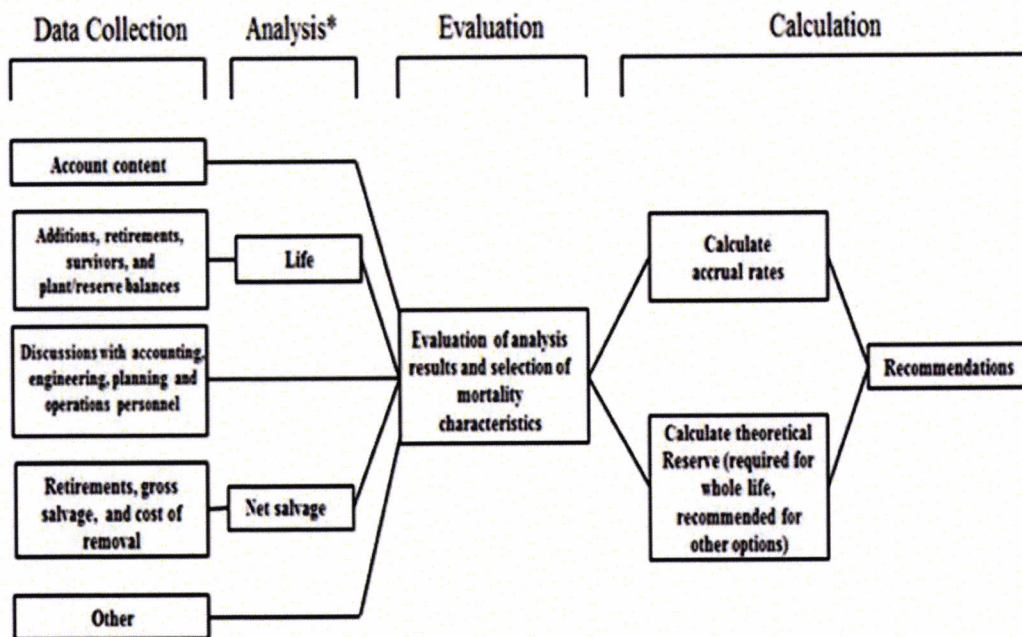
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<sup>3</sup>INTRODUCTION TO DEPRECIATION FOR PUBLIC UTILITIES & OTHER INDUSTRIES, AGA EEI (2013).

<sup>4</sup> W. C. Fitch and F.K.Wolf, DEPRECIATION SYSTEMS, Iowa State Press, at page 289 (1994).



## Book Depreciation Study Flow Diagram



Source: Introduction to Depreciation for Public Utilities and Other Industries, AGA EEI, 2013.

\*Although not specifically noted, the mathematical analysis may need some level of input from other sources (for example, to determine analysis bands for life and adjustments to data used in all analysis).

Figure 1

## **SUEZ WATER IDAHO DEPRECIATION STUDY PROCESS**



### **Depreciation Rate Calculation Process**

Annual depreciation expense amounts for Suez's depreciable property were calculated by the straight line, average life group, remaining life procedure.

In a whole life representation, the annual accrual rate is computed by the following equation,

$$\text{Annual Accrual Rate} = \frac{(100\% - \text{Net Salvage Percent})}{\text{Average Service Life}}$$

Use of the remaining life depreciation system adds a self-correcting mechanism, which accounts for any differences between theoretical and book depreciation reserve over the remaining life of the group. With the straight line, remaining life, average life group system using Iowa Curves, composite remaining lives were calculated according to standard broad group expectancy techniques, noted in the formula below:

$$\text{Composite Remaining Life} = \frac{(\sum \text{Original Cost} - \text{Theoretical Reserve})}{\sum \text{Whole Life Annual Accrual}}$$

For each plant account, the difference between the surviving investment, adjusted for estimated future net salvage, and the allocated book depreciation reserve, was divided by the composite remaining life to yield the annual depreciation expense as noted in this equation.

$$\text{Annual Depreciation Expense} = \frac{\text{Original Cost} - \text{Book Reserve} - (\text{Original Cost} * \text{Net Salvage \%})}{\text{Composite Remaining Life}}$$

Within a group, the sum of the group annual depreciation expense amounts, as a percentage of the depreciable original cost investment summed, gives the annual depreciation rate as shown below:

$$\text{Annual Depreciation Rate} = \frac{\sum \text{Annual Depreciation Expense}}{\text{Total Original Cost}}$$

### $\Sigma$ Original Cost

These calculations are shown in Appendix A. The calculations of the theoretical depreciation reserve values and the corresponding remaining life calculations are shown in the workpapers for this study. Book depreciation reserves are maintained on a plant account level basis. Theoretical reserve computations were used to reallocate depreciation reserves by account and to compute remaining life for each account. Annual depreciation expense amounts for the depreciable accounts of Suez were calculated by the straight line method, ALG procedure, and the remaining life technique. For each account, the difference between the surviving investment, adjusted for estimated net salvage, and the book depreciation reserve, was divided by the average remaining life to yield the annual depreciation expense. These calculations are shown in Appendix A.

### **Vintage Group Amortization**

Suez proposes to implement vintage group amortization for assets in Accounts 340.5 through 348.5, excluding Account 341.5 Transportation Equipment and Account 346.5 Power Operated Equipment. Under vintage group amortization, assets in the amortized accounts are retired when they reach the projected service life of the group. This study has reviewed the life and net salvage parameters for all accounts in this group. In the life analysis and salvage analysis sections, recommended changes to each account describe the depreciation parameters requested for those accounts. The depreciation accrual for General amortized property plant will change to reflect the reserve position of the various accounts and small changes in life parameters and net salvage percentages. This allows the Company to continue to track small dollar General Property plant items in a cost efficient manner.

The changes in General Property plant for Vintage Group Amortization assets resulted in a reserve difference that has to be addressed to provide full recovery of the cost for these assets. The remaining lives of the amortized accounts range from 1.38 years to 12.38 years. For ease of tracking the difference, this study proposes a 10 year recovery period for this difference. These computations are shown in Appendix A-1.

### **Remaining Life Calculation**

The establishment of appropriate average service lives and retirement dispersions for each account within a functional group was based on engineering judgment that incorporated available accounting information analyzed using the Retirement Rate actuarial methods. After establishment of appropriate average service lives and retirement dispersion, remaining life was computed for each account. Theoretical depreciation reserve with zero net salvage was calculated using theoretical reserve ratios as defined in the theoretical reserve portion of the General Discussion section. The difference between account balance and theoretical reserve was then spread over the ALG depreciation accruals. Remaining life computations are found for each account in the workpapers.



## **Life Analysis**

Two types of life analysis were performed for this study. The retirement rate actuarial analysis method was applied to all of the specified accounts for Suez. For each account, an actuarial retirement rate analysis was made with placement and experience bands of varying width. The historical observed life table was plotted and compared with various Iowa Curves to obtain the most appropriate match. A selected curve for each account is shown in the Life Analysis Section of this report. The observed life tables for all analyzed placement and experience bands are provided in workpapers.

Using data provided by Suez accounting personnel, an SPR data base was developed for each plant account. The bands of various widths were analyzed for each account. When there was not sufficient historical transactions from the years of actuarial data available to obtain meaningful actuarial results, the SPR method was used. The life analysis method used for each account is discussed in the detailed life analysis section which follows.

The depreciation accrual rates for most of the Company's plant accounts were based on a report from the National Association of Regulatory Commissioners ("NARUC") study on the lives of small water companies (those having only \$1,000,000 of investment).<sup>5</sup> Since existing accrual rate is available for those accounts, this study assumes that the life is the reciprocal of the annual accrual rate with a zero percent net salvage value. The existing life stated in the detailed account description is based on the reciprocal computation mentioned above.

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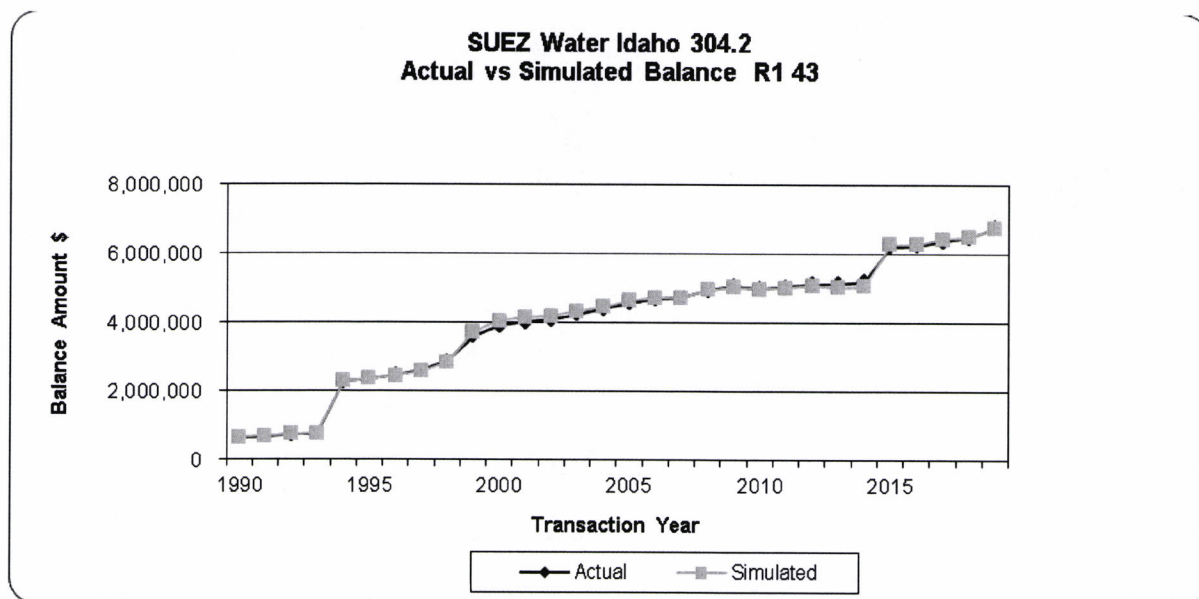
<sup>5</sup> Idaho, Docket U-1025-4, Order 17853, 17797, pages 3-4.

## Life Analysis – Suez Assets

### Structures

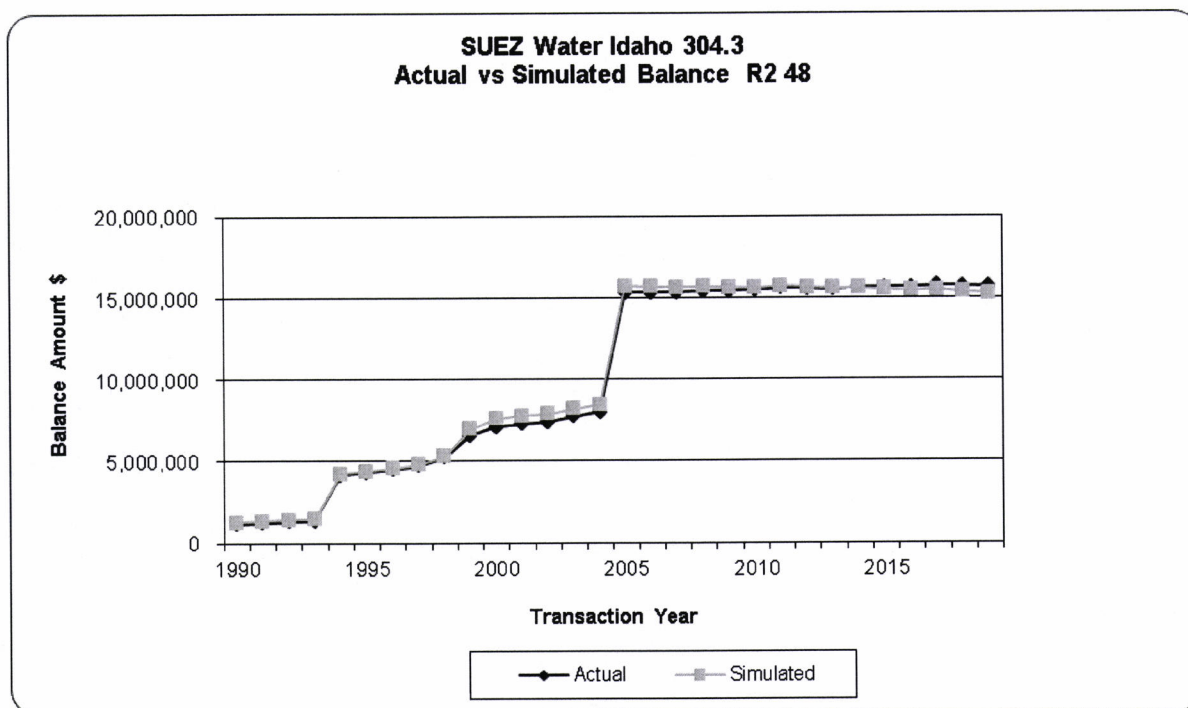
#### Account 304.2 Structures and Improvements- Pumping Plant (43 R1)

This account consists of structures and various improvements associated with pumping facilities. The account balance is \$6.8 million for this account, and the current life of this account is 50 years. The items in this account are components of structures such as: bulkhead, fences, HVAC systems, safety equipment, site work, roofs, security systems, valves, and vaults. Actuarial analysis has limited data for curve matching. Hence, the SPR balances method was used to analyze this account. In bands in which the width is approximately the width of average service life or longer (e.g., 1970-2019, 1960-2019, etc.), the highest ranked curve with an REI over 90 was the 43 R1. The CIs are in the 24 to 30 range for the widest bands. Company subject matter experts (“SMEs”) report that the smaller components will be replaced before the structures themselves. Wood buildings are being targeted for replacement and will be replaced with block construction. Based on judgment and the assets in this account, this study recommends moving to a 43 year life with an R1 dispersion curve for this account. A graph of the actual balances compared to the simulated balances from the proposed curve for this account is shown below.



### Account 304.3 Structures and Improvements Treatment (48 R2)

This account consists of structures and various improvements associated with treatment equipment. The account balance is \$15.7 million for this account. The current life of this account is 50 years. The items in this account are components of structures such as: building shell, site work, roofs, fences, HVAC systems, safety equipment, and security systems. Actuarial analysis has limited data for curve matching. Hence, the SPR balances method was used to analyze this account. In bands in which the width is approximately the width of average service life or longer (e.g., 1970-2019, 1960-2019, etc), the highest ranked curve with an REI over 90 was the 48 R2. The CIs are in the 30 or 45 range for the widest bands. Company SMEs report that the assets in this account are concrete basins, which would have a longer life than the components in other types of structures. Based on judgment and the assets in this account, this study recommends moving to a 48 year life with an R2 dispersion curve for this account. A graph of the actual balances compared to the simulated balances from the proposed curve for this account is shown below.

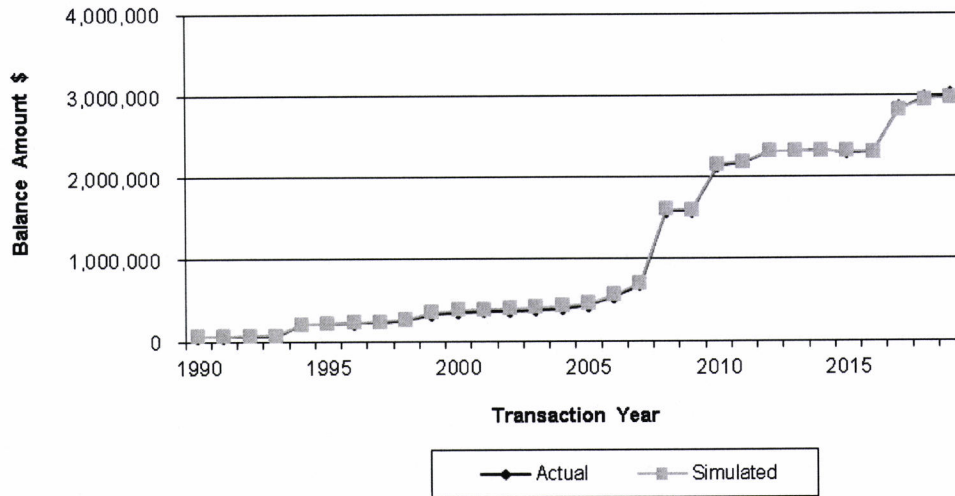




#### **Account 304.4 Structures and Improvements – Transmission and Distribution (39 R3)**

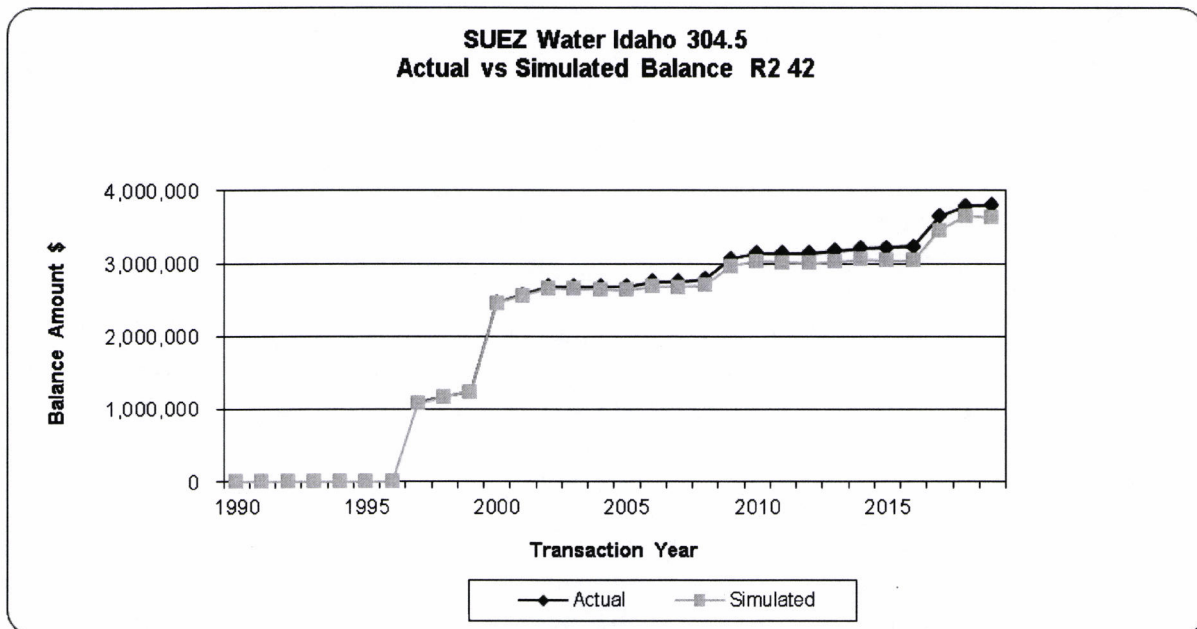
This account consists of structures and various improvements associated with the transmission and distribution plant. The account balance is \$3.0 million for this account. The current life of this account is 50 years. Actuarial analysis has limited data for curve matching. Hence, the SPR balances method was examined for this this account. In bands in which the width is approximately the width of average service life or longer (e.g., 1970-2019, 1960-2019, etc.), the highest ranked curve had an REI of 100, but the lives were between 25 and 30 years, much shorter than the existing life. Company SMEs state that the assets in this account are booster pump buildings and sampling stations. Most of the buildings are made of wood. Company SMEs report that more work and replacements occur on booster pump buildings and vaults than in other structures plant accounts. Many of the components are replaced over the life of building. Company SMEs expect a life in the 40 year range for booster pump buildings, making the life slightly shorter life for booster pump buildings than for other structure accounts. Based on judgment and the assets in this account, this study recommends moving to a 39 year life with an R3 dispersion curve for this account. A graph of the actual balances compared to the simulated balances from the proposed curve for this account is shown below.

**SUEZ Water Idaho 304.4**  
**Actual vs Simulated Balance R3 39**



### Account 304.5 General Offices (42 R2)

This account consists of structures and various improvements associated with general offices not tied to a specific functional group. The account balance is \$3.8 million this account, and the current life is 40 years. The items in this account are components of structures such as: the building shell, roadways, paving, HVAC systems, safety equipment, and flooring. Actuarial analysis has limited data for curve matching. Hence, the SPR balances method was used to analyze this account. In bands in which the width is approximately the width of average service life or longer (e.g., 1980-2019, 1970-2019, 1960-2019, etc.), the highest ranked curve with an REI over 90 was the 42 R2. The CIs are in the 24 to 30 range for the widest bands. Company SMEs state that assets in this group are office buildings and other building components. Based on judgment and the assets in this account, this study recommends moving to a 42 year life with an R2 dispersion curve for this account. A graph of the actual balances compared to the simulated balances from the proposed curve for this account is shown below.

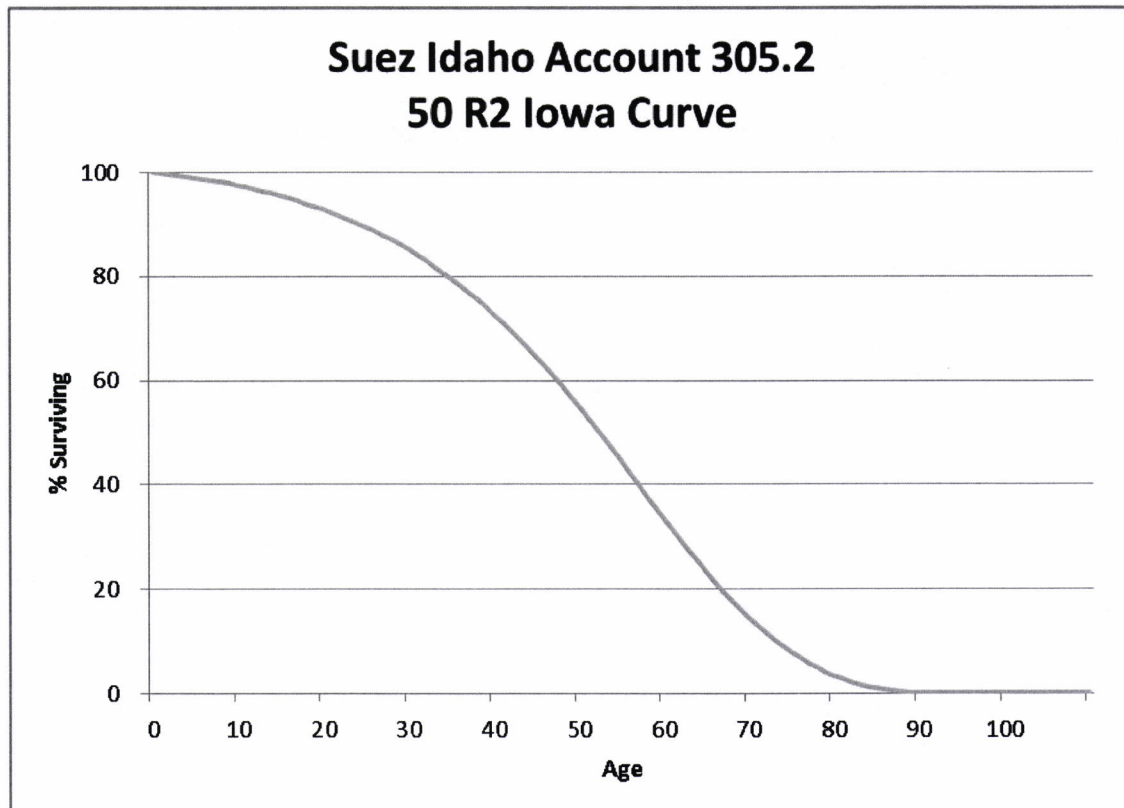




## **Source of Supply Plant**

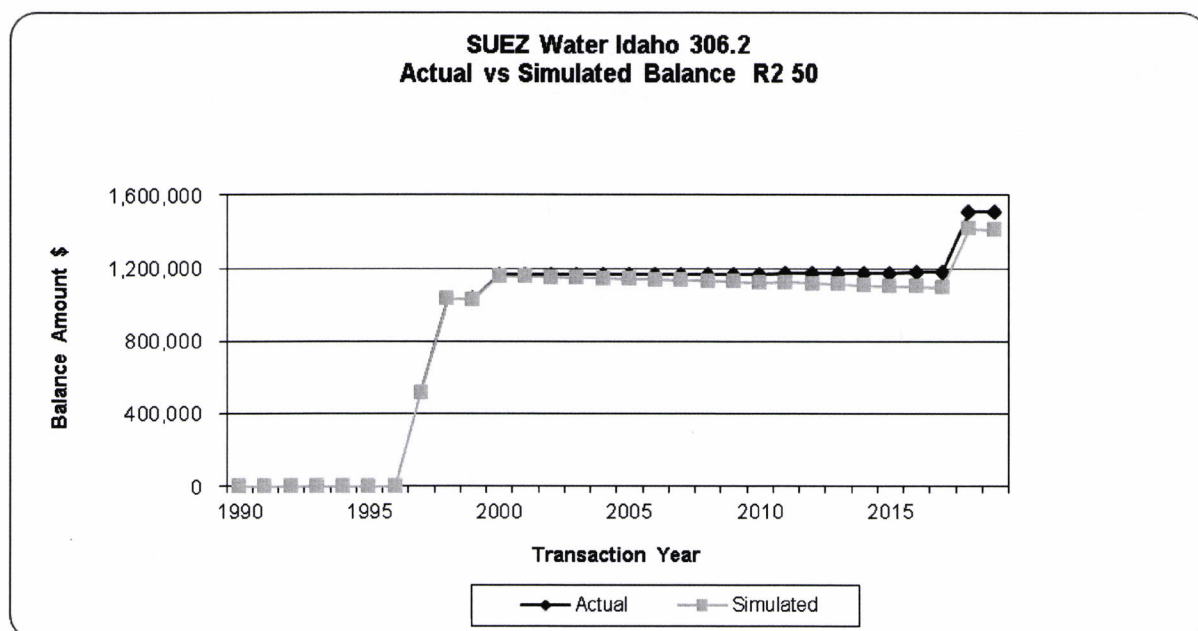
### **Account 305.2 Collecting & Impounding Reservoirs (50 R2)**

This account has an account balance of \$8.2 thousand as of December 31, 2019. The current life of this account is 50 years. This account contains structures and various improvements used for impounding, collecting, and storing water in the source of supply system. The only asset in this account is a retaining wall at a motor sports facility made of concrete, which was installed in 2018. Based on judgment and the type of construction, this study recommends retaining the 50 year life and using an R2 dispersion curve for this account. A graph showing the retirement pattern for this account is shown below.



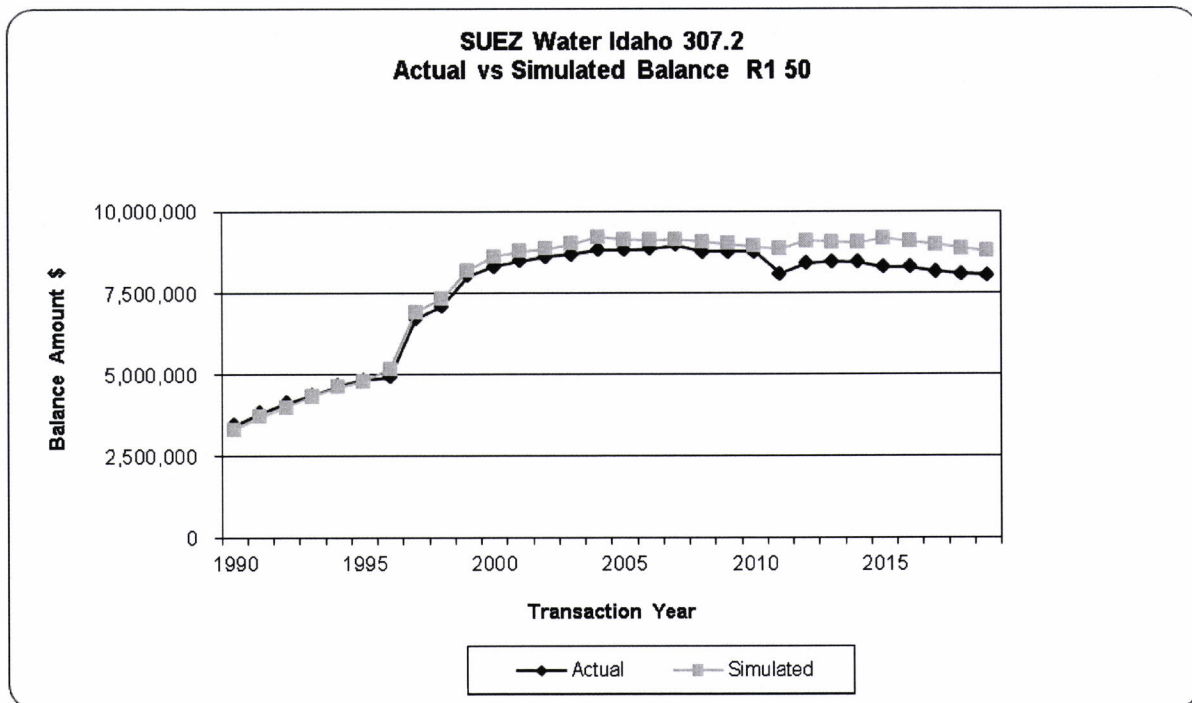
### Account 306.2 Lake, River, and Other Intakes (50 R2)

This account consists of lake, river, or other intakes and includes items such as buildings, bulkheads, filter plant, screens, piping, and related assets. This account has an account balance of \$1.5 million as of December 31, 2019. The current life of this account is 50 years. Actuarial analysis has limited data for curve matching. The SPR balances method produced lives under 20 years, which are not reflective of the life expectations for this account. Information gleaned from Company SMEs was used to establish a life estimate for this account. Company SMEs provided several important pieces of information. First, they stated that a primary component of this account is the Columbia building used for water treatment and was built in 2004-2005. The life expectation for this major component would be in the range of other robust structures. Second, the SMEs also see some replacement of smaller assets within this account over time. They estimate that intake screens will last 10-15 years and the operating life of a retaining wall is 20 years. Based on judgment and the assets in this account, this study recommends retaining a 50 year life with an R2 dispersion curve for this account. A graph of the actual balances compared to the simulated balances from the proposed curve for this account is shown below.



### Account 307.2 Wells and Springs (50 R1)

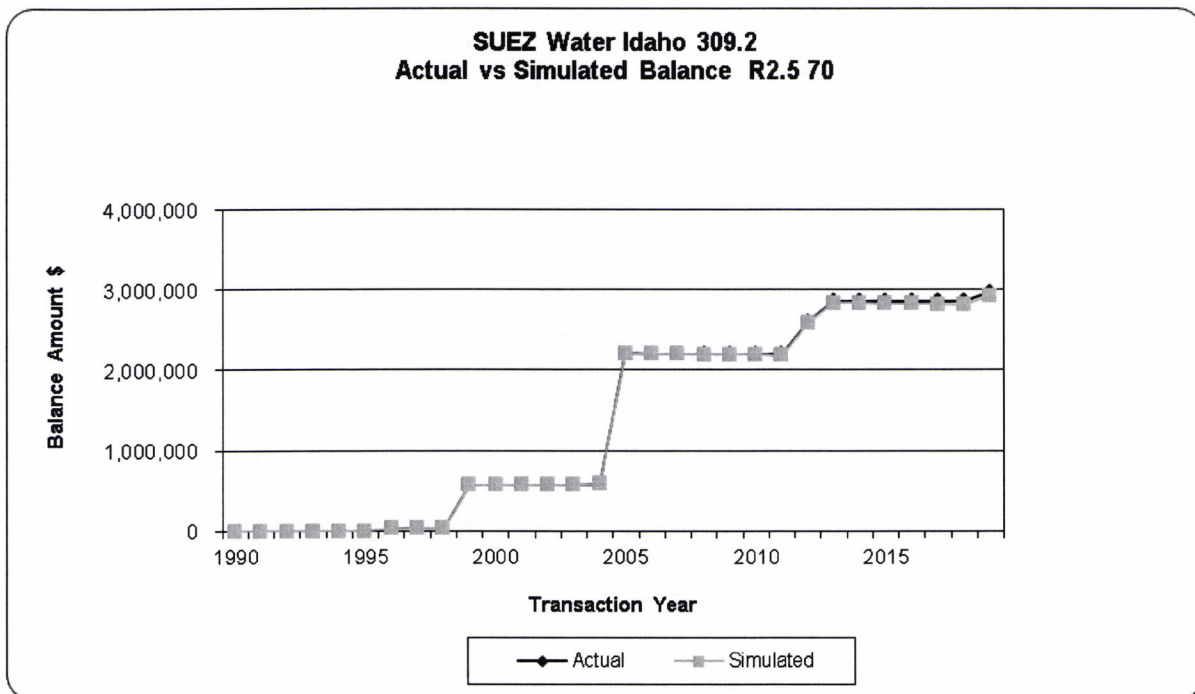
This account consists of the cost of wells and springs used as a source of supply. Such assets might be collecting basins, pipes, springs and appurtenances, and wells and casings. The current life of this account is 35 years, and the account balance is \$8.0 million. Actuarial analysis had insufficient activity on which to make a recommendation. The SPR balances method in bands in which the width is approximately the width of average service life or longer (e.g., 1970-2019, 1960-2019, etc.) produced the top-ranked curve of 40 years with an S0 dispersion. Company SMEs report that there has been a great deal of capital expenditure in this account in recent years. The Company has replaced well heads and added new casings/liners. Almost 20% of the existing wells are 50 years old and almost 50% of the wells are at least 35 years old. Based on judgment and data from Company SMEs, this study recommends moving to a 50 year life with an R1 dispersion curve for this account. A graph of the actual balances compared to the simulated balances from the proposed curve for this account is shown below.





### Account 309.2 Supply Mains (70 R2.5)

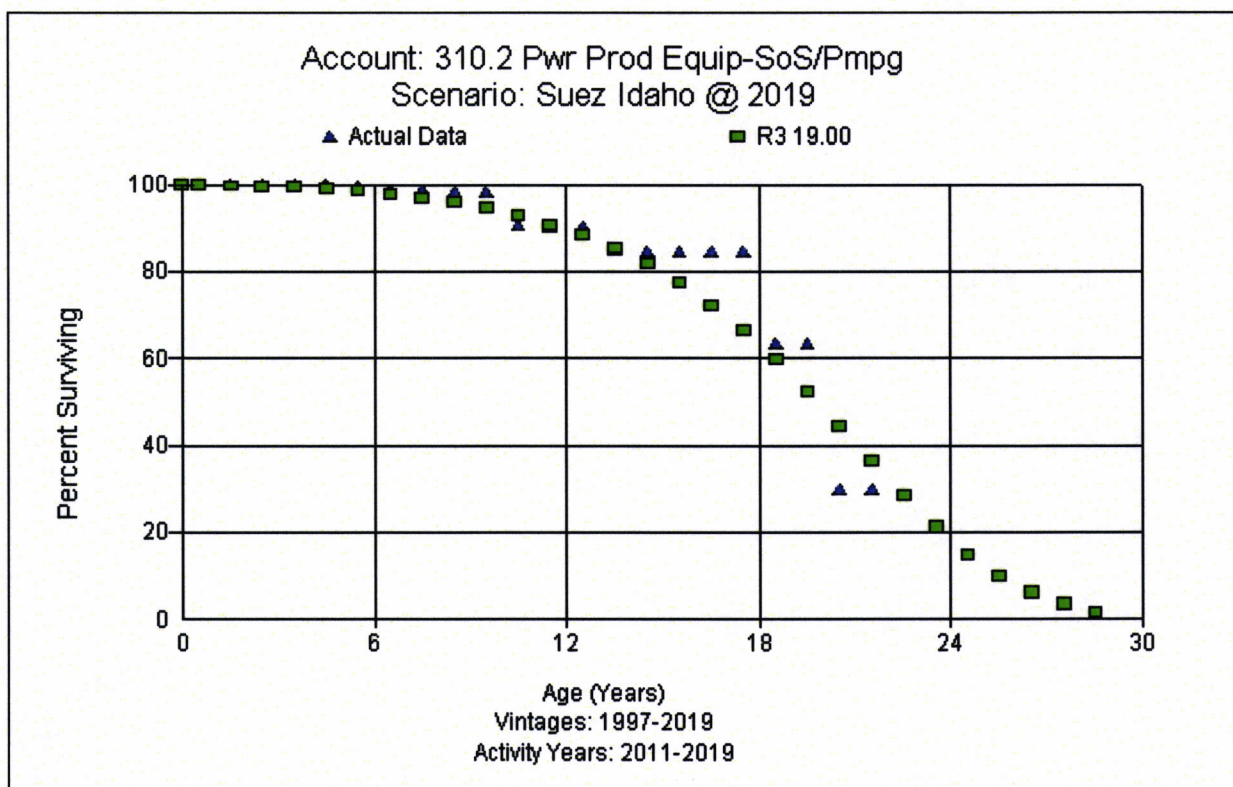
This account consists of raw water lines and intertie vaults, and other supply mains, pipes, aqueducts, canals, and their appurtenances. The current life of this account is 50 years, and the account balance is \$3.0 million. Both actuarial analysis and SPR analysis had insufficient activity on which to make a recommendation. Company SMEs believe that this account will have a life similar to Account 331.4, Transmission and Distribution Mains. Professional judgment based on the characteristics of the assets in the account and input from utility personnel was used to set the current recommendation to the same life as Transmission and Distribution Mains. Based on judgment and the assets in this account, this study recommends moving to a 70 year life with an R2.5 dispersion curve for this account. A graph of the actual balances compared to the simulated balances from the proposed curve for this account is shown.



## Pumping Plant

### **Account 310.2 Other Power Production Equipment (19 R3)**

This account consists of other production equipment not powered by electric or diesel. The account balance is \$3.5 million. The current life of this account is 20 years. The assets in this account are larger generators and pump stations. Company SMEs report that more replacements will start occurring since many assets date from around 2000 and are at the end of their useful life. This account has sufficient retirement data for actuarial analysis. After examining various curve combinations, the 19 R3 is the best match. Based on judgment and the assets in this account, this study recommends moving to a 19 year life with of an R3 dispersion curve for this account. A graph of the actual data versus the proposed curve for this account is shown.



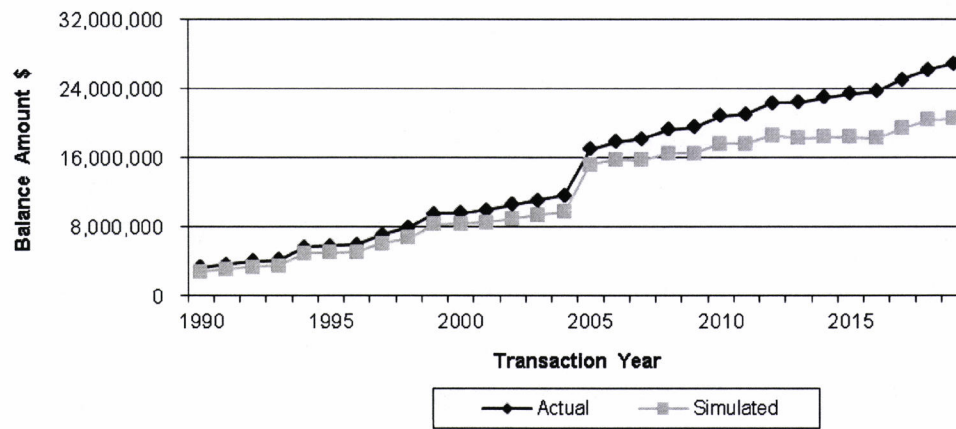


### **Account 311.2, 311.3, 311.4 Pumping Equipment (20 R1)**

This account consists of electric pumps, piping, circulating, and other related equipment used in the pumping plant. The account balance is \$27 million for this account. The current life of this account is 20 years. The data in this account has been combined for historical purposes, so the proposed life is for all three accounts. Company SMEs state that pumping equipment will last 20 years at the most. Some pumps have gone longer in this past, but this does not match recent experience as contemporary assets are not lasting that long. The Company is replacing more pumps proactively, and more capital is being allocated for that purpose. Company SMEs report that vibration studies and heat replacement are used to target replacements. When rehabbing wells, the pump is being replaced when the pump is pulled. Company personnel report that many water treatment pumps are located at the Columbia//Martin treatment plants. Company SMEs estimate that the chemical pumps will have a 5-10 year life and that the VFD pumps will have a 20-25 year life. More control equipment is found in account 311.3, which requires replacement of control equipment at 15-25 years due to technology change. Account 311.4 includes piping at pump station. Company SMEs opine that a pump will last 20-25 years, control equipment approximately 15 years, and piping slightly longer due to chemicals and exposure to air. The long-term historical data suggests a life longer than company experts believe is reasonable in today's environment. Based on component lives of various assets in this account, this study recommends retaining a 20 year composite for this account. Based on judgment and the assets in this account, this study recommends the 20 year life with an R1 dispersion curve for this account. A graph of the actual balances compared to the simulated balances from the proposed curve for this account is shown.



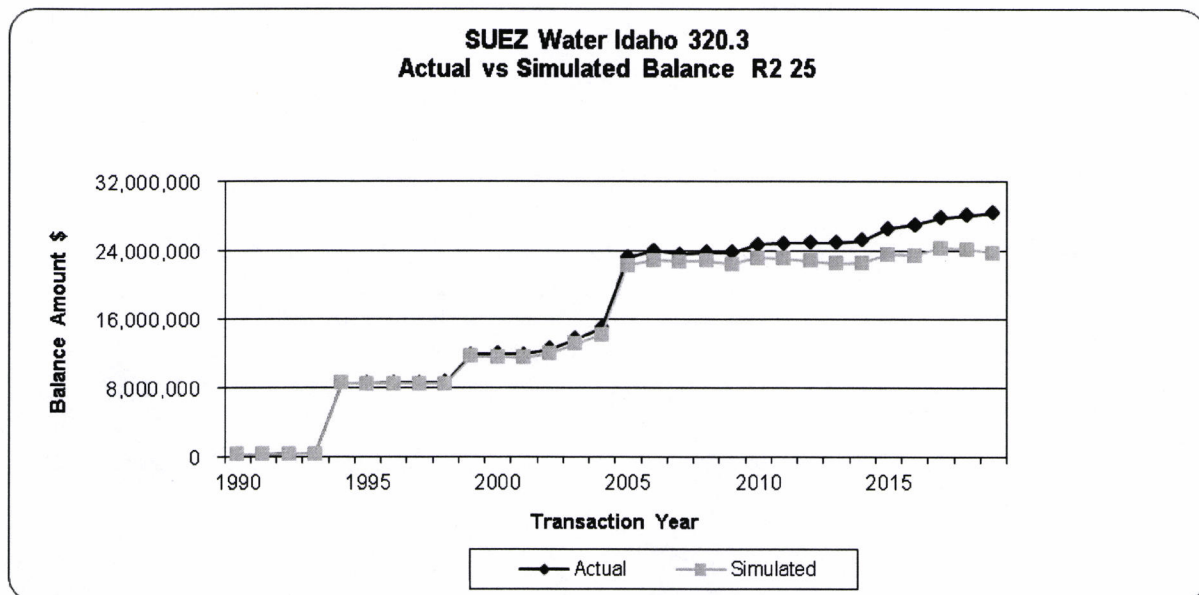
**SUEZ Water Idaho 311.2, 311.3, 311.4  
Actual vs Simulated Balance R1 20**



## **Water Treatment Plant**

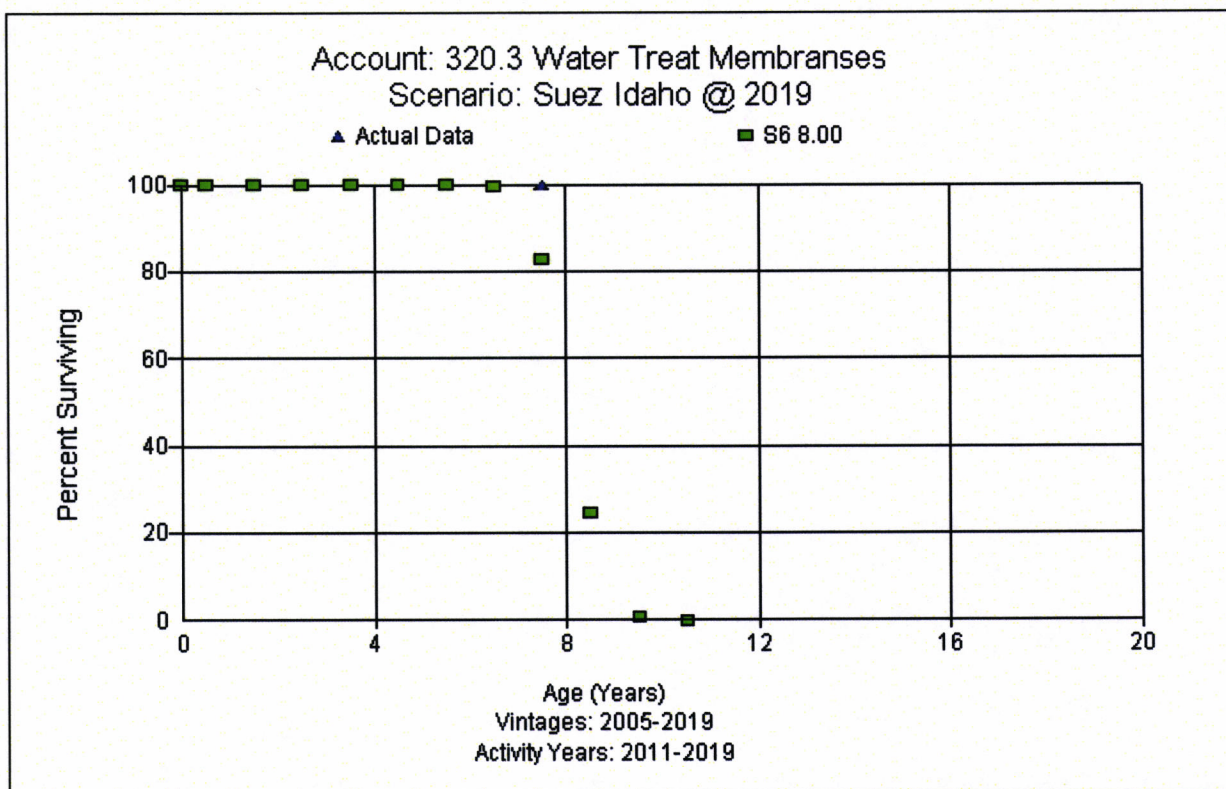
### **Account 320.3 Water Treatment Equipment (25 R2)**

This account consists of tanks, tank controls, media for water treatment equipment, including filtration systems, and other equipment used in the water treatment plant. The account balance is \$28.4 million for this account. The current life of this account is 20 years. There are many diverse assets in this account: filter plant, disinfectant equipment, pumps, and a chlorine generator. Filter plant is largest group. Company personnel report there are many small items that will have a short life. Pumps would be shorter lived as well as other small items such eyewash stations. Control upgrades would last 15 years, similar to assets in Accounts 311.2, 311.3, and 311.4. Historical analysis suggests a longer life that is reasonable given the current mix of assets in the account. Based on input from Company experts, this study recommends moving the life out slightly to 25 years. Based on judgment, input of utility personnel and future plans, and the mix of assets in the account, this study recommend a 25 year life with an R2 dispersion curve for this account. A graph of the actual balances compared to the simulated balances from the proposed curve for this account is shown.



### Account 320.3 Water Treatment Equipment Membranes (8 S6)

This account consists of membranes used in water treatment equipment plant. The account balance is \$1.3 million for this account. The current life of this account is 7 years, which was established in order 29838 from the 2004 case UWI-W-04-4. Company SMEs report that membranes are budgeted for 7 years and reviewed as that end of life approaches. Occasionally the life may be extended slightly. Since the assets in this account have a short life, actuarial analysis was used for this account. With experience from 2011-2019 there was sufficient data for analysis. After reviewing actuarial matches, the best fit was an 8 year with an S6 dispersion. Based on judgment and the assets in this account, this study recommends moving to an 8 year life with an S6 dispersion curve for this account. A graph of the observed life table compared to the proposed curve for this account is shown below.

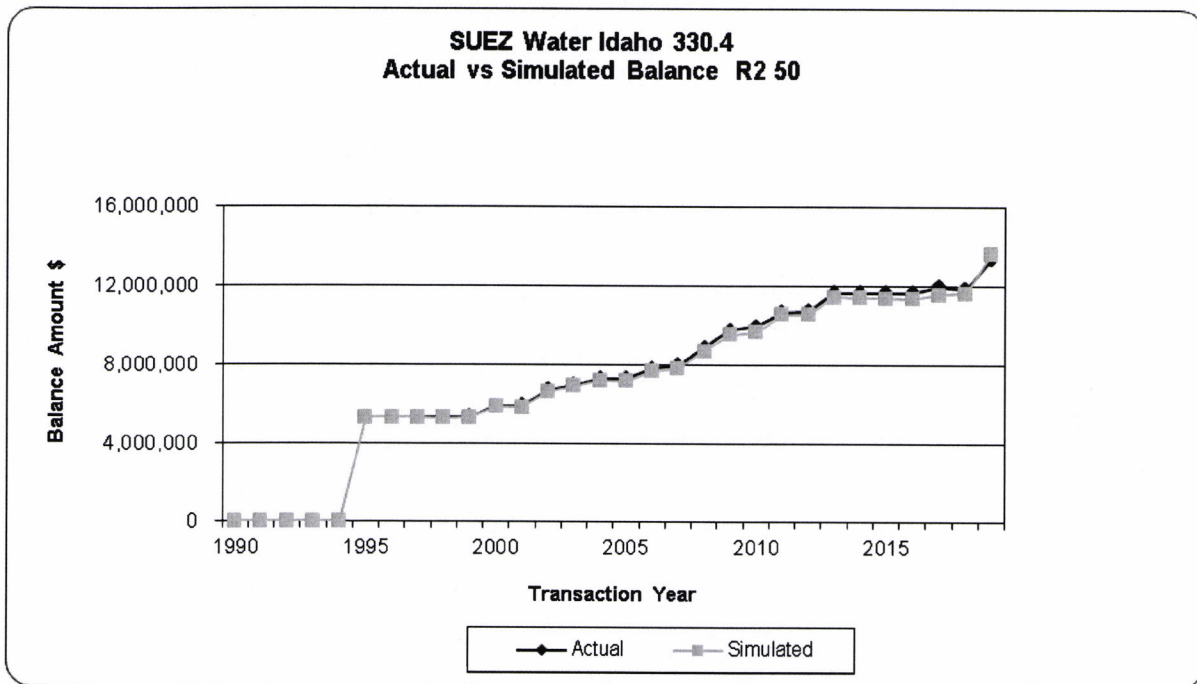




## **Transmission and Distribution Plant**

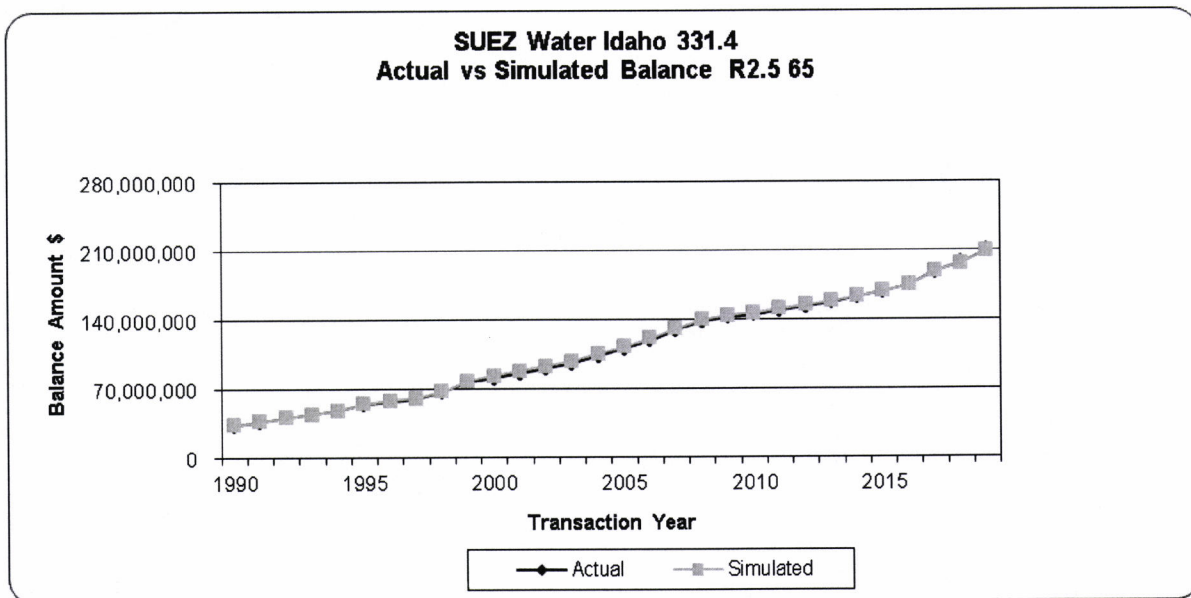
### **Account 330.4 Distribution Reservoirs and Standpipes (50 R2)**

This account consists of reservoirs, tanks, standpipes, and appurtenances used in storing water for transmission and distribution plant. The account balance is \$13.4 million for this account. The current life of this account is 50 years. Company SMEs state that there are around 42 tanks on system, with gravity and pressurized feeds. Tanks are not elevated. Most tanks are made of welded steel or concrete, with the split being around 50/50 between the two. There are 4 bolted tanks. Concrete will last longer, and the life of bolted tanks will be much shorter. There is data in this account from the 1990s. The current tanks were built in 1992 and mid-1990s. Hillcrest is at the end of its life. Company personnel report that there have been some new tanks in recent years, and the Company replaces rusted out pieces and parts, which is capital. Based on judgment and the assets in this account, this study recommends retaining a 50 year life with of an R2 dispersion curve for this account. A graph of the actual balances compared to the simulated balances from the proposed curve for this account is shown.



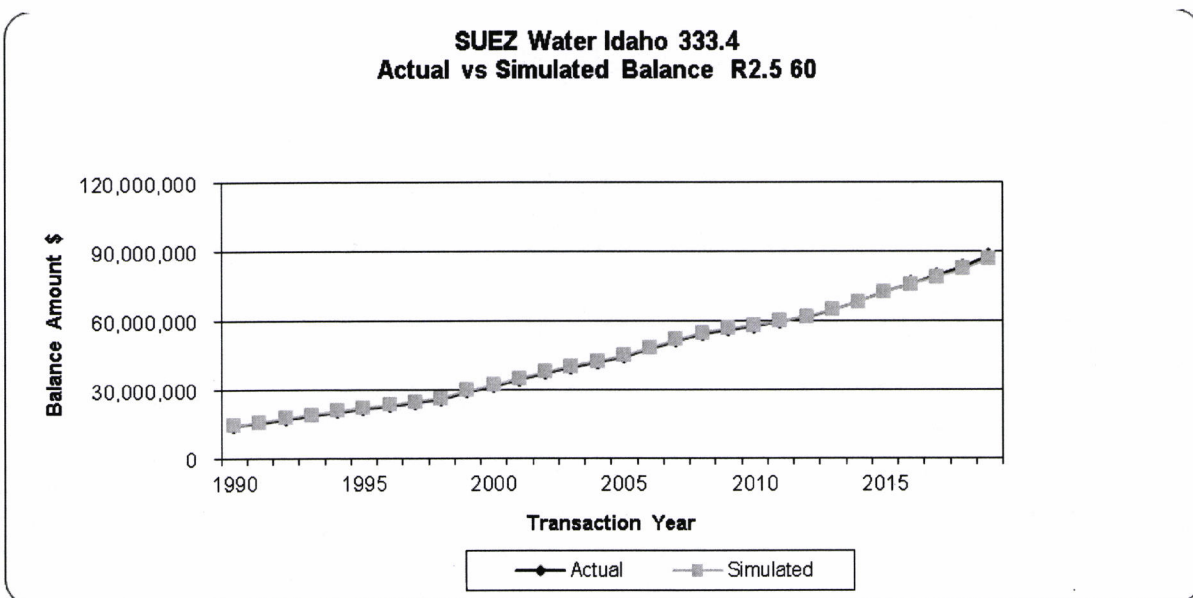
#### Account 331.4 Transmission and Distribution Mains (65 R2.5)

This account consists of transmission and distribution mains of varying types. The account balance is \$210.3 million for this account. Of that amount, approximately \$4.6 million of the assets are valves and \$2.8 million are various types of clamps. The current life of this account is 50 years. SPR analysis reflects a life of 60 years, which is in the range of lives expected by Company SMEs. Company personnel report that the system is fairly new, with most of the mains being constructed in the last 40 years. Company SMEs report that while AC main from the 1960s are in good shape, 16 inch PVC mains have some operational issues. GIS data on installation dates are available. Given the assets' age and condition, moving to 60 or even 65 years would be rational. Based on judgment and the assets in this account, this study recommends moving to a 65 year life with an R2.5 dispersion curve for this account. A graph of the actual balances compared to the simulated balances from the proposed curve for this account is shown.



#### Account 333.4 Services (60 R2.5)

This account consists of service pipes and accessories leading from the main to the customers' premises. The account balance is \$88.2 million for this account. The current life of this account is 40 years. There are many forces of retirement acting upon this account: dig-ins, replacements that occur with main replacement in relocations or road projects, and some replacements of service to accommodate customer change (demand or change in commercial use). Plastic pipe is the primary material used in replaced services. A large expansion occurred in 1974. Company personnel believe that services should have a shorter life than mains. Many services are installed later than the mains and are generally replaced when the mains are replaced. Operationally, 60 years is thought to be reasonable by Company SMEs. The 60 year analysis is also indicated in SPR results for this account. Based on judgment, analysis and the assets in this account, this study recommends moving to a 60 year life with of an R2.5 dispersion curve for this account. A graph of the actual balances compared to the simulated balances from the proposed curve for this account is shown.

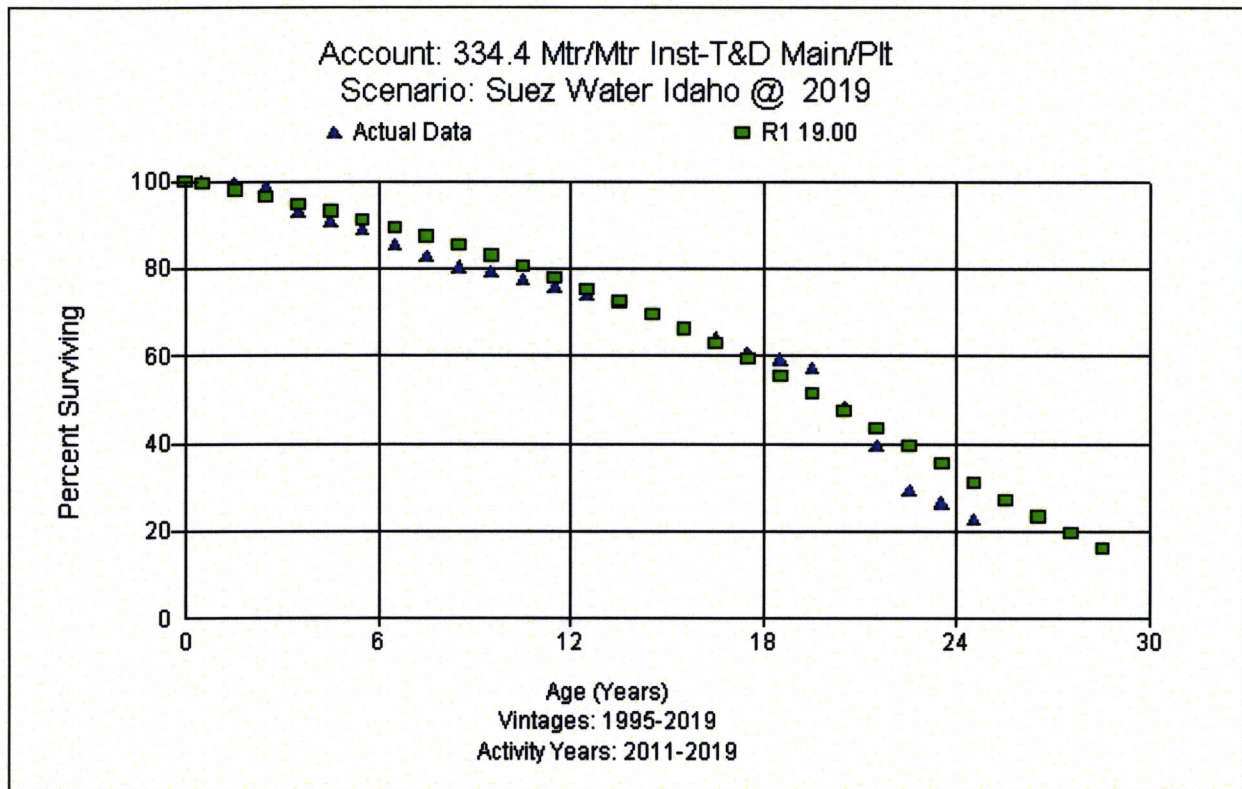




### **Account 334.4 Meters (19 R1)**

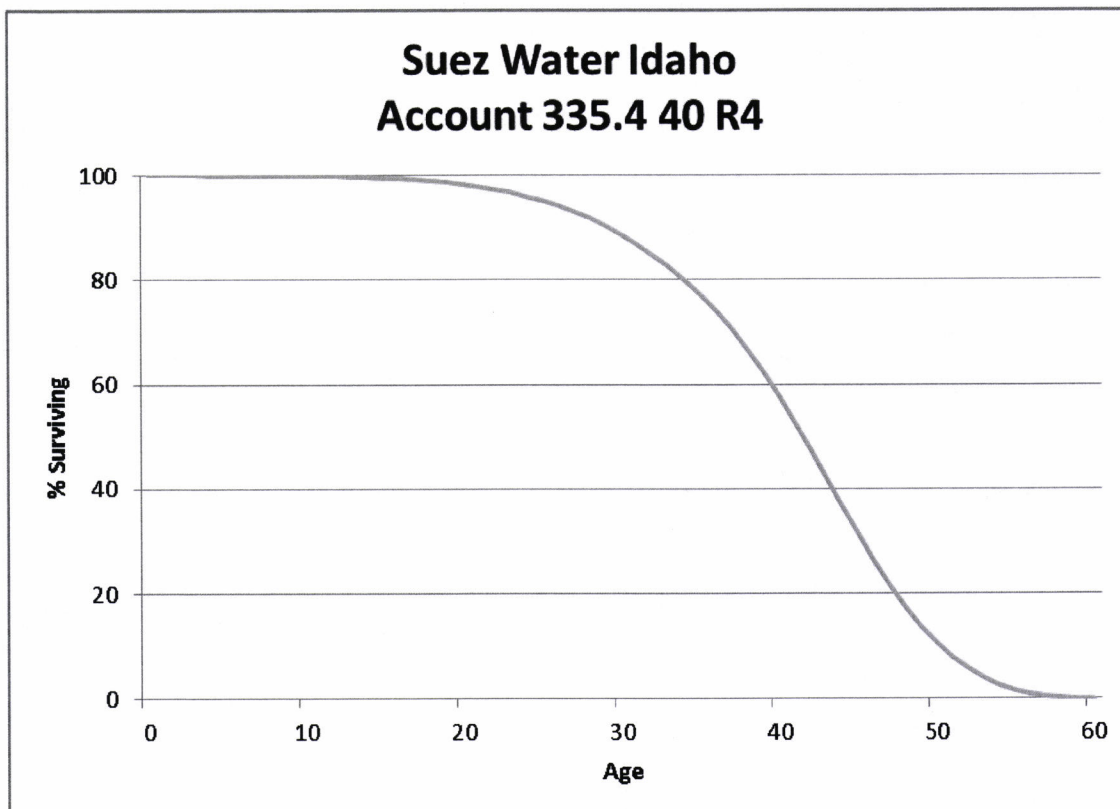
This account consists of meters, devices, and other appurtenances used for measuring the quantity of water delivered to users, whether actually in service or held in reserve. The account balance is \$16.8 million for this account. The current life of this account is 40 years. The Company is converting to AMI meters. Overall, approximately 30% of the conversion has occurred. The Company is targeting replacing 6,000 meters per year out of 100,000 customers and expects to complete that effort in 10-15 years. Meters are being replaced using a strategy based on what meters are most easy to convert to AMI.

The Company is using Sensus meters. When the battery fails, they replace the battery and meter gets retired. A maximum of a 20 year life would generally be expected for the battery life. Even before AMI, meters were replaced at 20-25 years for accuracy. Company personnel believe that 25 years is too long, even for old-style meters. Actuarial analysis reflects a 19 year life. Based on judgment and the assets in this account, this study recommends moving to a 19 year life with an R1 dispersion curve for this account. A graph of the actual data compared to the proposed curve for this account is shown.



#### **Account 335.4 Hydrants (40 R4)**

This account consists of hydrants in service owned by the utility. The account balance is \$10.0 million for this account. The current life of this account is 40 years. There is insufficient data for actuarial or SPR analysis. Most of Suez's service area is in Boise. Until 2015, the city of Boise owned the hydrants. Now when the service is replaced, the Company owns the hydrants. On a cyclic basis, the Company plans to replace all the Boise hydrants. At 20 years old, the hydrant is reviewed. Most of the investment comes from years 2001 and newer. Company personnel state that a life of 40 years is rational from an operational standpoint. Based on judgment and the assets in this account, this study recommends moving to a 40 year life with an R4 dispersion curve for this account. A generic graph below shows the proposed curve shape.

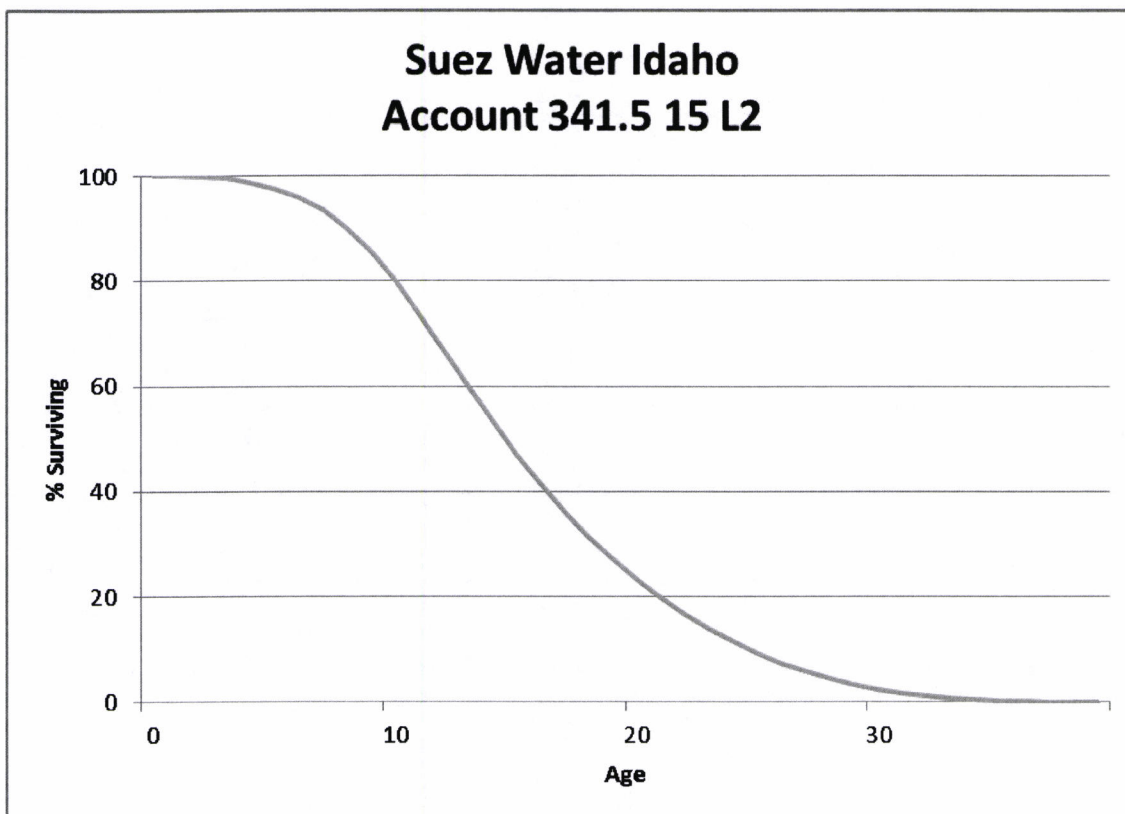




## **General Plant – Depreciated**

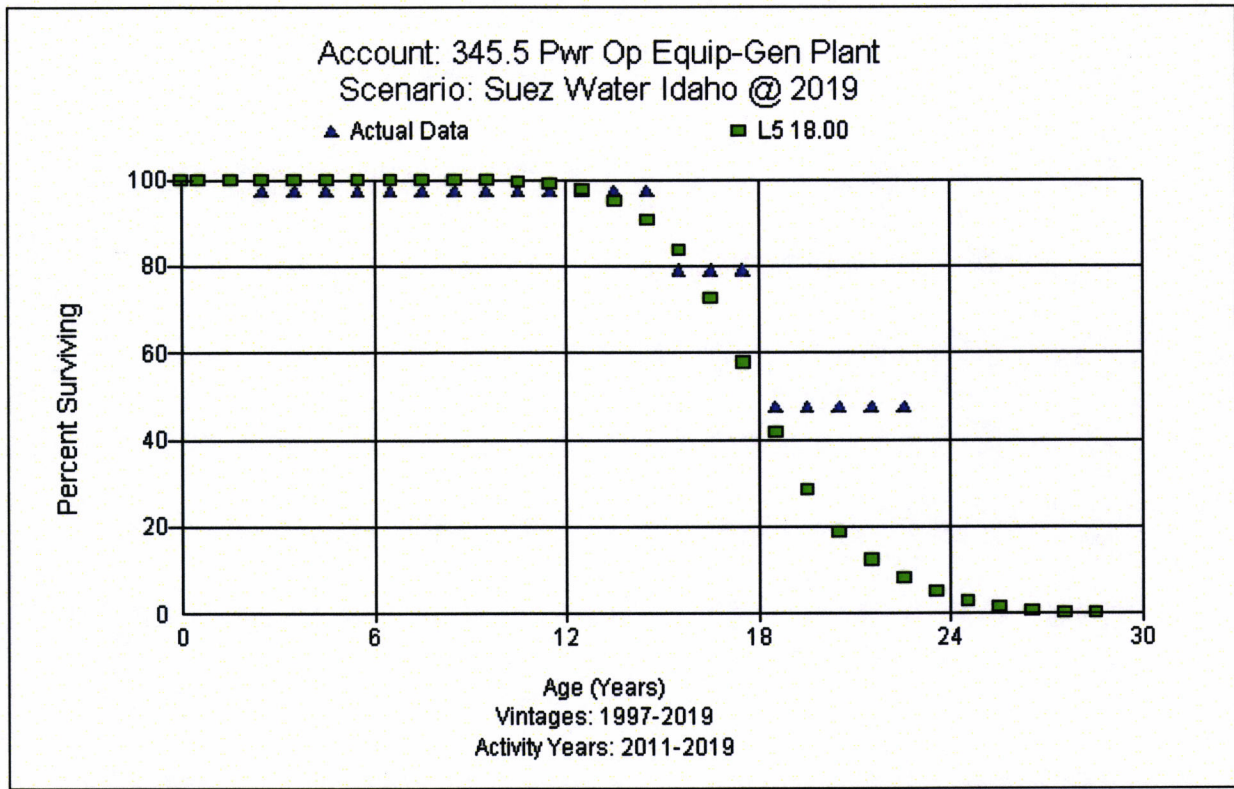
### **Account 341.5 Transportation Equipment (15 L2)**

This account consists of transportation equipment that is licensed on local roadways. The account balance is \$37 thousand for this account. The approved life is 8.7 years. Company personnel state that most vehicles are leased. Assets in this account include a mini excavator and trailers. From an operations perspective, Company SMEs believe that the trailers will last about 15 years. Based on judgment and information provided by Company's SMEs, this study recommends a 15 L2 dispersion curve for this account. A generic graph below shows the proposed curve shape.



### Account 345.5 Power Operated Equipment (18 L5)

This account can consist of power operated equipment such as bulldozers, trenchers, hydro excavators, and backhoes. The account balance is \$82 thousand for this account. The approved life is 6.9 years. Two of the large items in this account are excavators and backhoes. Company personnel report that Suez usually keeps that type of equipment approximately 15 years. Based on judgment, the analysis and input from Company personnel, this depreciation study recommends moving to an 18 year life and using an L5 dispersion curve for this account. A graph comparing the Company's data to the proposed survivor curve is shown below.





## **General Plant - Amortized (Accounts 340.5, 342.5-344.5, 346.5-348.5)**

### **Adoption of Vintage Group Amortization**

This study recommends the adoption of vintage group amortization for certain General plant accounts. FERC adopted Accounting Release 15 ("AR15") in 1997 using the following criteria:

1. The individual classes of assets for which vintage year accounting is followed are high volume, low value items;
2. There is no change in existing retirement unit designations, for purposes of determining when expenditures are capital or expense;
3. The cost of the vintage groups is amortized to depreciation expense over their useful lives and there is no change in depreciation rates resulting from the adoption of the vintage year accounting;
4. Interim retirements are not recognized;
5. Salvage and removal cost relative to items in the vintage categories are included in the accumulated depreciation account and assigned to the oldest vintage first; and
6. Properties are retired from the affected accounts that, at the date of the adoption of vintage year accounting, meet or exceed the average service life of properties in that account.

A vintage year method of accounting for the general plant accounts that meets all of the foregoing requirements may be implemented without obtaining specific authorization from the Commission to do so.

With the adoption of vintage group amortization, it is no longer necessary to keep track of the location and retirement of specific assets. Annually, assets are retired after reaching the average service life for that account. The retirement amounts for fully accrued assets are shown for each account in Appendix A-1. After those assets are retired, the remaining plant in service for each account will be amortized using the amortization rates shown in Appendix A-1. An additional accrual is necessary for each plant account to make up the

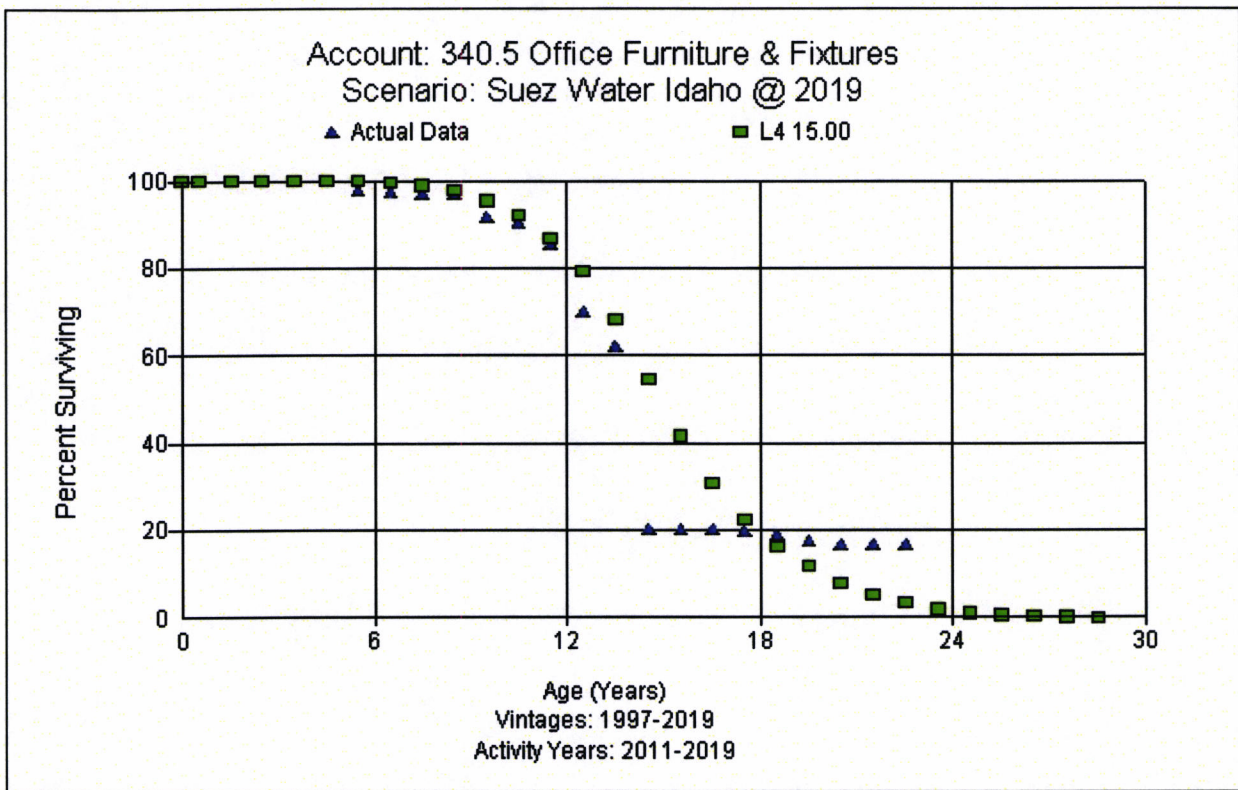


difference between the book depreciation reserve and the theoretical depreciation reserve.

For Suez, there is a small difference between the book and theoretical reserve that needs to be amortized over the remaining life of each plant account. This amount is shown for each account in Appendix A-1. Slight changes in life for the amortized plant accounts are discussed below.

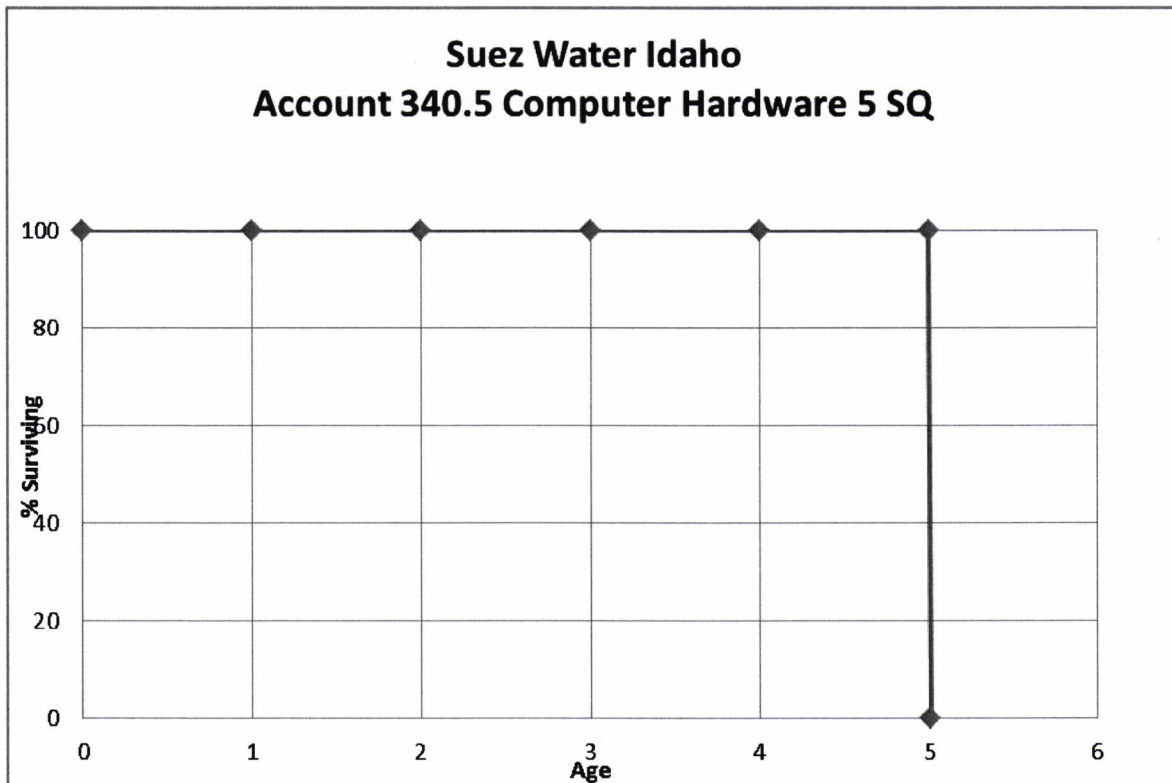
**Account 340.5 Office Furniture and Equipment (15 SQ)**

This account consists of office furniture and equipment such as desks, chairs, projectors, or other similar equipment. The account balance is \$1.4 million for this account. After the retirement of fully accrued assets, there will be \$1.3 million in plant. The approved life is 15 years. After reviewing actuarial analysis, the best fit is 15 years with an L4 dispersion. After adoption of general plant amortization, this study recommends retaining the approved 15 year life and using an SQ dispersion curve for this account. A graph of the actuarial analysis is shown below.



### Account 340.5 Computer Hardware (5 SQ)

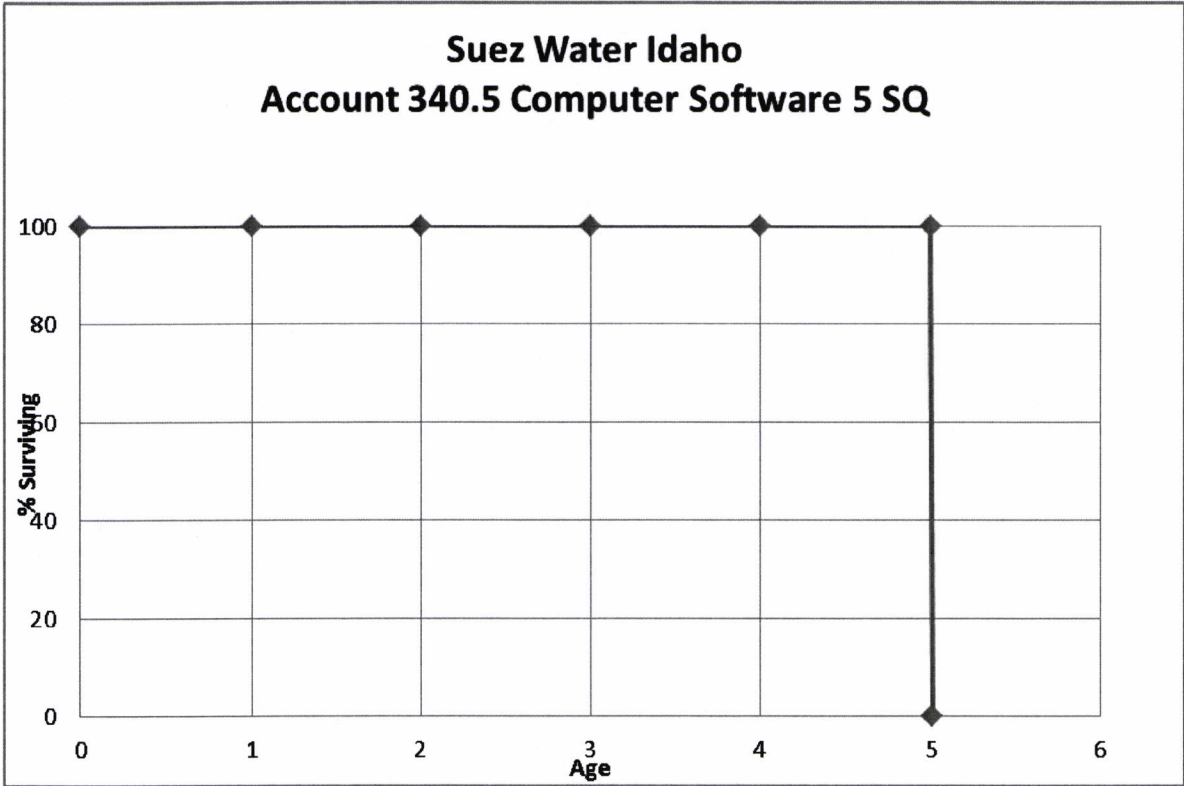
This account consists of various types of computer hardware, such as servers and network equipment. The account balance is \$1.1 million for this account, and after the retirement of fully accrued assets, there will be \$98 thousand in plant. The approved life is 5 years. The Company's goal is to refresh its computer equipment every 4 years. Some assets (such as network equipment) may last longer. Based on judgment and Company practices, this study recommends retaining the approved 5 year life and using an SQ dispersion curve for this account. A representative graph of the proposed life is shown below.





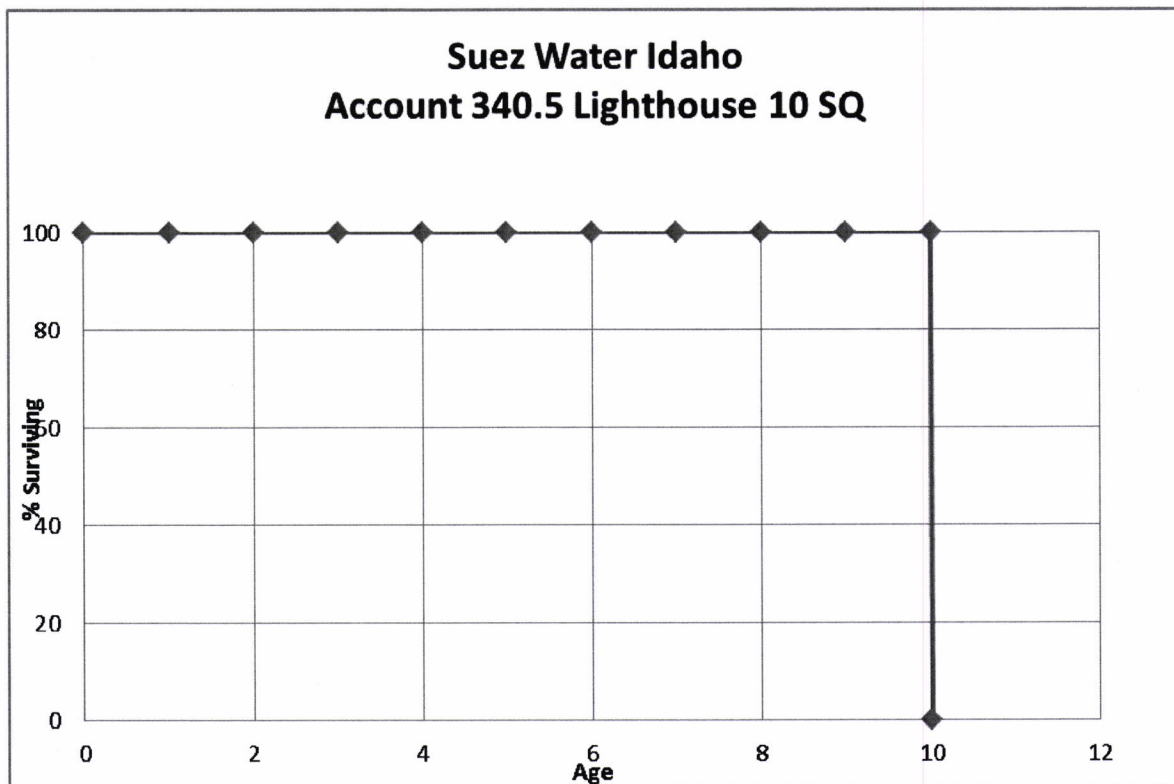
**Account 340.5 Computer Software (5 SQ)**

This account consists of miscellaneous computer software. The account balance is \$3.6 million for this account. After the retirement of fully accrued assets, there will be \$1.3 million in plant. The approved life is 5 years. The Company refreshes software every 4 to 5 years. Based on judgment and Company practice, this study recommends retaining the approved 5 year life and using an SQ dispersion curve for this account. A representative graph of the proposed life is shown below.



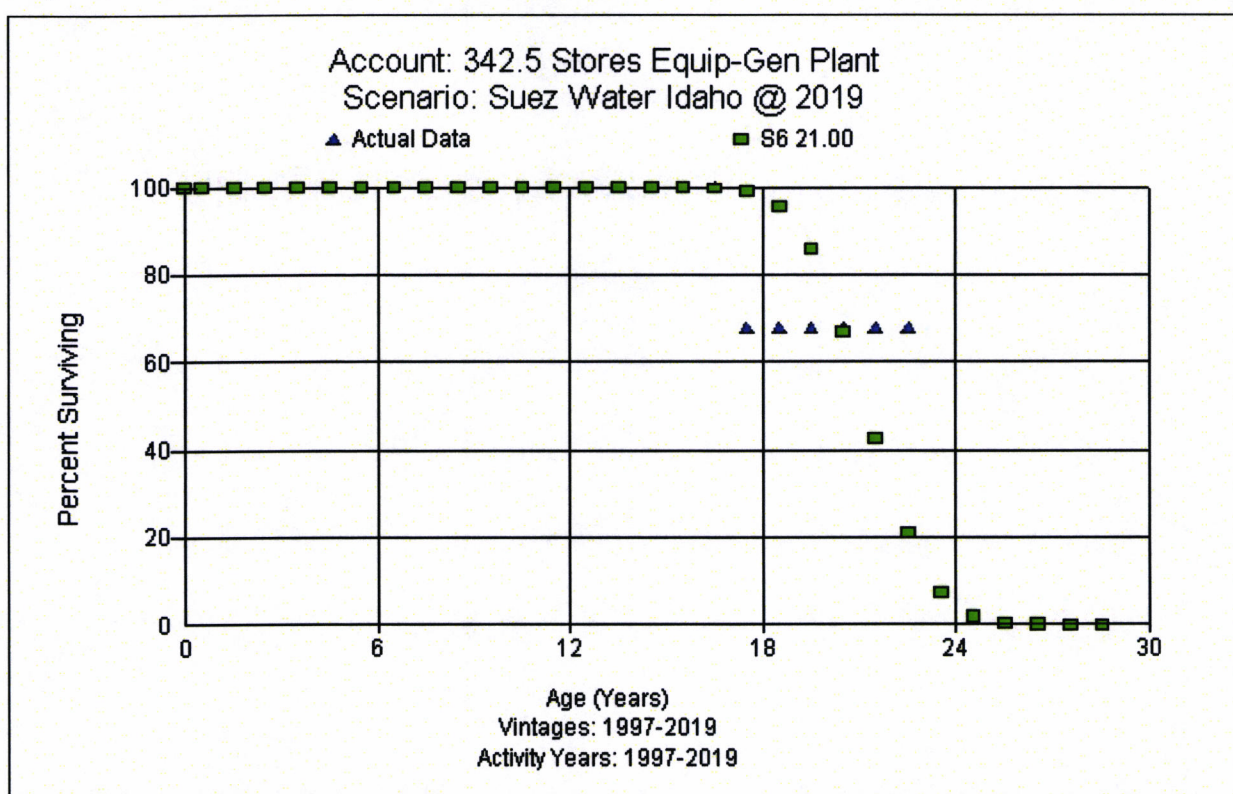
### Account 340.5 Computer Software Lighthouse (10 SQ)

This account consists of the Company's lighthouse computer software. The account balance is \$5.2 million for this account. The current 10 year life was established in Case UWI-W-11-02 dated 2012. The assets in this account were installed in 2011, and there have been no additions or retirements since this asset went in service. Company SMEs recommend retention of the current life of 10 years, with a 1.5 year remaining life as of December 31, 2019. Based on judgment and the recommendation of Company personnel, this study recommends retaining the approved 10 year life and using an SQ dispersion curve for this account. A representative graph of the proposed life is shown below.



### Account 342.5 Stores Equipment (21 SQ)

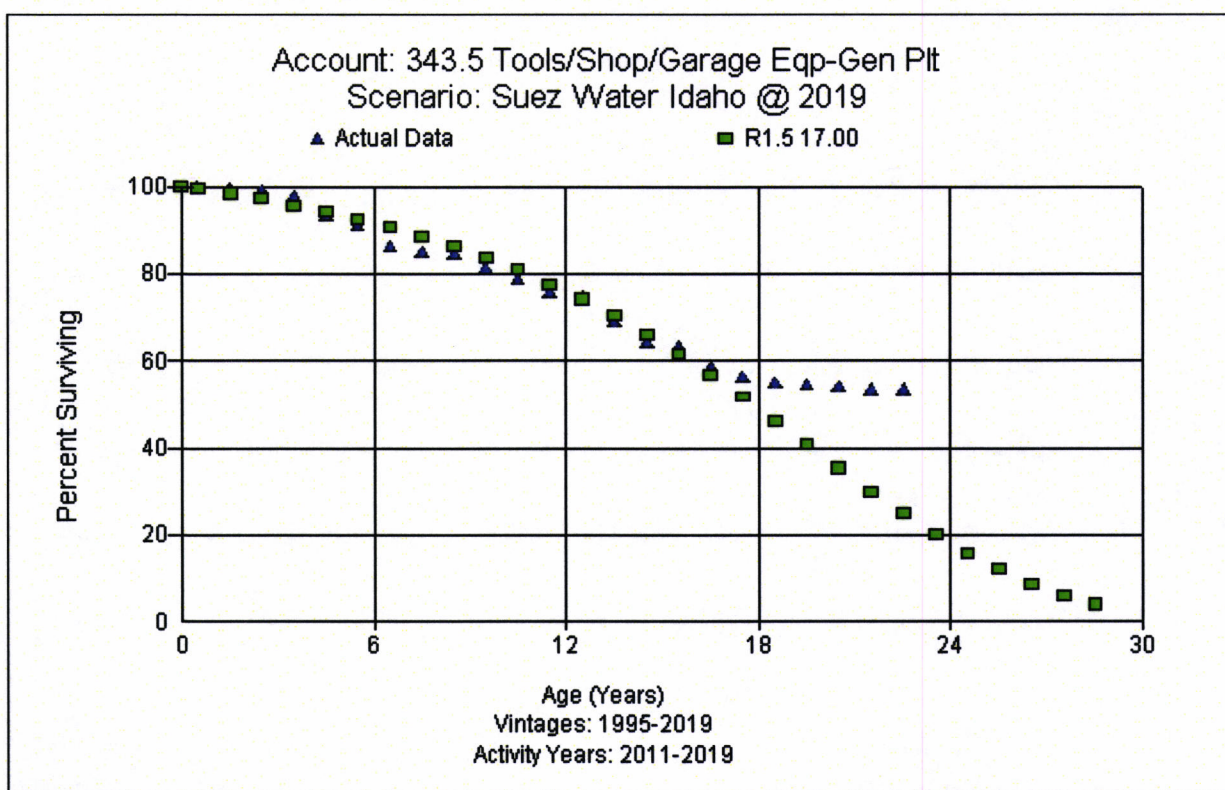
This account consists of stores equipment such as furniture and tools. The account balance is \$19 thousand for this account, and after the retirement of fully accrued assets there will be \$4 thousand in plant. The approved life characteristic is 15 years. The actuarial analysis for this account shows a similar life. After reviewing actuarial analysis, the best fit for curve and life is 21 years with an S6 dispersion. After adoption of general plant amortization, this study recommends moving to a 21 year life and using an SQ dispersion curve for this account. A graph of the actuarial analysis is shown below.





### Account 343.5 Tools, Shop, and Garage Equipment (17 SQ)

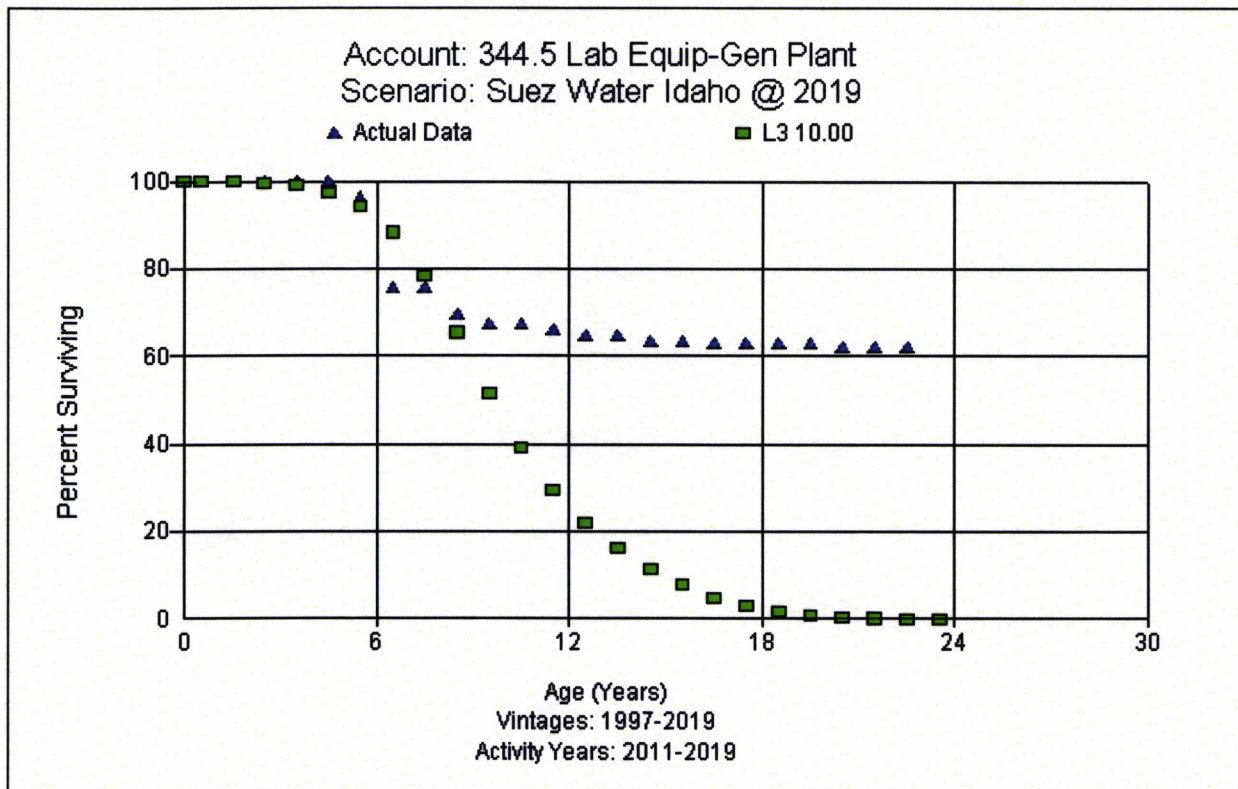
This account consists of tools, shop, and garage equipment, such as miscellaneous tools, electric equipment, or pumps. The account balance is \$1.3 millions for this account. After the retirement of fully accrued assets, there will be \$1 million in plant. The approved life characteristic is 15 years. After reviewing actuarial analysis, the best fit for curve and life is 17 years with an R1.5 dispersion. After adoption of general plant amortization, this study recommends moving 17 year life and using an SQ dispersion curve for this account. A graph of the actuarial analysis is shown below.





### Account 344.5 Laboratory Equipment (10 SQ)

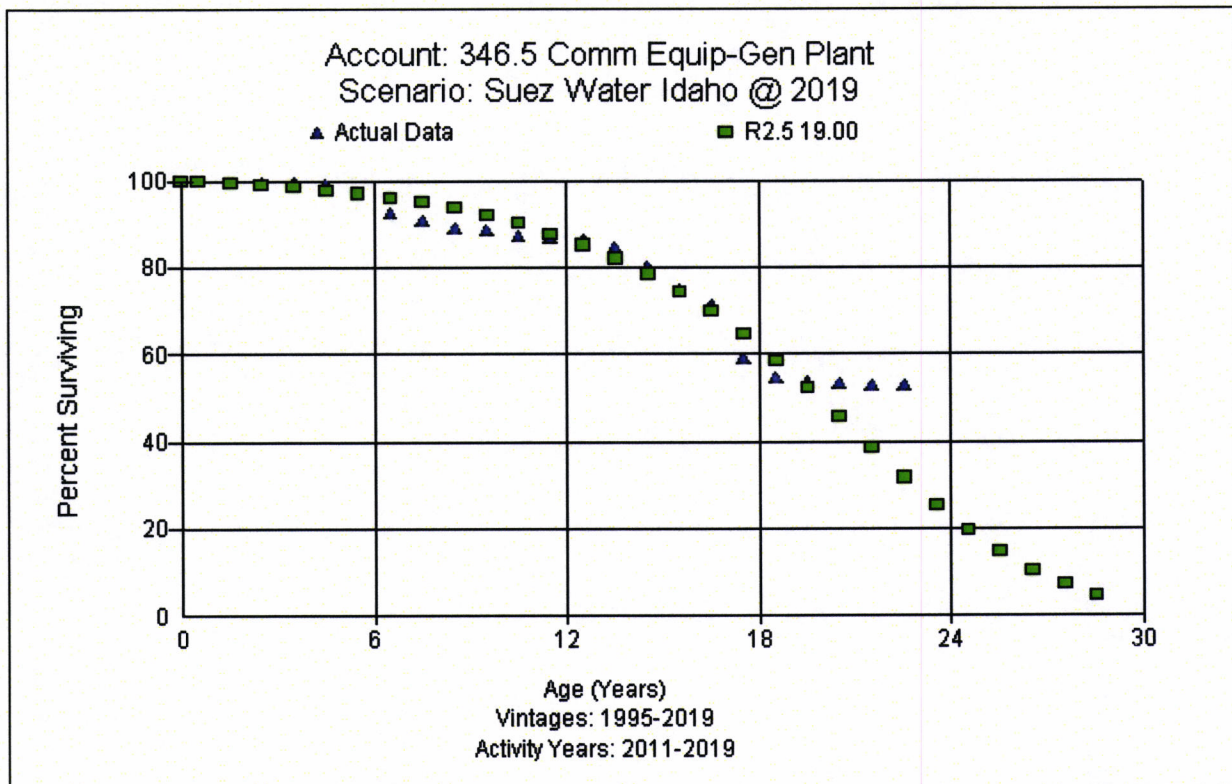
This account consists of laboratory equipment such as testing instruments. The account balance is \$314 thousand for this account. After the retirement of fully accrued assets, there will be \$86 thousand in plant. The approved life characteristic is 15 years. Actuarial analysis shows a life in the same range as is currently approved. After reviewing actuarial analysis, the best fit for curve and life is 10 years with an L3 dispersion. After adoption of general plant amortization, this study recommends moving to a 10 year life and using an SQ dispersion curve for this account. A graph of the actuarial analysis is shown below.





### Account 346.5 Communication Equipment (19 SQ)

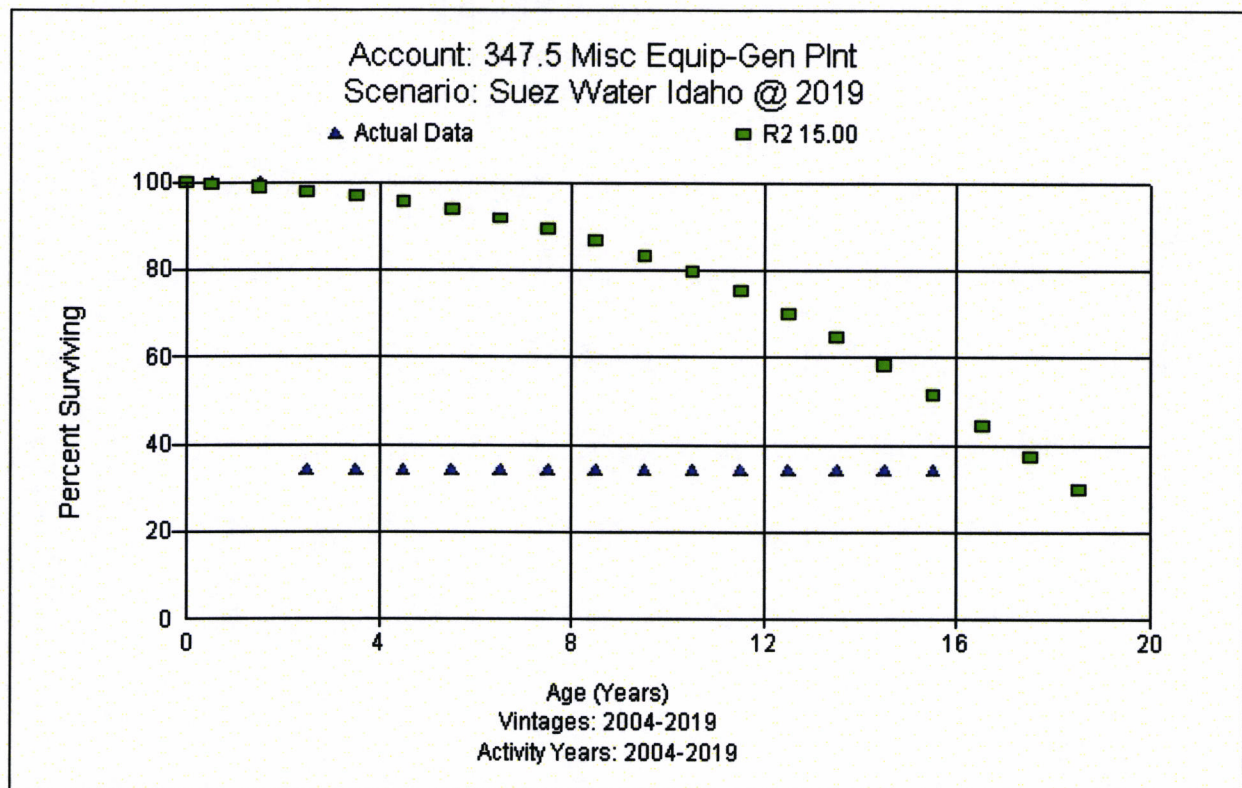
This account consists of communication equipment such as control equipment, radios, telephone systems, and similar assets. The account balance is \$4.6 million for this account, and after the retirement of fully accrued assets there will be \$3.9 million in plant. The approved life characteristic is 15 years. Actuarial analysis shows slightly longer life than is currently approved for this account. Some budget constraints in the past deferred replacements. SCADA control equipment and all instrument controls are being targeted for a 15 year life cycle now. Some other equipment would have a longer life expectation. After reviewing actuarial analysis, the best fit for curve and life is 19 years with an R2.5 dispersion. After adoption of general plant amortization, this study recommends moving to a 19 year life and using an SQ dispersion curve for this account. A graph of the actuarial analysis is shown below.





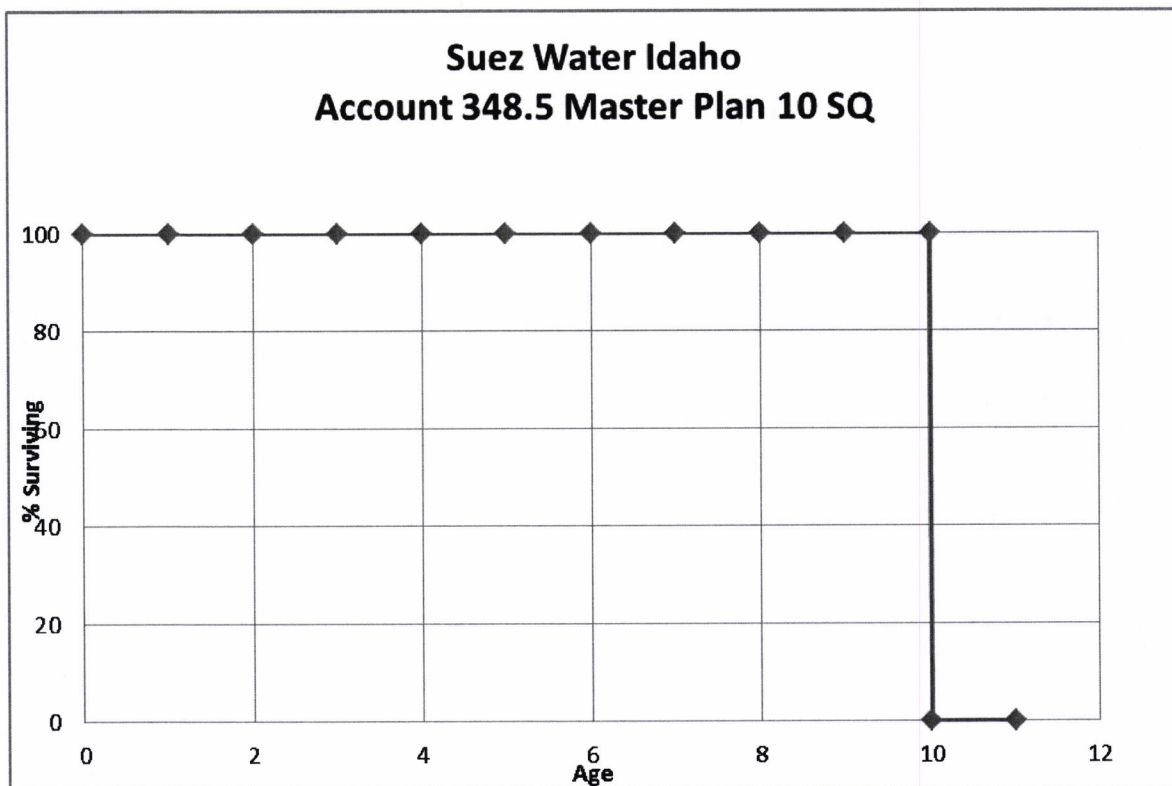
### Account 347.5 Miscellaneous Equipment (15 SQ)

This account consists of miscellaneous equipment signs, miscellaneous tools, sampling stations, or other equipment that may not fit in any other general plant account. The account balance is \$122 thousand for this account. After the retirement of fully accrued assets, there will be \$119 thousand in plant. The approved life is 15 years. After reviewing actuarial analysis, given the limited data in the analysis, the best fit for curve and life is 15 years with an R2 dispersion. After adoption of general plant amortization, this study recommends moving to an approved 15 year life and using an SQ dispersion curve for this account. A graph of the actuarial analysis is shown below.



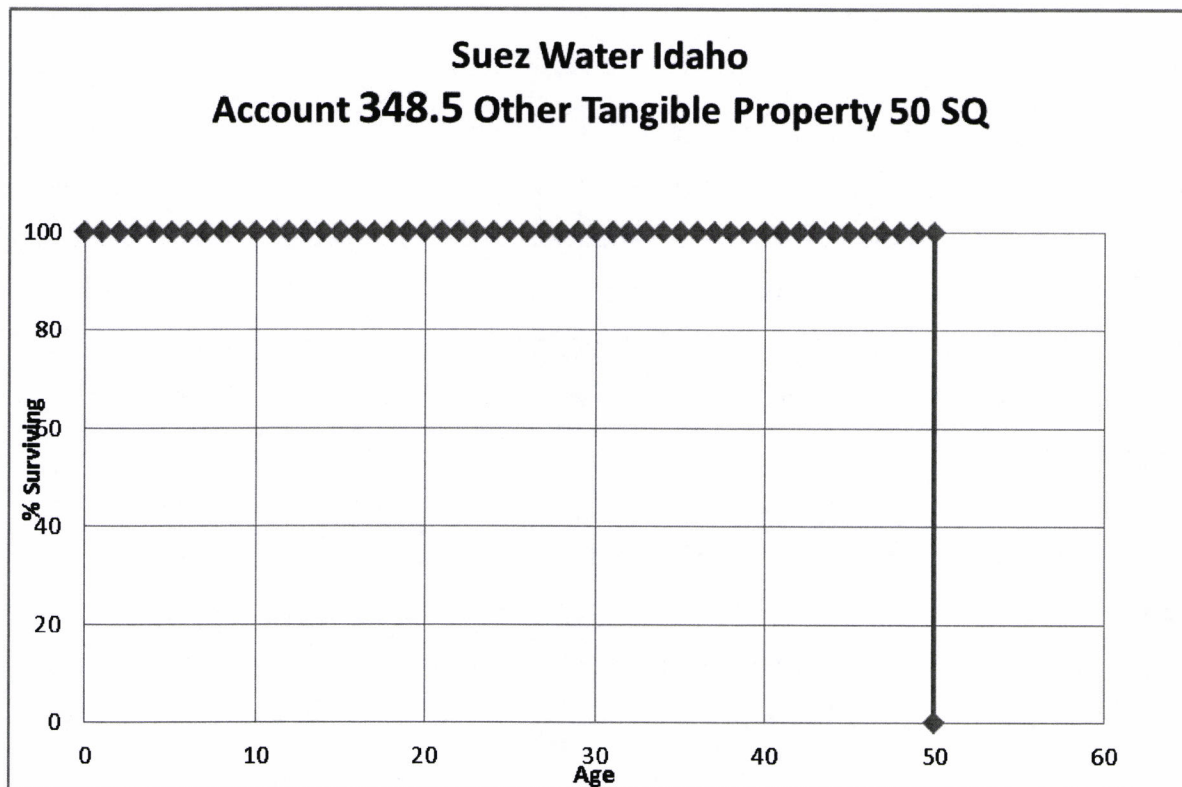
### Account 348.5 Master Plan (10 SQ)

This account consists of miscellaneous special studies that are used in planning. The account balance is \$2.5 million for this account, and after the retirement of fully accrued assets there will be \$1.8 million in plant. The approved life characteristic is 10 years, which was established in Order 27617, Case UWI-W-97-6. Given the nature of this account, a 10 year life is reasonable. After adoption of general plant amortization, this study recommends moving to a 10 year life and using an SQ dispersion curve for this account. A generic graph below shows the proposed curve shape.



### Account 348.5 Other Tangible Plant (50 SQ)

This account consists of other tangible plant not used in any other account specified previously. The account balance is \$0 for this account, and the approved life characteristic is 50 years. There is no retirement experience for this account to examine. Based on judgment, this study recommends retention of the 50 year life combined with a SQ dispersion. A graph of the proposed life pattern is shown below.





### **Salvage Analysis**

When a capital asset is retired, physically removed from service, and finally disposed of, terminal retirement is said to have occurred. The residual value of a terminal retirement is called gross salvage. Net salvage is the difference between the gross salvage (what the asset was sold for) and the removal cost (cost to remove and dispose of the asset).

Gross salvage and cost of removal related to retirements are recorded to the general ledger in the accumulated provision for depreciation at the time retirements occur within the system.

Net salvage data by plant account and entity for all depreciable property is shown in Appendix D. Removal cost percentages are calculated by dividing the current cost of removal by the original installed cost of the asset. Some plant assets can experience significant negative removal cost percentages due to the timing of the addition versus the retirement. For example, a Transmission and Distribution asset in Account 331 Mains with a current installed cost of \$500 (2019) would have had an installed cost of \$31.80<sup>6</sup> in 1954. A removal cost of \$50 for the asset calculated (incorrectly) on current installed cost would only have a negative 10 percent removal cost (\$50/\$500). However, a correct removal cost calculation would show a negative 157 percent removal cost for that asset (\$50/\$31.80). Inflation from the time of installation of the asset until the time of its removal must be taken into account in the calculation of the removal cost percentage because the depreciation rate, which includes the removal cost percentage, will be applied to the original installed cost of assets.

### **Salvage Analysis – Suez Assets**

For each account, data for retirements, gross salvage, and cost of removal were derived from 2004-2019. Moving averages, which remove timing differences between retirement and salvage and removal cost, were analyzed over periods varying from one to 16 years, and are generally evaluated in making the net salvage recommendations for the study. .

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<sup>6</sup> Using the Handy-Whitman Bulletin No. 191, W-5, line 28, \$31.80 = \$500 x 47/739.



**Account 304.2 Structures and Improvements- Pumping Plant (-10%)**

**Account 304.3 Structures and Improvements Treatment (-10%)**

**Account 304.4 Structures and Improvements – Transmission and Distribution (-10%)**

**Account 304.5 General Offices (-10%)**

This account consists of cost of gross salvage and cost of removal associated with structures and various improvements in various functional groups. Historical information did not distinguish between each of the functions associated with structures. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving averages are -23.94 percent and -24.53 percent respectively. Based on historic activity and judgment, this study recommends negative 10 percent for this account.

**Account 305.2 Collecting & Impounding Reservoirs (0%)**

This account consists of cost of gross salvage and cost of removal associated with structures and various improvements used for impounding, collecting, and storing water in the source of supply system. There is no existing net salvage in Suez's accrual rates. The only asset in this account is a small amount installed in 2018, and there is insufficient history on which to base a net salvage estimate. Based on judgment, this study recommends 0 percent for this account.

**Account 306.2 Lake River and Other Intakes (0%)**

This account consists of cost of gross salvage and cost of removal associated with lake, river, or other intakes and includes items such as buildings, bulkheads, filter plant, screens, piping, and related assets. There is no existing net salvage in Suez's accrual rates. There is insufficient history on which to base a net salvage estimate. Based on judgment, this study recommends 0 percent for this account.

**Account 307.2 Wells and Springs (-10%)**

This account consists of cost of gross salvage and cost of removal associated with

cost of wells and springs used as a source of supply. Such assets might be collecting basins, pipes, springs and appurtenances, and wells and casings. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving averages are -12.31 percent and -11.55 percent respectively. Based on historic activity and judgment, this study recommends negative 10 percent for this account.

#### **Account 309.2 Supply Mains (0%)**

This account consists of cost of gross salvage and cost of removal associated with raw water lines and intertie vaults, and other supply mains, pipes, aqueducts, canals, and their appurtenances. There is no existing net salvage in Suez's accrual rates. The net salvage history in this account is limited. Based on judgment, this study recommends 0 percent for this account.

#### **Account 310.2 Other Power Production Equipment (0%)**

This account consists of cost of gross salvage and cost of removal associated with other production equipment not powered by electric or diesel. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving averages are 11.89 percent and 2.68 percent respectively. The positive net salvage is driven by a singular outlier of gross salvage in 2017 from the sale of the generator in the Please Valley Well project. Generally, no material gross salvage would be expected for this account. Based on judgment, this study recommends 0 percent for this account.

#### **Account 311.2, 311.3, 311.4 Pumping Equipment (-15%)**

This account consists of cost of gross salvage and cost of removal associated with electric pumps, piping, circulating, and other related equipment used in the pumping plant. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving averages are -21.58 percent and -21.21 percent respectively. Based on historic activity and judgment, this study recommends negative 15 percent for this account.



**Account 320.3 Water Treatment Equipment (-10%)**

This account consists of cost of gross salvage and cost of removal associated with tanks, tank controls, steam heat exchangers, media for water treatment equipment, including filtration systems, and other equipment used in the water treatment plant. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving averages are -16.31 percent and -8.59 percent respectively. Based on historic activity and judgment, this study recommends negative 10 percent for this account.

**Account 320.3 Water Treatment Equipment Membranes (0%)**

This account consists of cost of gross salvage and cost of removal associated with membranes used in water treatment equipment plant. There is no existing net salvage in Suez's accrual rates. It is not possible to segregate the net salvage history between this account and the other 320.3 account, Water Treatment Equipment. Company SMEs do not include any net salvage in budgeting for this account. Based on the type of asset in this group and judgment, this study recommends 0 percent for this account.

**Account 330.4 Distribution Reservoirs and Standpipes (-5%)**

This account consists of cost of gross salvage and cost of removal associated with reservoirs, tanks, standpipes, and appurtenances used in storing water for transmission and distribution plant. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving averages are 0 percent and -12.57 percent respectively. Based on historic activity and judgment, this study recommends negative 5 percent for this account.

**Account 331.4 Transmission and Distribution Mains (-30%)**

This account consists of cost of gross salvage and cost of removal associated with transmission and distribution mains of varying types. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving

averages are -42.12 percent and -34.89 percent respectively. Based on historic activity and judgment, this study recommends negative 30 percent for this account.

#### **Account 333.4 Services (-75%)**

This account consists of cost of gross salvage and cost of removal associated with service pipes and accessories leading from the main to the customers' premises. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving averages are -404.67 percent and -120.67 percent respectively. Based on historic activity and judgment, this study recommends negative 75 percent for this account.

#### **Account 334.4 Meters (0%)**

This account consists of cost of gross salvage and cost of removal associated with meters, devices, and other appurtenances used for measuring the quantity of water delivered to users, whether actually in service or held in reserve. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving averages are -5.8 percent and 1.15 percent respectively. Based on historic activity and judgment, this study recommends 0 percent for this account.

#### **Account 335.4 Hydrants (0%)**

This account consists of cost of gross salvage and cost of removal associated with hydrants in service owned by the utility. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving averages are both 0 percent. Based on historic activity and judgment, this study recommends 0 percent for this account.

#### **Account 341.5 Transportation Equipment (5%)**

This account consists of cost of gross salvage and cost of removal associated with transportation equipment that is licensed on local roadways. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year



moving averages are 0 percent and 123.3 percent respectively. Based on historic activity and judgment, this study recommends 5 percent for this account.

**Account 345.5 Power Operated Equipment (5%)**

This account consists of cost of gross salvage and cost of removal associated with power operated equipment such as bulldozers, trenchers, hydro excavators, or backhoes. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving averages are -0.55 percent and 5.64 percent respectively. Based on historic activity and judgment, this study recommends 5 percent for this account.

**Account 340.5 Office Furniture and Equipment (0%)**

This account consists of cost of gross salvage and cost of removal associated with office furniture and equipment such as desks, chairs, projectors, or other similar equipment. There is no existing net salvage in Suez's accrual rates. It is not possible to separate the history among the 340.5 accounts. When examining historical activity for the combined account, the 5-year and 10-year moving averages are -0.47 percent and -0.13 percent respectively. Based on historic activity and judgment, this study recommends 0 percent for this account.

**Account 340.5 Computer Hardware (0%)**

This account consists of cost of gross salvage and cost of removal associated with various types of computer hardware, such as servers. There is no existing net salvage in Suez's accrual rates. Typically, these assets produce no net salvage. It is not possible to separate the history among the 340.5 accounts. When examining historical activity for the combined account, the 5-year and 10-year moving averages are -0.47 percent and -0.13 percent respectively. Based on historic activity, the type of asset, and judgment, this study recommends 0 percent for this account.

**Account 340.5 Computer Software (0%)**

This account consists of cost of gross salvage and cost of removal associated with



miscellaneous computer software. There is no existing net salvage in Suez's accrual rates. Typically, these assets produce no net salvage. It is not possible to separate the history among the 340.5 accounts. When examining historical activity for the combined account, the 5-year and 10-year moving averages are -0.47 percent and -0.13 percent respectively. Based on historic activity, the type of asset, and judgment, this study recommends 0 percent for this account.

#### **Account 340.5 Computer Software Lighthouse (0%)**

This account consists of cost of gross salvage and cost of removal associated with the Company's Lighthouse computer software, which was installed in 2011. There is no existing net salvage in Suez's accrual rates. It is not possible to distinguish among the 340.5 subaccounts in examining history. Typically, these assets produce no net salvage. When examining historical activity for the combined account, the 5-year and 10-year moving averages are -0.47 percent and -0.13 percent respectively. Based on historic activity, the type of asset, and judgment, this study recommends 0 percent for this account.

#### **Account 342.5 Stores Equipment (0%)**

This account consists of cost of gross salvage and cost of removal associated with stores equipment such as furniture and tools. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving averages are 0 percent for both periods. Based on historic activity and judgment, this study recommends 0 percent for this account.

#### **Account 343.5 Tools, Shop, and Garage Equipment (0%)**

This account consists of cost of gross salvage and cost of removal associated with tools, shop, and garage equipment, such as miscellaneous tools, electric equipment, or pumps. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving averages are 0.90 percent and 5.62 percent respectively. Based on historic activity and judgment, this study recommends 0 percent for this account.

**Account 344.5 Laboratory Equipment (0%)**

This account consists of cost of gross salvage and cost of removal associated with laboratory equipment such as testing instruments. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving averages are -5.96 percent and -4.74 percent respectively. Based on historic activity and judgment, this study recommends 0 percent for this account.

**Account 346.5 Communication Equipment (-5%)**

This account consists of cost of gross salvage and cost of removal associated with communication equipment such as control equipment, radios, telephone systems, and similar assets. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving averages are -13.64 percent and -8.39 percent respectively. Based on historic activity and judgment, this study recommends negative 5 percent for this account.

**Account 347.5 Miscellaneous Equipment (0%)**

This account consists of cost of gross salvage and cost of removal associated with miscellaneous equipment signs, miscellaneous tools, sampling stations, or other equipment that may not fit in any other general plant account. There is no existing net salvage in Suez's accrual rates. When examining historical activity, the 5-year and 10-year moving averages are 0 for both periods. Based on historic activity and judgment, this study recommends 0 percent for this account.

**Account 348.5 Master Plan (0%)**

This account consists of cost of gross salvage and cost of removal associated special studies that are used in planning. There is no existing net salvage in Suez's accrual rates. There are two 348.5 accounts, but all the retirement activity has been related to this account. When examining historical activity, the 5-year and 10-year moving averages are 0 percent for both periods. Based on historic activity and judgment, this study recommends 0

percent for this account.

**Account 348.5 Other Tangible Plant (0%)**

This account consists of gross salvage and cost of removal associated with other tangible plant not used in any other account specified. There is no history for net salvage on this account alone. Based on judgment, this study recommends 0 percent for this account.



**APPENDIX A**  
**Computation of Annual Depreciation Accrual and Rates**

Suez Water Idaho

Computation of Proposed Depreciation Rates  
Using Average Life Group Depreciation  
As of December 31, 2019

Account	Description	Plant Balance (c)	Book Reserve (d)	Net Salvage % (e)	Net Salvage Amount (f) = (e)/100*(c)	Unaccrued Balance (g) = (c)-(d)-(f)	Average Remaining Life (h)	Annual Accrual Amount (i) = (g)/(h)	Proposed Annual Accrual Rate (j) = (i)/(c)
<b>Structures and Improvements</b>									
304.2	Pumping	6,781,076.69	1,768,524.07	-10%	(678,107.67)	5,690,660.29	31.99	177,865.67	2.62%
304.3	Treatment	15,687,412.85	5,301,965.76	-10%	(1,568,741.29)	11,954,188.38	32.08	372,648.18	2.38%
304.4	Transmission and Distribution	2,997,926.12	767,048.40	-10%	(299,792.61)	2,530,670.34	29.21	86,645.60	2.89%
304.5	Offices	3,802,867.50	1,390,904.06	-10%	(380,286.75)	2,792,250.19	26.92	103,707.54	2.73%
<b>Source of Supply Plant</b>									
305.2	Collecting and Impounding Reservoirs	8,188.66	3,325.91	0%	0.00	4,862.75	35.61	136.55	1.67%
306.2	Lake River and Other Intakes	1,511,320.42	592,401.23	0%	0.00	918,919.19	36.11	25,444.86	1.68%
307.2	Wells and Springs	8,036,876.80	4,240,793.77	-10%	(803,687.68)	4,599,770.71	32.96	139,541.91	1.74%
309.2	Supply Mains	2,980,833.77	747,982.66	0%	0.00	2,232,851.11	57.55	38,795.09	1.30%
<b>Pumping Equipment</b>									
310.2	Power Production Equipment	3,516,129.70	1,820,631.20	0%	0.00	1,695,498.50	11.33	149,598.41	4.25%
311.2	Pumping Equipment	15,229,944.12	9,074,589.52	-15%	(2,284,491.62)	8,439,846.22	11.92	708,277.33	4.65%
311.3	Treatment Equipment	4,064,847.57	2,421,993.33	-15%	(609,727.14)	2,252,581.38	11.92	189,038.08	4.65%
311.4	Transmission and Distribution Equipment	7,729,968.63	4,605,814.16	-15%	(1,159,495.29)	4,283,649.76	11.92	359,486.65	4.65%
<b>Treatment Plant</b>									
320.3	Water Treatment Equipment	28,442,746.83	21,564,072.61	-10%	(2,844,274.68)	9,722,948.90	13.03	746,150.78	2.62%
320.3	Treatment Membranes	1,345,882.90	1,340,582.89	0%	0.00	5,300.01	1.53	3,467.21	0.26%
<b>Transmission and Distribution Plant</b>									
330.4	Distribution Reservoirs and Standpipes	13,374,408.13	3,270,061.33	-5%	(668,720.41)	10,773,067.20	37.82	284,815.26	2.13%
331.4	Transmission and Distribution Mains	210,333,829.95	58,165,596.25	-30%	(63,100,148.99)	215,268,382.69	50.63	4,251,433.42	2.02%
333.4	Services	88,246,138.24	34,523,170.21	-75%	(66,184,603.68)	119,907,571.71	45.97	2,608,178.90	2.96%
334.4	Meters and Meter Installations	16,830,162.49	4,863,784.89	0%	0.00	11,966,377.60	13.26	902,570.83	5.36%
335.4	Hydrants	10,041,714.63	1,778,727.50	0%	0.00	8,262,987.13	33.36	247,661.49	2.47%
<b>General Plant Depreciated</b>									
341.5	Transportation Equipment	36,773.36	19,050.17	5%	1,838.67	15,884.52	4.55	3,490.97	9.49%
345.5	Power Operated Equipment	81,574.03	45,696.60	5%	4,078.70	31,798.73	4.44	7,161.73	8.78%

**APPENDIX A-1**  
**Computation of Annual Amortization Accrual and Rates**



Suez Water Idaho

COMPUTATION OF AMORTIZATION RATE  
AT DECEMBER 31, 2019

Account	Description	Original Cost at 12/31/19	Allocated Book Reserve at 12/31/19	Theoretical Reserve \$	Reserve Difference \$	Asset > ASL	Remaining Life
340.5	Computer Hardware	1,135,037.48	1,077,563.84	1,088,855.13	(11,291.29)	1,036,881.04	2.35
340.5	Computer Software	3,626,486.63	3,079,599.31	3,278,758.44	(199,159.13)	2,362,023.66	1.38
340.5	Office Furniture and Fixtures	1,409,124.00	458,895.64	536,697.16	(78,001.52)	110,834.42	10.08
342.5	Stores Equipment	19,634.76	18,250.54	19,103.93	(853.39)	15,175.75	2.50
343.5	Tools, Shop and Garage Equipment	1,335,301.85	573,962.65	654,455.04	(80,492.39)	283,946.41	11.01
344.5	Laboratory Equipment	314,250.47	268,605.23	279,787.74	(11,182.51)	228,314.37	4.01
346.5	Communication Equipment	4,641,664.54	1,866,762.79	2,179,704.67	(312,941.88)	704,023.71	12.38
347.5	Miscellaneous Equipment	122,183.90	42,956.81	54,121.46	(11,164.65)	2,730.27	8.55
348.5	Master Plan	2,523,932.53	1,464,660.59	1,669,401.80	(204,741.22)	726,972.55	4.76
348.5	Other Tangible Plant	0.00	0.00	0.00	0.00	0.00	0.00
		15,127,616.16	8,851,057.39	9,760,885.37	(909,827.98)	5,470,902.18	

After Retirements of Assets with Age > Average Service Life

Account	Description	Plant Balance	Allocated Reserve	Amortization Life Amount	Amortization Net Salvage	Annual Amortization %	Annual Amortization \$	Annual Amortization True Up \$
340.5	Computer Hardware	98,156.44	40,682.80	5	0.00%	20.00%	19,631.29	1,129.13
340.5	Computer Software	1,264,462.97	717,575.65	5	0.00%	20.00%	252,892.59	19,915.91
340.5	Office Furniture and Fixtures	1,298,289.58	347,861.22	15	0.00%	6.67%	86,552.64	7,800.15
342.5	Stores Equipment	4,459.01	3,074.79	21	0.00%	4.76%	212.33	85.34
343.5	Tools, Shop and Garage Equipment	1,051,355.44	290,016.24	17	0.00%	5.88%	61,844.44	8,049.24
344.5	Laboratory Equipment	85,936.10	40,290.86	10	0.00%	10.00%	8,593.61	1,118.25
346.5	Communication Equipment	3,937,640.83	1,162,739.08	19	-5.00%	5.53%	217,606.47	31,294.19
347.5	Miscellaneous Equipment	119,453.63	40,226.54	15	0.00%	6.67%	7,963.58	1,116.47
348.5	Master Plan	1,796,959.98	737,688.04	10	0.00%	10.00%	179,696.00	20,474.12
348.5	Other Tangible Plant	0.00	0.00	50	0.00%	2.00%	0.00	0.00
		9,656,713.98	3,380,155.21				834,992.94	90,982.80

**APPENDIX B**  
**Comparison of Existing and Proposed Accrual and Rates**

**Suez Water Idaho**  
**Comparison Of Current and Proposed Depreciation Rates**  
**Using Average Life Group Depreciation**  
**As of December 31, 2019**

Account (a)	Description (b)	Plant Balance (c)	Existing Accrual Rate (d)	Accrual \$ at Existing Rates (e) = (c) * (d)	Proposed Accrual Rate (f)	Accrual at Proposed Rates (g)=(c) * (f)	Note	Difference In Expense \$ (h) = (g)-(e)
<b><u>Structures and Improvements</u></b>								
304.2 Pumping		6,781,076.69	2.00%	135,621.53	2.62%	177,865.67		42,244.14
304.3 Treatment		15,687,412.85	2.00%	313,748.26	2.38%	372,648.18		58,899.93
304.4 Transmission and Distribution		2,997,926.12	2.00%	59,958.52	2.89%	86,645.60		26,687.08
304.5 Offices		3,802,867.50	2.50%	95,071.69	2.73%	103,707.54		8,635.85
Total Structures		29,269,283.16		604,400.00		740,867.00		136,467.00
<b><u>Source of Supply</u></b>								
305.2 Collecting and Impounding Reservoirs		8,188.66	2.00%	163.77	1.67%	136.55		(27.22)
306.2 Lake River and Other Intakes		1,511,320.42	2.00%	30,226.41	1.68%	25,444.86		(4,781.55)
307.2 Wells and Springs		8,036,876.80	2.86%	229,854.68	1.74%	139,541.91		(90,312.76)
309.2 Supply Mains		2,980,833.77	2.00%	59,616.68	1.30%	38,795.09		(20,821.59)
Total Source of Supply		12,537,219.65		319,861.53		203,918.40		(115,943.13)
<b><u>Pumping Equipment</u></b>								
310.2 Power Production Equipment		3,516,129.70	5.00%	175,806.49	4.25%	149,598.41		(26,208.07)
311.2 Pumping Equipment		15,229,944.12	5.00%	761,497.21	4.65%	708,277.33		(53,219.87)
311.3 Treatment Equipment		4,064,847.57	5.00%	203,242.38	4.65%	189,038.08		(14,204.30)
311.4 Transmission and Distribution Equipment		7,729,968.63	5.00%	386,498.43	4.65%	359,486.65		(27,011.78)
Total Pumping Equipment		30,540,890.02		1,527,044.50		1,406,400.47		(120,644.03)
<b><u>Treatment Plant</u></b>								
320.3 Water Treatment Equipment		28,442,746.83	5.00%	1,422,137.34	2.62%	746,150.78		(675,986.56)
320.3 Treatment Membranes		1,345,882.90	14.28%	192,192.08	12.50%	3,467.21	(1)	(188,724.87)
Total Treatment Plant		29,788,629.73		1,614,329.42		749,617.99		(864,711.43)
<b><u>Transmission and Distribution Plant</u></b>								
330.4 Distribution Reservoirs and Standpipes		13,374,408.13	2.00%	267,488.16	2.13%	284,815.26		17,327.10
331.4 Transmission and Distribution Mains		210,333,829.95	2.00%	4,206,676.60	2.02%	4,251,433.42		44,756.82
333.4 Services		88,246,138.24	2.50%	2,206,153.46	2.96%	2,608,178.90		402,025.44
334.4 Meters and Meter Installations		16,830,162.49	2.50%	420,754.06	5.36%	902,570.83		481,816.77
335.4 Hydrants		10,041,714.63	2.50%	251,042.87	2.47%	247,661.49		(3,381.38)
Total Transmission and Distribution		338,826,253.44		7,352,115.15		8,294,659.89		942,544.75
<b><u>General Plant Depreciated</u></b>								
341.5 Transportation Equipment		36,773.36	11.49%	4,225.26	9.49%	3,490.97		(734.29)
345.5 Power Operated Equipment		81,574.03	14.50%	11,828.23	8.78%	7,161.73		(4,666.50)
Total General		118,347.39		16,053.49		10,652.71		(5,400.79)



Suez Water Idaho

Comparison Of Current and Proposed Depreciation Rates  
Using Average Life Group Depreciation  
As of December 31, 2019

Account (a)	Description (b)	Plant Balance (c)	Existing Accrual Rate (d)	Accrual \$ at Existing Rates (e) = (c) * (d)	Proposed Accrual Rate (f)	Accrual at Proposed Rates (g)=(c) * (f)	Difference In Expense \$ (h) = (g)-(e)
<b>General Plant Amortized After Retirement Fully Accrued Assets</b>							
340.5	Software- Lighthouse	5,225,078.90	10.00%	522,507.89	10.00%	522,507.89	0.00
340.5	Computer Hardware	98,156.44	20.00%	19,631.29	20.00%	19,631.29	0.00
340.5	Computer Software	1,264,462.97	20.00%	252,892.59	20.00%	252,892.59	0.00
340.5	Office Furniture and Fixtures	1,298,289.58	6.67%	86,595.91	6.67%	86,552.64	(43.28)
342.5	Stores Equipment	4,459.01	6.67%	297.42	4.76%	212.33	(85.08)
343.5	Tools, Shop and Garage Equipment	1,051,355.44	6.67%	70,125.41	5.88%	61,844.44	(8,280.97)
344.5	Laboratory Equipment	85,936.10	6.67%	5,731.94	10.00%	8,593.61	2,861.67
346.5	Communication Equipment	3,937,640.83	6.67%	262,640.64	5.53%	217,606.47	(45,034.18)
347.5	Miscellaneous Equipment	119,453.63	6.67%	7,967.56	6.67%	7,963.58	(3.98)
348.5	Master Plan	1,796,959.98	10.00%	179,696.00	10.00%	179,696.00	0.00
348.5	Other Tangible Plant	0.00	2.00%	0.00	2.00%	0.00	0.00
		14,881,792.88		1,408,086.65		1,357,500.83	(50,585.81)
Amortization for Reserve Balance difference							
	10 Year Period					90,982.80	90,982.80
Fully Accrued Amortized Asset							
		5,470,902.18					
	Total Depreciated	461,433,318.45		12,841,890.74		12,854,600.09	12,709.35
<b>Non Depreciable Property</b>							
301.1	Organization	103,737.92					
302.1	Franchises and Consents	41,181.68					
303.2	Land Source of Supply Pumping	9,897,341.43					
303.3	Land Purification	0.00					
304.4	Land Transmission and Distribution	889,033.64					
303.5	Land General Plant	1,086,818.19					
	303.5 303.5 Land/Land Rights-Gen Plt	213,382.87					
	Total Suez Idaho	473,664,814.18		12,841,890.74		12,854,600.09	12,709.35
	GL Total	473,664,814.18					
	Difference						0.00

Note (1) : With reallocation account is almost fully accrued. The study proposes to accrue the net book value shown above and apply the proposed rate to new additions only

**APPENDIX C**  
**Comparison of Life and Net Salvage Parameters**

**SUEZ WATER IDAHO**  
**COMPARISON OF CURRENT AND PROPOSED DEPRECIATION PARAMETERS**  
**AT DECEMBER 31, 2019**

Acct	Description	Current		Proposed	
		Life	Net Salvage	Life	Curve Net Salvage
<b><u>Non Depreciable</u></b>					
301.10	Organizaton	NA	NA	NA	NA
302.10	Franchises and Consents	NA	NA	NA	NA
303.20	Land Source of Supply Pumping	NA	NA	NA	NA
303.30	Land Purification	NA	NA	NA	NA
304.40	Land Transmission and Distribution	NA	NA	NA	NA
303.50	Land General Plant	NA	NA	NA	NA
<b><u>Structures and Improvements</u></b>					
304.2	Pumping	50	0%	43	R1 -10%
304.3	Treatment	50	0%	48	R2 -10%
304.4	Transmission and Distribution	50	0%	39	R3 -10%
304.5	Offices	40	0%	42	R2 -10%
<b><u>Source of Supply</u></b>					
305.2	Collecting and Impounding Reservoirs	50	0%	50	R2 0%
306.2	Lake River and Other Intakes	50	0%	50	R2 0%
307.2	Wells and Springs	35	0%	50	R1 -10%
308.2	Infiltration Galleries and Tunnels	50	0%	NA	NA
309.2	Supply Mains	50	0%	70	R2.5 0%



**SUEZ WATER IDAHO**  
**COMPARISON OF CURRENT AND PROPOSED DEPRECIATION PARAMETERS**  
**AT DECEMBER 31, 2019**

Acct	Description	Current		Proposed		
		Life	Net Salvage	Life	Curve	Net Salvage
<b><u>Pumping Equipment</u></b>						
310.2	Power Production Equipment	20	0%	19	R3	0%
311.2	Pumping Equipment	20	0%	20	R1	-15%
311.3	Treatment Equipment	20	0%	20	R1	-15%
311.4	Transmission and Distribution Equipme	20	0%	20	R1	-15%
<b><u>Treatment Plant</u></b>						
320.3	Water Treatment Equipment	20	0%	25	R2	-10%
320.3	Treatment Membranes	7	0%	8	S6	0%
<b><u>Transmission aond Distribution Plant</u></b>						
330.4	Distribution Reservoirs and Standpipes	50	0%	50	R2	-5%
331.4	Transmission and Distribution Mains	50	0%	65	R2.5	-30%
333.4	Services	40	0%	60	R2.5	-75%
334.4	Meters and Meter Installations	40	0%	19	R1	0%
335.4	Hydrants	40	0%	40	R4	0%
<b><u>General Plant Depreciated</u></b>						
341.5		8.70	Unknown	15	L2	5%
345.5		6.90	Unknown	18	L5	5%

**SUEZ WATER IDAHO**  
**COMPARISON OF CURRENT AND PROPOSED DEPRECIATION PARAMETERS**  
**AT DECEMBER 31, 2019**

Acct	Description	Current		Proposed	
		Life	Net Salvage	Life	Curve Net Salvage
<b><u>General Plant Amortized</u></b>					
	340.5 Software- Lighthouse	10	0%	10	SQ 0%
	340.5 Computer Hardware	5	0%	5	SQ 0%
	340.5 Computer Software	5	0%	5	SQ 0%
	340.5 Office Furniture and Fixtures	15	0%	15	SQ 0%
	342.5 Stores Equipment	15	0%	21	SQ 0%
	343.5 Tools, Shop and Garage Equipment	15	0%	17	SQ 0%
	344.5 Laboratory Equipment	15	0%	10	SQ 0%
	346.5 Communication Equipment	15	0%	19	SQ -5%
	347.5 Miscellaneous Equipment	15	0%	15	SQ 0%
	348.5 Master Plan	10	0%	10	SQ 0%
	348.5 Other Tangible Plant	50	0%	50	SQ 0%

**APPENDIX D**  
**Net Salvage**



**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Activity	Year	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
301	Organization	2004	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
301		2005	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
301		2006	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
301		2007	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
301		2008	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
301		2009	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
301		2010	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
301		2011	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
301		2012	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
301		2013	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
301		2014	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
301		2015	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
301		2016	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
301		2017	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
301		2018	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
301		2019	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Activity	Year	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
302	Franchises and Contents	2004	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
302		2005	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
302		2006	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
302		2007	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
302		2008	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
302		2009	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
302		2010	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
302		2011	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
302		2012	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
302		2013	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
302		2014	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
302		2015	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
302		2016	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
302		2017	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
302		2018	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
302		2019	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
Land, Land Rights & Water Rights			78,171.00													
303	2004		0.00	0.00	0.00	0.00	0.00%									
303	2005		0.00	0.00	0.00	0.00	0.00%									
303	2006		937.00	0.00	0.00	0.00	0.00%									
303	2007		0.00	0.00	0.00	0.00	0.00%									
303	2008		0.00	0.00	0.00	0.00	0.00%									
303	2009		0.00	0.00	0.00	0.00	0.00%									
303	2010		0.00	0.00	0.00	0.00	0.00%									
303	2011		8,323.00	0.00	0.00	0.00	0.00%									
303	2012		0.00	0.00	0.00	0.00	0.00%									
303	2013		0.00	0.00	0.00	0.00	0.00%									
303	2014		39,626.00	0.00	0.00	0.00	0.00%									
303	2015		955.00	0.00	0.00	0.00	0.00%									
303	2016		0.00	0.00	0.00	0.00	0.00%									
303	2017		0.00	0.00	0.00	0.00	0.00%									
303	2018		4,000.00	0.00	0.00	0.00	0.00%									
303	2019		0.00	0.00	2,058.11	(2,058.11)	0.00%	-51.45%	-51.45%	-51.45%	-41.54%	-4.62%	-4.62%	-4.62%	-3.89%	-3.89%



**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
304	2004	Structures and Improvements	48,114.00	0.00	0.00	0.00	0.00%	26.97%	24.83%							
304	2005		68,472.00	35,965.87	4,525.42	31,440.45	45.92%	40.05%	29.72%							
304	2006		10,022.00	0.00		0.00	0.00%	0.00%	0.00%							
304	2007		27,300.00	0.00		0.00	0.00%	-10.22%	-9.31%	20.43%						
304	2008		75,793.00	0.00	10,534.17	(10,534.17)	-13.90%	-19.10%	-15.81%	11.51%	9.10%					
304	2009		55,459.00	0.00	14,534.05	(14,534.05)	-26.21%	-53.59%	-38.92%	-34.34%	-32.92%	2.23%				
304	2010		73,772.00	(31,791.81)	22,927.59	(54,719.40)	-74.17%	-51.36%	-44.26%	-35.82%	-32.55%	-15.55%	-13.47%			
304	2011		67,432.00	200.00	17,997.58	(17,797.58)	-26.39%	-19.10%	-34.04%	-32.60%	-28.83%	-26.88%	-17.49%	-15.51%		
304	2012		104,120.00	0.00	10,995.04	(10,995.04)	-10.56%	-16.78%	-13.26%	-28.19%	-27.88%	-25.43%	-23.92%	-23.41%	-14.54%	-13.39%
304	2013		55,748.00	0.00	1,350.90	(1,350.90)	-2.42%	-7.72%	-8.48%	-12.84%	-25.73%	-25.79%	-23.92%	-22.64%	-22.21%	-14.27%
304	2014		49,941.00	0.00	5,450.00	(5,450.00)	-10.91%	-6.43%	-7.60%	-8.07%	-9.80%	-15.80%	-16.49%	-16.27%	-15.81%	-15.64%
304	2015		439,502.00	348.80	34,969.26	(34,620.46)	-7.88%	-8.19%	-9.56%	-8.88%	-9.13%	-10.68%	-16.37%	-16.99%	-16.74%	-16.28%
304	2016		33,575.00	0.00	9,949.31	(9,949.31)	-29.63%	-9.42%	-9.80%	-9.90%	-9.24%	-9.43%	-10.84%	-11.14%	-15.79%	-16.33%
304	2017		57,865.00	1,510.87	8,958.62	(7,447.75)	-12.92%	-19.07%	-15.72%	-10.42%	-10.46%	-9.86%	-9.95%	-11.14%	-15.79%	-16.33%
304	2018		119,724.00	0.00	15,763.64	(15,763.64)	-13.17%	-13.09%	-15.72%	-10.42%	-10.46%	-9.86%	-9.95%	-11.14%	-15.79%	-16.33%
304	2019		61,412.00	0.00	102,648.02	(102,648.02)	-167.15%	-65.37%	-52.70%	-49.86%	-23.94%	-23.09%	-21.68%	-20.42%	-20.83%	-24.53%

**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
305	2004	Reservoirs & Standpipes	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
305	2005		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
305	2006		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
305	2007		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
305	2008		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
305	2009		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
305	2010		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
305	2011		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
305	2012		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
305	2013		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
305	2014		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
305	2015		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
305	2016		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
305	2017		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
305	2018		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
305	2019		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
306	2004	Lake, River and Other Intakes	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
306	2005		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
306	2006		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
306	2007		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
306	2008		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
306	2009		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
306	2010		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
306	2011		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
306	2012		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
306	2013		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
306	2014		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
306	2015		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
306	2016		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
306	2017		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
306	2018		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
306	2019		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA



**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Activity Year	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
307	Wells and Springs														
307	2004	152,319.00	0.00	36,655.34	(36,655.34)	-24.06%	-35.76%	-33.76%	-33.76%	-17.50%	-13.33%	-17.37%	-5.74%	-8.27%	-8.29%
307	2005	2,500.00	0.00	18,701.67	(18,701.67)	-748.07%	-160.19%	-160.19%	-12.88%	-6.00%	-13.02%	-4.10%	-3.82%	-5.77%	-11.40%
307	2006	9,175.00	0.00	0.00	0.00	0.00%	0.00%	-4.26%	-5.06%	-2.11%	-2.09%	-3.78%	-9.70%	-8.17%	-8.14%
307	2007	0.00	0.00	0.00	0.00	NA	-4.45%	-5.27%	-6.23%	-3.42%	-3.86%	-3.86%	-8.75%	-11.47%	-10.59%
307	2008	204,206.00	0.00	9,094.26	(9,094.26)	-4.45%	-5.27%	-6.23%	-2.11%	-3.82%	-3.86%	-4.10%	-5.74%	-11.47%	-11.87%
307	2009	17,545.00	0.00	2,601.50	(2,601.50)	-14.83%	-16.00%	-1.43%	-3.64%	-3.69%	-11.01%	-3.78%	-9.70%	-8.17%	-8.14%
307	2010	19,500.00	0.00	3,324.44	(3,324.44)	-17.05%	-1.09%	-3.37%	-3.42%	-10.93%	-8.70%	-8.79%	-8.75%	-11.47%	-10.59%
307	2011	673,688.00	0.00	4,253.50	(4,253.50)	-0.63%	-2.99%	-3.37%	-3.42%	-10.93%	-8.70%	-8.79%	-8.75%	-11.47%	-10.59%
307	2012	24,032.00	0.00	16,576.46	(16,576.46)	-68.98%	-2.99%	-3.37%	-3.42%	-10.93%	-8.70%	-8.79%	-8.75%	-11.47%	-10.59%
307	2013	4,000.00	0.00	514.32	(514.32)	-12.86%	-60.97%	-3.04%	-3.42%	-10.93%	-8.70%	-8.79%	-8.75%	-11.47%	-10.59%
307	2014	74,462.00	0.00	62,284.20	(62,284.20)	-83.65%	-80.04%	-77.44%	-10.77%	-16.50%	-22.68%	-22.25%	-21.15%	-11.48%	-11.55%
307	2015	400,531.00	0.00	17,158.45	(17,158.45)	-4.28%	-16.73%	-16.69%	-19.19%	-18.98%	-20.63%	-19.58%	-21.15%	-11.48%	-11.55%
307	2016	5,500.00	0.00	0.00	0.00	0.00%	-4.23%	-16.53%	-16.50%	-18.98%	-20.63%	-22.25%	-21.15%	-11.48%	-11.55%
307	2017	133,529.00	0.00	49,097.01	(49,097.01)	-36.77%	-35.31%	-12.28%	-20.93%	-20.88%	-22.68%	-22.25%	-21.15%	-11.48%	-11.55%
307	2018	72,710.00	0.00	13,438.08	(13,438.08)	-18.48%	-30.32%	-29.53%	-13.02%	-20.67%	-22.68%	-22.25%	-21.15%	-11.48%	-11.55%
307	2019	40,426.00	0.00	676.40	(676.40)	-1.67%	-12.48%	-25.63%	-25.07%	-12.31%	-19.62%	-19.58%	-21.15%	-11.48%	-11.55%

**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
Infiltration Galleries and Tunnels																
308	2004		0.00	0.00	0.00	0.00	NA									
308	2005		0.00	0.00	0.00	0.00	NA	NA								
308	2006		0.00	0.00	0.00	0.00	NA	NA	NA							
308	2007		0.00	0.00	0.00	0.00	NA	NA	NA	NA						
308	2008		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA					
308	2009		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA				
308	2010		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA			
308	2011		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA		
308	2012		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	
308	2013		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
308	2014		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
308	2015		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
308	2016		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
308	2017		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
308	2018		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
308	2019		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
309	2004	Supply Mains	0.00	0.00	0.00	0.00	NA									
309	2005		0.00	0.00	0.00	0.00	NA									
309	2006		5,125.00	0.00	0.00	0.00	0.00%									
309	2007		0.00	0.00	0.00	0.00	NA									
309	2008		0.00	0.00	0.00	0.00	NA									
309	2009		0.00	0.00	0.00	0.00	NA									
309	2010		0.00	0.00	0.00	0.00	NA									
309	2011		0.00	0.00	0.00	0.00	NA									
309	2012		0.00	0.00	0.00	0.00	NA									
309	2013		0.00	0.00	0.00	0.00	NA									
309	2014		0.00	0.00	0.00	0.00	NA									
309	2015		0.00	0.00	0.00	0.00	NA									
309	2016		0.00	0.00	0.00	0.00	NA									
309	2017		0.00	0.00	0.00	0.00	NA									
309	2018		0.00	0.00	0.00	0.00	NA									
309	2019		0.00	0.00	0.00	0.00	NA									



**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
Power Generation Equipment																
310	2004		0.00	0.00	0.00	0.00	NA									
310	2005		0.00	0.00	0.00	0.00	NA									
310	2006		0.00	0.00	0.00	0.00	NA									
310	2007		0.00	0.00	0.00	0.00	NA									
310	2008		0.00	0.00	0.00	0.00	NA									
310	2009		24,832.00	0.00	162.50	(162.50)	-0.65%	-0.65%	-0.65%	-0.65%	-0.65%	-0.65%	-0.65%	-0.65%	-0.65%	-0.65%
310	2010		4,518.00	0.00	18,982.45	(18,982.45)	-65.23%	-65.23%	-65.23%	-65.23%	-65.23%	-65.23%	-65.23%	-65.23%	-65.23%	-65.23%
310	2011		0.00	0.00	0.00	0.00	-420.15%	-420.15%	-56.66%	-34.08%	-34.08%	-34.08%	-34.08%	-34.08%	-34.08%	-34.08%
310	2012		32,243.00	178.60	2,025.16	(1,846.56)	-5.73%	-5.73%	-3.36%	-3.12%	-3.12%	-3.12%	-3.12%	-3.12%	-3.12%	-3.12%
310	2013		22,696.00	0.00	0.00	0.00	0.00%	0.00%	-3.36%	-3.36%	-3.36%	-3.36%	-3.36%	-3.36%	-3.36%	-3.36%
310	2014		4,290.00	0.00	0.00	0.00	0.00%	0.00%	-3.12%	-3.12%	-3.12%	-3.12%	-3.12%	-3.12%	-3.12%	-3.12%
310	2015		3,052.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
310	2016		1,000.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
310	2017		131,111.00	31,070.00	1,977.70	29,092.30	22.19%	22.02%	21.52%	20.86%	17.94%	14.02%	14.02%	14.02%	14.02%	14.02%
310	2018		9,161.00	0.00	0.00	0.00	0.00%	20.74%	20.59%	20.16%	19.58%	16.98%	13.39%	13.39%	13.39%	13.39%
310	2019		100,287.00	0.00	0.00	0.00	0.00%	0.00%	12.09%	12.04%	11.89%	11.69%	10.71%	8.97%	8.97%	2.68%

**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
311	2004	Pumping Equipment	154,124.00	0.00	0.00	0.00	0.00%									
311	2005		421,424.00	29,168.35	31,058.65	(1,890.30)	-0.45%	-0.33%								
311	2006		68,032.00	0.00	8,692.06	(8,692.06)	-12.78%	-2.16%	-1.64%							
311	2007		20,675.00	0.00	2,970.49	(2,970.49)	-14.37%	-13.15%	-2.66%	-2.04%						
311	2008		204,034.00	0.00	20,789.81	(20,789.81)	-10.19%	-10.57%	-11.09%	-4.81%	-3.96%					
311	2009		138,934.00	0.00	6,407.88	(6,407.88)	-4.61%	-7.93%	-8.30%	-9.00%	-4.78%	-4.05%				
311	2010		337,683.00	(24,678.85)	39,701.75	(64,380.60)	-19.07%	-14.85%	-13.45%	-13.48%	-13.42%	-8.83%	-7.82%			
311	2011		320,830.00	121.20	26,717.31	(26,596.11)	-8.29%	-13.82%	-12.21%	-11.80%	-11.85%	-11.91%	-8.71%	-7.91%		
311	2012		210,965.00	8,458.38	78,535.72	(70,077.34)	-33.22%	-18.18%	-18.52%	-16.61%	-15.53%	-15.51%	-15.36%	-11.72%	-10.75%	
311	2013		161,399.00	3,038.90	28,467.92	(25,429.02)	-15.76%	-25.65%	-17.61%	-18.09%	-16.49%	-15.55%	-15.54%	-15.41%	-15.41%	-11.15%
311	2014		184,440.00	1,049.25	65,848.37	(64,799.12)	-35.13%	-26.09%	-28.79%	-21.30%	-20.68%	-19.03%	-17.87%	-17.83%	-17.62%	-14.12%
311	2015		233,815.00	1,899.65	19,117.64	(17,217.99)	-7.36%	-19.61%	-18.54%	-22.45%	-18.37%	-18.53%	-17.31%	-16.50%	-16.48%	-16.34%
311	2016		256,669.00	0.00	29,031.33	(29,031.33)	-11.31%	-9.43%	-16.45%	-16.32%	-19.72%	-17.04%	-17.44%	-16.48%	-15.85%	-15.84%
311	2017		464,737.00	90.30	116,241.99	(116,151.69)	-24.99%	-20.13%	-17.00%	-19.94%	-19.42%	-21.34%	-19.06%	-19.06%	-18.19%	-17.54%
311	2018		633,767.00	1,674.80	207,165.03	(205,490.23)	-32.42%	-29.28%	-25.88%	-23.15%	-24.40%	-23.68%	-24.62%	-22.49%	-22.08%	-21.25%
311	2019		183,780.00	0.00	14,651.01	(14,651.01)	-7.97%	-26.93%	-26.23%	-23.74%	-21.58%	-22.86%	-22.32%	-23.30%	-21.49%	-21.21%

**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
Purification Systems																
320	2004		9,499.00	0.00	0.00	0.00	0.00%									
320	2005		12,197.00	0.00	0.00	0.00	0.00%									
320	2006		12,400.00	0.00	0.00	0.00	0.00%									
320	2007		548,910.00	0.00	0.00	0.00	0.00%			0.00%						
320	2008		47,975.00	0.00	231.83	(231.83)	-0.48%	-0.04%	-0.04%	-0.04%	-0.04%	-0.05%	-0.08%	-0.30%	-0.27%	-2.86%
320	2009		22,768.00	0.00	70.00	(70.00)	-0.31%	-0.43%	-0.05%	-0.05%	-0.05%	-0.08%	-0.08%	-0.30%	-0.27%	-2.86%
320	2010		105,110.00	0.00	270.00	(270.00)	-0.26%	-0.27%	-0.33%	-0.08%	-0.08%	-0.08%	-0.08%	-0.30%	-0.27%	-2.86%
320	2011		161,544.00	0.00	2,164.30	(2,164.30)	-1.34%	-0.91%	-0.87%	-0.81%	-0.31%	-0.30%	-0.30%	-0.30%	-0.27%	-2.86%
320	2012		32,362.00	184.00	0.00	184.00	0.57%	-1.02%	-0.75%	-0.72%	-0.69%	-0.28%	-0.27%	-0.27%	-0.27%	-2.86%
320	2013		1,131,046.00	101.00	57,169.91	(57,068.91)	-5.05%	-4.89%	-4.46%	-4.15%	-4.09%	-3.97%	-3.91%	-2.89%	-2.87%	-2.71%
320	2014		360,206.00	678.50	6,952.82	(6,274.32)	-1.74%	-4.25%	-4.15%	-3.88%	-3.66%	-3.62%	-3.54%	-2.73%	-2.72%	-2.85%
320	2015		70,419.00	330.10	5,384.37	(5,054.27)	-7.18%	-2.63%	-4.38%	-4.28%	-4.01%	-3.80%	-3.75%	-3.67%	-3.62%	-2.84%
320	2016		67,809.00	0.00	1,436.18	(1,436.18)	-2.12%	-4.70%	-2.56%	-4.29%	-4.19%	-3.94%	-3.74%	-3.70%	-3.62%	-2.84%
320	2017		653,755.00	48.30	152,077.94	(152,029.64)	-23.25%	-21.27%	-20.02%	-14.30%	-9.72%	-9.57%	-9.04%	-8.68%	-8.61%	-8.46%
320	2018		284,592.00	36.00	15,757.23	(15,721.23)	-5.52%	-17.88%	-16.82%	-16.18%	-12.56%	-9.25%	-9.13%	-8.67%	-8.37%	-8.30%
320	2019		64,962.00	0.00	11,965.09	(11,965.09)	-18.42%	-7.92%	-17.91%	-16.91%	-16.31%	-12.82%	-9.48%	-9.36%	-8.90%	-8.59%



**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
Distribution Reservoirs and Standpipes																
330	2004		0.00	0.00	0.00	0.00	NA									
330	2005		0.00	16,652.72	23,313.53	(6,660.81)	NA									
330	2006		0.00	0.00	546.00	(546.00)	-17.06%	-225.21%	-225.21%							
330	2007		3,200.00	0.00	0.00	0.00	0.00%	-7.09%	-93.59%	-93.59%						
330	2008		4,500.00	0.00	0.00	0.00	NA	0.00%	-7.09%	-93.59%	-93.59%					
330	2009		0.00	0.00	0.00	0.00	NA	0.00%	-38.00%	-31.74%	-93.99%	-93.99%				
330	2010		3,000.00	0.00	2,850.00	(2,850.00)	-95.00%	-95.00%	-38.00%	-31.74%	-93.99%	-93.99%				
330	2011		3,750.00	(16,652.72)	5,931.00	(22,583.72)	-602.23%	-376.80%	-376.80%	-226.08%	-179.79%	-225.89%	-225.89%			
330	2012		178,234.00	0.00	51,848.73	(51,848.73)	-29.09%	-40.90%	-41.78%	-59.78%	-59.78%	-58.41%	-57.75%	-43.85%		
330	2013		7,076.00	139.50	37,676.53	(37,537.03)	-530.48%	-48.24%	-59.22%	-59.78%	-66.30%	-66.30%	-64.78%	-61.09%	-61.09%	-67.35%
330	2014		0.00	0.00	12,518.68	(12,518.68)	NA	-707.40%	-707.40%	-54.99%	-65.85%	-66.30%	-64.78%	-64.02%	-64.02%	-67.35%
330	2015		0.00	0.00	0.00	0.00	NA	0.00%	-36.64%	-121.37%	-46.43%	-55.77%	-56.29%	-56.29%	-55.19%	-54.67%
330	2016		0.00	0.00	0.00	0.00	NA	0.00%	0.00%	-36.64%	-121.37%	-46.43%	-55.77%	-56.29%	-56.29%	-55.19%
330	2017		780.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	-35.82%	-119.12%	-46.27%	-55.57%	-56.09%	-56.09%
330	2018		252,970.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	-4.35%	-16.97%	-21.53%	-26.10%	-26.53%
330	2019		513,278.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.56%	-6.19%	-10.33%	-12.57%

**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Activity	Year	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
Transmission and Distribution Mains																
331	2004		206,766.00	0.00	23,786.71	(23,786.71)	-11.50%									
331	2005		179,499.00	59,135.02	53,813.22	5,321.80	2.96%	-4.78%								
331	2006		118,321.00	0.00	15,920.82	(15,920.82)	-13.46%	-3.56%	-6.81%							
331	2007		309,155.00	0.00	21,766.97	(21,766.97)	-7.04%	-8.82%	-5.33%	-6.90%						
331	2008		193,383.00	0.00	18,565.56	(18,565.56)	-9.60%	-8.03%	-9.06%	-6.36%	-7.42%					
331	2009		168,299.00	0.00	19,786.20	(19,786.20)	-11.76%	-10.60%	-8.96%	-9.64%	-7.30%	-8.04%				
331	2010		106,995.00	(51,807.91)	19,992.73	(71,800.64)	-67.11%	-33.27%	-23.50%	-16.96%	-16.50%	-13.25%	-12.97%			
331	2011		377,293.00	730.01	46,209.20	(45,479.19)	-12.05%	-24.22%	-21.00%	-18.40%	-15.36%	-15.18%	-12.94%	-12.76%		
331	2012		286,296.00	18,328.72	76,503.48	(58,174.76)	-20.32%	-15.62%	-22.77%	-20.80%	-18.88%	-16.34%	-16.12%	-14.15%	-13.87%	-16.51%
331	2013		129,874.00	249.60	72,961.12	(72,711.52)	-55.99%	-31.45%	-22.23%	-27.56%	-25.07%	-22.70%	-19.62%	-19.19%	-17.06%	-17.83%
331	2014		157,285.00	0.00	42,389.70	(42,389.70)	-26.95%	-40.08%	-30.22%	-23.01%	-27.47%	-25.31%	-23.17%	-20.29%	-19.85%	-18.67%
331	2015		294,313.00	0.00	33,125.13	(33,125.13)	-11.26%	-16.72%	-25.49%	-23.79%	-20.23%	-23.94%	-22.59%	-21.13%	-18.97%	-18.32%
331	2016		166,175.00	0.00	17,185.67	(17,185.67)	-10.34%	-10.93%	-15.01%	-22.12%	-21.62%	-19.07%	-22.45%	-21.38%	-20.17%	-18.32%
331	2017		247,220.00	0.00	112,510.97	(112,510.97)	-45.51%	-31.37%	-23.01%	-23.72%	-27.94%	-26.23%	-23.01%	-25.68%	-24.47%	-23.12%
331	2018		188,230.00	0.00	95,941.59	(95,941.59)	-50.97%	-47.87%	-37.50%	-28.88%	-28.59%	-31.60%	-29.40%	-25.86%	-28.12%	-26.82%
331	2019		190,514.00	0.00	198,837.80	(198,837.80)	-104.37%	-77.83%	-65.07%	-53.59%	-42.12%	-40.20%	-41.69%	-38.01%	-33.20%	-34.89%

**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
333	2004	Services	45,380.00	993.86	27,172.39	(26,178.53)	-57.69%									
333	2005		157,545.00	23,628.75	26,616.02	(2,987.27)	-1.90%	-14.37%								
333	2006		41,186.00	0.00	38,344.75	(38,344.75)	-93.10%	-20.80%	-27.66%							
333	2007		223,309.00	0.00	61,215.54	(61,215.54)	-27.41%	-37.64%	-24.30%	-27.54%						
333	2008		142,368.00	0.00	60,921.04	(60,921.04)	-42.79%	-33.40%	-39.44%	-28.96%	-31.10%					
333	2009		115,895.00	0.00	42,825.05	(42,825.05)	-36.95%	-40.17%	-34.25%	-38.89%	-30.32%	-32.03%				
333	2010		77,369.00	(25,124.96)	44,805.72	(69,930.68)	-90.39%	-58.34%	-51.75%	-42.02%	-45.53%	-36.46%	-37.66%			
333	2011		148,140.00	9,765.09	36,294.98	(26,529.89)	-17.91%	-42.77%	-40.80%	-41.38%	-36.97%	-40.06%	-33.42%	-34.58%		
333	2012		74,518.00	9,122.01	28,444.45	(19,322.44)	-25.93%	-20.59%	-38.59%	-38.13%	-39.32%	-35.92%	-38.78%	-32.85%	-33.95%	
333	2013		0.00	3,522.34	37,048.30	(33,525.96)	NA	-70.92%	-35.65%	-49.77%	-46.19%	-45.33%	-40.21%	-42.86%	-36.27%	-37.22%
333	2014		236,283.00	4,449.11	21,869.89	(17,420.78)	-7.37%	-21.56%	-22.61%	-21.09%	-31.09%	-32.13%	-34.04%	-32.59%	-34.94%	-30.66%
333	2015		80,693.00	1,613.85	31,228.47	(29,614.62)	-36.70%	-14.84%	-25.42%	-25.51%	-23.43%	-31.82%	-32.63%	-34.29%	-32.89%	-35.06%
333	2016		38,683.00	0.00	3,013.77	(3,013.77)	-7.79%	-27.33%	-14.07%	-23.50%	-23.92%	-22.38%	-30.40%	-31.39%	-33.16%	-32.03%
333	2017		47,889.00	6,966.19	459,882.82	(452,916.63)	-945.76%	-526.65%	-290.28%	-124.64%	-132.94%	-116.26%	-93.00%	-92.71%	-84.82%	-78.60%
333	2018		1,906.00	0.00	199,033.95	(199,033.95)	-10442.49%	-1309.27%	-740.26%	-404.67%	-173.14%	-181.41%	-157.27%	-124.40%	-120.67%	-108.86%
333	2019		0.00	0.00	0.00	0.00	NA	-10442.49%	-1309.27%	-740.26%	-404.67%	-173.14%	-181.41%	-157.27%	-124.40%	-120.67%



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Acct	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
334	2004	26,179.00	5,960.87	0.00	5,960.87	22.77%									
334	2005	42,182.00	5,102.08	(1,903.02)	7,005.10	16.61%	18.97%								
334	2006	179,501.00	0.00	179.06	(179.06)	-0.10%	3.08%	5.16%							
334	2007	293,601.00	0.00	0.00	0.00	0.00%	-0.04%	1.32%	2.36%						
334	2008	429,529.00	0.00	43.20	(43.20)	-0.01%	-0.01%	-0.02%	0.72%	1.31%					
334	2009	251,526.00	0.00	0.00	0.00	0.00%	-0.01%	0.00%	-0.02%	0.57%	1.04%				
334	2010	70,439.00	0.00	(577.28)	117,393.71	166.66%	36.46%	15.62%	11.23%	9.57%	9.80%	10.07%			
334	2011	84,326.00	13,086.45	163.37	12,923.08	15.33%	84.20%	32.07%	15.59%	11.53%	9.94%	10.15%	10.39%		
334	2012	92,366.00	17,117.20	108.60	17,008.60	18.41%	16.94%	59.61%	29.54%	15.87%	12.05%	10.50%	10.68%	10.89%	13.30%
334	2013	0.00	35,380.80	0.00	35,380.80	NA	56.72%	36.96%	73.93%	36.64%	19.68%	14.95%	13.02%	13.13%	10.64%
334	2014	705,308.00	50,188.41	11,105.74	39,082.67	5.54%	10.56%	11.47%	11.84%	23.29%	18.42%	13.57%	11.51%	10.52%	8.92%
334	2015	499,290.00	10,871.86	(74.47)	10,946.33	2.19%	4.15%	7.09%	7.90%	8.35%	16.03%	13.66%	10.91%	9.59%	8.34%
334	2016	362,650.00	0.00	0.00	0.00	0.00%	1.27%	3.19%	5.45%	6.17%	6.61%	12.83%	11.27%	9.32%	8.34%
334	2017	1,563,616.00	15,620.93	130,139.08	(114,518.15)	-7.32%	-5.95%	-4.27%	-2.06%	-0.93%	-0.38%	0.02%	3.50%	3.26%	2.91%
334	2018	455,316.00	14,617.00	71,146.24	(56,529.24)	-12.42%	-8.47%	-7.18%	-5.56%	-3.37%	-2.39%	-1.87%	-1.48%	-1.61%	1.51%
334	2019	148,349.00	5,617.45	21,332.00	(15,714.55)	-10.59%	-11.97%	-8.62%	-7.38%	-5.80%	-3.66%	-2.71%	-2.20%	-1.83%	1.15%

**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2- yr Net Salv. %	3- yr Net Salv. %	4- yr Net Salv. %	5- yr Net Salv. %	6- yr Net Salv. %	7- yr Net Salv. %	8- yr Net Salv. %	9- yr Net Salv. %	10- yr Net Salv. %
Hydrants																
335	2004		10,763.00	0.00	0.00	0.00	0.00%									
335	2005		0.00	0.00	0.00	0.00	NA	0.00%								
335	2006		0.00	0.00	0.00	0.00	NA									
335	2007		0.00	0.00	0.00	0.00	NA		0.00%							
335	2008		0.00	0.00	0.00	0.00	NA		NA							
335	2009		0.00	0.00	0.00	0.00	NA		NA		0.00%					
335	2010		0.00	0.00	0.00	0.00	NA		NA		NA					
335	2011		0.00	0.00	0.00	0.00	NA		NA		NA					
335	2012		0.00	0.00	0.00	0.00	NA		NA		NA		0.00%			
335	2013		0.00	0.00	0.00	0.00	NA		NA		NA		NA	0.00%		
335	2014		0.00	0.00	0.00	0.00	NA		NA		NA		NA	NA	NA	
335	2015		0.00	0.00	1,285.00	(1,285.00)	NA		NA		NA		NA	NA	NA	0.00%
335	2016		0.00	0.00	1,285.00	(1,285.00)	NA		NA		NA		NA	NA	NA	NA
335	2017		0.00	0.00	341.12	(341.12)	NA		NA		NA		NA	NA	NA	NA
335	2018		0.00	0.00	0.00	0.00	NA		NA		NA		NA	NA	NA	NA
335	2019		0.00	0.00	0.00	0.00	NA		NA		NA		NA	NA	NA	NA

**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Activity	Year	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
340	Office Furniture and Equipment	2004	0.00	0.00	0.00	0.00	NA									
340		2005	209,024.00	0.00	(1,000.00)	1,000.00	0.48%	0.48%	0.47%							
340		2006	2,800.00	0.00	0.00	0.00	0.00%	0.47%	0.02%	0.02%						
340		2007	1,554,783.00	0.00	613.00	(613.00)	-0.04%	-0.04%	-0.04%	0.02%	0.02%					
340		2008	43,887.00	0.00	0.00	0.00	0.00%	-0.04%	-0.04%	-0.04%	0.02%	0.02%				
340		2009	122,227.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.10%	0.10%	0.02%	0.14%			
340		2010	18,337.00	0.00	0.00	0.00	13.29%	1.73%	1.32%	0.10%	0.02%	0.02%	0.04%	0.04%		
340		2011	5,018,345.00	0.00	3,188.67	2,437.33	-0.01%	-0.02%	0.04%	0.04%	0.02%	0.01%	0.01%	0.02%	0.02%	
340		2012	26,930.00	50.00	866.26	(358.65)	-3.03%	-0.02%	0.03%	0.03%	0.08%	0.08%	0.05%	0.05%	0.06%	0.06%
340		2013	241,597.00	2,984.00	0.00	2,984.00	1.24%	0.81%	0.71%	0.03%	0.08%	0.08%	0.07%	0.05%	0.05%	0.06%
340		2014	18,439.00	21.19	161.13	(139.94)	-0.76%	1.09%	0.09%	0.06%	0.02%	0.05%	0.05%	0.05%	0.03%	0.03%
340		2015	2,993,441.00	0.00	0.00	0.00	0.00%	0.00%	0.09%	0.06%	0.02%	0.02%	0.02%	0.05%	0.05%	0.03%
340		2016	23,565.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.09%	0.06%	0.02%	0.05%	0.05%	0.05%	0.03%
340		2017	31,966.00	0.00	3,476.97	(3,476.97)	-10.88%	-6.26%	-0.11%	-0.12%	-0.02%	-0.04%	-0.02%	-0.01%	-0.01%	-0.01%
340		2018	155,017.00	0.00	12,018.98	(12,018.98)	-7.75%	-8.29%	-7.36%	-0.48%	-0.49%	-0.37%	-0.39%	-0.16%	-0.13%	-0.13%
340		2019	85,489.00	50.00	0.00	50.00	0.06%	-4.98%	-5.67%	-5.22%	-0.47%	-0.47%	-0.36%	-0.38%	-0.16%	-0.13%



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Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
341	2004	Transportation Equipment	0.00	0.00	0.00	0.00	NA									
341	2005		0.00	0.00	0.00	0.00	NA									
341	2006		39,362.00	0.00	0.00	0.00	0.00%	0.00%	0.00%							
341	2007		55,058.00	0.00	0.00	0.00	0.00%	0.00%	0.00%							
341	2008		0.00	0.00	0.00	0.00	NA	0.00%	0.00%							
341	2009		0.00	0.00	0.00	0.00	NA	0.00%	0.00%							
341	2010		0.00	7,834.00	0.00	7,834.00	NA	NA	NA	14.23%	8.30%	0.00%	8.30%			
341	2011		4,163.00	0.00	0.00	0.00	0.00%	188.18%	188.18%	174.57%	174.57%	12.27%	7.95%	7.95%		
341	2012		0.00	0.00	566.62	(566.62)	NA	-13.61%	174.57%	174.57%	174.57%	12.27%	7.37%	7.37%	7.37%	
341	2013		0.00	0.00	0.00	0.00	NA	NA	-13.61%	174.57%	174.57%	174.57%	12.27%	7.37%	7.37%	7.37%
341	2014		0.00	0.00	0.00	0.00	NA	0.00%	0.00%	-13.61%	-9.61%	123.30%	123.30%	123.30%	11.92%	7.24%
341	2015		1,731.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	-32.73%	-9.61%	123.30%	123.30%	123.30%	123.30%	11.92%
341	2016		0.00	0.00	0.00	0.00	NA	0.00%	0.00%	0.00%	-32.73%	-9.61%	-9.61%	123.30%	123.30%	123.30%
341	2017		0.00	0.00	0.00	0.00	NA	NA	0.00%	0.00%	0.00%	0.00%	-32.73%	-9.61%	123.30%	123.30%
341	2018		0.00	0.00	0.00	0.00	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	-9.61%	123.30%	123.30%
341	2019		0.00	0.00	0.00	0.00	NA	NA	NA	NA	0.00%	0.00%	0.00%	-32.73%	-9.61%	123.30%

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**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
Stores Equipment																
342	2004		0.00	0.00	0.00	0.00	NA	NA								
342	2005		0.00	0.00	0.00	0.00	NA	NA								
342	2006		0.00	0.00	0.00	0.00	NA	NA	NA							
342	2007		0.00	0.00	0.00	0.00	NA	NA	NA	NA						
342	2008		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA					
342	2009		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA				
342	2010		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA			
342	2011		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA		
342	2012		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	
342	2013		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
342	2014		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
342	2015		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
342	2016		0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
342	2017		9,273.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
342	2018		0.00	0.00	0.00	0.00	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
342	2019		0.00	0.00	0.00	0.00	NA	NA								

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Acct	Year	Activity	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
343	2004	Tool, Shop and Garage Equipment	0.00	0.00	0.00	0.00%									
343	2005	7,877.00	0.00	0.00	0.00	0.00%	0.00%								
343	2006	46,062.00	0.00	0.00	0.00	0.00%	0.00%	0.00%							
343	2007	0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%						
343	2008	2,445.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%					
343	2009	12,665.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
343	2010	2,417.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
343	2011	59,883.00	10,550.00	0.00	10,550.00	17.62%	16.93%	14.07%	13.63%	13.63%	13.63%	13.63%	8.03%		
343	2012	41,118.00	6,000.00	0.00	6,000.00	14.59%	16.39%	16.00%	14.26%	13.96%	13.96%	13.96%	10.06%		
343	2013	11,123.00	0.00	0.00	0.00	0.00%	11.49%	14.76%	14.45%	13.01%	12.77%	12.77%	9.60%		
343	2014	23,381.00	0.00	0.00	0.00	0.00%	0.00%	7.93%	12.21%	12.00%	10.99%	10.81%	9.42%		
343	2015	5,643.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	7.38%	11.73%	11.53%	10.59%	10.43%		
343	2016	112,488.00	0.00	660.00	(660.00)	-0.59%	-0.56%	-0.47%	-0.43%	2.76%	6.26%	6.21%	5.91%		
343	2017	44,494.00	0.00	0.00	0.00	0.00%	-0.42%	-0.41%	-0.35%	-0.33%	2.24%	5.33%	5.29%		
343	2018	20,023.00	3,773.62	2,105.65	1,667.97	8.33%	2.59%	0.57%	0.55%	0.49%	0.46%	2.71%	5.52%		
343	2019	5,615.00	822.38	0.00	822.38	14.65%	9.71%	3.55%	1.00%	0.97%	0.86%	0.82%	2.97%		
343		0.00	0.00	190.44	(190.44)	NA	11.25%	8.97%	3.28%	0.90%	0.87%	0.77%	0.74%		



**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
Laboratory Equipment																
344	2004		0.00	0.00	0.00	0.00	NA									
344	2005		0.00	0.00	0.00	0.00	NA									
344	2006		0.00	0.00	0.00	0.00	NA									
344	2007		0.00	0.00	0.00	0.00	NA									
344	2008		0.00	0.00	0.00	0.00	NA									
344	2009		0.00	0.00	0.00	0.00	NA									
344	2010		0.00	0.00	0.00	0.00	NA									
344	2011		2,471.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
344	2012		6,926.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
344	2013		0.00	0.00	0.00	0.00	NA									
344	2014		0.00	0.00	0.00	0.00	NA									
344	2015		5,181.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
344	2016		3,242.53	0.00	1,408.09	(1,408.09)	-43.43%	-16.72%	-16.72%	-16.72%	-9.17%	-7.90%	-7.90%	-7.90%	-7.90%	-7.90%
344	2017		5,998.00	0.00	422.42	(422.42)	-7.04%	-19.81%	-12.69%	-12.69%	-12.69%	-8.57%	-7.69%	-7.69%	-7.69%	-7.69%
344	2018		3,966.00	0.00	348.20	(348.20)	-8.78%	-7.73%	-16.50%	-11.85%	-11.85%	-11.85%	-8.61%	-7.84%	-7.84%	-7.84%
344	2019		18,160.00	0.00	0.00	0.00	0.00%	-1.57%	-2.74%	-6.95%	-5.96%	-5.96%	-5.96%	-5.01%	-4.74%	-4.74%

**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
345	2004	Power Operated Equipment	0.00	0.00	0.00	0.00	NA	NA								
345	2005		0.00	0.00	0.00	0.00	NA	NA								
345	2006		0.00	0.00	0.00	0.00	NA	NA								
345	2007		0.00	0.00	0.00	0.00	NA	NA								
345	2008		26,515.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%					
345	2009		0.00	0.00	0.00	0.00	NA	0.00%	0.00%	0.00%	0.00%					
345	2010		3,553.00	3,050.00	0.00	3,050.00	85.84%	85.84%	10.14%	10.14%	10.14%	10.14%	10.14%			
345	2011		0.00	0.00	0.00	0.00	NA	85.84%	85.84%	85.84%	10.14%	10.14%	10.14%	10.14%		
345	2012		0.00	0.00	0.00	0.00	NA	NA	NA	85.84%	10.14%	10.14%	10.14%	10.14%	10.14%	10.14%
345	2013		0.00	0.00	0.00	0.00	NA	NA	NA	85.84%	10.14%	10.14%	10.14%	10.14%	10.14%	10.14%
345	2014		0.00	0.00	0.00	0.00	NA	NA	NA	85.84%	10.14%	10.14%	10.14%	10.14%	10.14%	10.14%
345	2015		45,023.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	6.28%	6.28%	4.06%	4.06%	4.06%
345	2016		0.00	0.00	0.00	0.00	NA	0.00%	0.00%	0.00%	0.00%	0.00%	6.28%	6.28%	4.06%	4.06%
345	2017		0.00	0.00	255.00	(255.00)	NA	NA	-0.57%	-0.57%	-0.57%	-0.57%	-0.57%	5.75%	5.75%	3.72%
345	2018		955.00	0.00	0.00	0.00	0.00%	-26.70%	-26.70%	-0.55%	-0.55%	-0.55%	-0.55%	-0.55%	5.64%	5.64%
345	2019		0.00	0.00	0.00	0.00	NA	0.00%	-26.70%	-26.70%	-0.55%	-0.55%	-0.55%	-0.55%	-0.55%	5.64%

**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Activity	Year	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
346	Communication Equipment	2004	7,518.00	0.00	0.00	0.00	0.00%									
346		2005	6,500.00	0.00	0.00	0.00	0.00%	0.00%								
346		2006	9,000.00	0.00	0.00	0.00	0.00%	0.00%								
346		2007	3,084.00	0.00	0.00	0.00	0.00%	0.00%								
346		2008	20,380.00	0.00	1,035.72	(1,035.72)	-5.08%	-4.41%	-3.19%	-2.66%	-2.23%					
346		2009	4,030.00	0.00	0.00	0.00	0.00%	-4.24%	-3.77%	-2.84%	-2.41%	-2.05%				
346		2010	2,190.00	0.00	83.85	(83.85)	-3.83%	-1.35%	-4.21%	-3.77%	-2.89%	-2.48%	-2.12%			
346		2011	93,844.00	0.00	388.83	(388.83)	-0.41%	-0.49%	-0.47%	-1.25%	-1.22%	-1.14%	-1.08%	-1.03%		
346		2012	86,096.00	0.00	629.69	(629.69)	-0.73%	-0.57%	-0.61%	-0.59%	-1.04%	-1.02%	-0.98%	-0.95%	-0.92%	-0.73%
346		2013	82,663.00	0.00	156.56	(156.56)	-0.19%	-0.47%	-0.45%	-0.48%	-0.47%	-0.79%	-0.79%	-0.76%	-0.75%	-1.72%
346		2014	68,093.00	0.00	4,158.32	(4,158.32)	-6.11%	-2.86%	-2.09%	-1.61%	-1.63%	-1.61%	-1.81%	-1.79%	-1.75%	-1.26%
346		2015	202,346.00	0.00	740.01	(740.01)	-0.37%	-1.81%	-1.43%	-1.29%	-1.14%	-1.15%	-1.14%	-1.29%	-1.28%	-1.38%
346		2016	15,256.00	0.00	799.27	(799.27)	-5.24%	-0.71%	-1.99%	-1.59%	-1.43%	-1.25%	-1.26%	-1.25%	-1.39%	-5.37%
346		2017	91,334.00	416.07	28,182.57	(27,766.50)	-30.40%	-26.80%	-9.49%	-8.88%	-7.31%	-6.28%	-5.42%	-5.41%	-5.38%	-8.51%
346		2018	101,916.00	0.00	28,876.95	(28,876.95)	-28.33%	-29.31%	-27.55%	-14.16%	-13.02%	-11.13%	-9.75%	-8.57%	-8.55%	-8.51%
346		2019	17,576.00	0.00	253.91	(253.91)	-1.44%	-24.38%	-26.99%	-25.52%	-13.64%	-12.61%	-10.83%	-9.53%	-8.40%	-8.39%



Activity	Acct	Year	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2- yr		3- yr		4- yr		5- yr		6- yr		7- yr		8- yr		9- yr		10- yr	
								Net Salv. %	Salv. %	Net Salv. %	Salv. %	Net Salv. %	Salv. %	Net Salv. %	Salv. %	Net Salv. %	Salv. %	Net Salv. %	Salv. %	Net Salv. %	Salv. %	Net Salv. %	Salv. %	Net Salv. %	Salv. %
Miscellaneous Equipment																									
	347	2004	0.00	0.00	0.00	0.00	NA																		
	347	2005	6,000.00	0.00	0.00	0.00	0.00%		0.00%																
	347	2006	0.00	0.00	0.00	0.00	NA		0.00%																
	347	2007	31,000.00	0.00	0.00	0.00	0.00%		0.00%	0.00%															
	347	2008	10,500.00	0.00	0.00	0.00	0.00%		0.00%	0.00%															
	347	2009	0.00	0.00	0.00	0.00	NA		0.00%																
	347	2010	0.00	0.00	0.00	0.00	NA		0.00%																
	347	2011	239,713.00	0.00	0.00	0.00	0.00%		0.00%	0.00%															
	347	2012	0.00	0.00	0.00	0.00	NA		0.00%																
	347	2013	0.00	0.00	0.00	0.00	NA		0.00%	0.00%															
	347	2014	0.00	0.00	0.00	0.00	NA		NA	0.00%															
	347	2015	0.00	0.00	0.00	0.00	NA		NA	NA															
	347	2016	0.00	0.00	0.00	0.00	NA		NA	NA															
	347	2017	0.00	0.00	0.00	0.00	NA		NA	NA															
	347	2018	0.00	0.00	2,341.13	0.00	NA		NA	NA															
	347	2019	0.00	0.00	0.00	(2,341.13)	NA		NA	NA															
	347	2020	0.00	0.00	0.00	0.00	NA		NA	NA															
	347	2021	0.00	0.00	0.00	0.00	NA		NA	NA															
	347	2022	0.00	0.00	0.00	0.00	NA		NA	NA															
	347	2023	0.00	0.00	0.00	0.00	NA		NA	NA															
	347	2024	0.00	0.00	0.00	0.00	NA		NA	NA															
	347	2025	0.00	0.00	0.00	0.00	NA		NA	NA															
	347	2026	0.00	0.00	0.00	0.00	NA		NA	NA															
	347	2027	0.00	0.00	0.00	0.00	NA		NA	NA															
	347	2028	0.00	0.00	0.00	0.00	NA		NA	NA															
	347	2029	0.00	0.00	0.00	0.00	NA</																		

**SUEZ WATER IDAHO**  
**NET SALVAGE HISTORY 2004-2019**

Acct	Year	Activity	Retirement	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
348	2004	Other Tangible Property	0.00	0.00	0.00	0.00	NA									
348	2005		0.00	0.00	0.00	0.00	NA									
348	2006		0.00	0.00	0.00	0.00	NA	NA								
348	2007		0.00	0.00	0.00	0.00	NA	NA	NA							
348	2008		0.00	0.00	0.00	0.00	NA	NA	NA	NA						
348	2009		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA					
348	2010		0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA				
348	2011		253,281.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
348	2012		0.00	0.00	0.00	0.00	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
348	2013		0.00	0.00	0.00	0.00	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
348	2014		515,468.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
348	2015		30,898.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
348	2016		0.00	0.00	0.00	0.00	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
348	2017		0.00	0.00	0.00	0.00	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
348	2018		0.00	0.00	0.00	0.00	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
348	2019		0.00	0.00	0.00	0.00	NA	NA	NA	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

**APPENDIX E**  
**Comparison of Book and Reallocated Depreciation Reserve**



**Suez Water Idaho**

**Comparison of Book, Allocated and Theoretical Reserve  
Using Average Life Group Depreciation  
As of December 31, 2019**

<b>Account Description</b>	<b>Plant Balance (c)</b>	<b>Book Reserve (d)</b>	<b>Note</b>	<b>Reallocated Reserve (e)</b>	<b>Theoretical Reserve (f)</b>
<b>Non Depreciable</b>					
301.10 Organization	103,737.92		(810.00) (1)	0.00	0.00
302.10 Franchises and Consents	41,181.68		11,357.36 (1)	0.00	0.00
	9,897,341.43				
303.20 Land Source of Supply Pumping	0.00		(45,702.84) (1)	0.00	0.00
303.30 Land Purification	889,033.64		(1)	0.00	0.00
304.40 Land Transmission and Distribution	1,086,818.19		(7,252.47) (1)	0.00	0.00
303.50 Land General Plant	213,382.87				
<b>Total Non Depreciable</b>	<b>12,231,495.73</b>	<b>(42,407.95)</b>		<b>0.00</b>	<b>0.00</b>
<b>Structures and Improvements</b>					
304.20 Pumping	6,781,076.69	1,548,191.31		1,768,524.07	1,909,178.96
304.30 Treatment	15,687,412.85	5,662,070.02		5,301,965.76	5,723,643.61
304.40 Transmission and Distribution	2,997,926.12	530,714.32		767,048.40	828,053.56
304.50 Offices	3,802,867.50	1,487,466.63		1,390,904.06	1,501,525.94
<b>Total Structures and Improvements</b>	<b>29,269,283.16</b>	<b>9,228,442.28</b>		<b>9,228,442.28</b>	<b>9,962,402.08</b>
<b>Source of Supply</b>					
305.20 Collecting and Impounding Reservoirs	8,188.66	190.67		3,325.91	2,356.43
306.20 Lake River and Other Intakes	1,511,320.42	527,845.70		592,401.23	419,719.54
307.20 Wells and Springs	8,036,876.80	4,178,080.67		4,240,793.77	3,012,269.75
308.20 Infiltration Gallery	0.00	46,928.27		0.00	0.00
309.20 Supply Mains	2,980,833.77	831,458.27		747,982.66	529,949.84
<b>Total Source of Supply</b>	<b>12,537,219.65</b>	<b>5,584,503.58</b>		<b>5,584,503.58</b>	<b>3,964,295.55</b>
<b>Pumping Equipment</b>					
310.20 Power Production Equipment	3,516,129.70	1,396,147.41		1,820,631.20	1,418,727.51
311.20 Pumping Equipment	15,229,944.12	12,803,643.36		9,074,589.52	7,079,318.18
311.30 Treatment Equipment	4,064,847.57	1,470,180.11		2,421,993.33	1,889,458.62
311.40 Transmission and Distribution Equipment	7,729,968.63	2,253,057.33		4,605,814.16	3,593,112.82
<b>Total Pumping Equipment</b>	<b>30,540,890.02</b>	<b>17,923,028.21</b>	<b>0.00</b>	<b>17,923,028.21</b>	<b>13,980,617.14</b>
<b>Treatment Plant</b>					
320.30 Water Treatment Equipment	28,442,746.83	21,698,675.50		21,564,072.61	14,979,212.45
320.30 Treatment Membranes	1,345,882.90	1,205,980.00		1,340,582.89	1,088,716.65
<b>Total Treatment Plant</b>	<b>29,788,629.73</b>	<b>22,904,655.50</b>		<b>22,904,655.50</b>	<b>16,067,929.10</b>

Suez Water Idaho

Comparison of Book, Allocated and Theoretical Reserve  
Using Average Life Group Depreciation  
As of December 31, 2019

Account Description	Plant Balance (c)	Book Reserve (d)	Note	Reallocated Reserve (e)	Theoretical Reserve (f)
<b>Transmission and Distribution Plant</b>					
330.40 Distribution Reservoirs and Standpipes	13,374,408.13	3,583,651.14		3,270,061.33	3,419,570.80
331.40 Transmission and Distribution Mains	210,333,829.95	65,492,584.61		58,165,596.25	60,824,967.62
333.40 Services	88,246,138.24	31,242,998.82		34,523,170.21	36,101,593.48
334.40 Meters and Meter Installations	16,830,162.49	647,914.54		4,863,784.89	5,086,160.50
335.40 Hydrants	10,041,714.63	1,634,191.06		1,778,727.50	1,860,052.15
Total Transmission and Distribution	338,826,253.44	102,601,340.17		102,601,340.17	107,292,344.56
<b>General Plant Depreciated</b>					
341.50 Transportation Equipment	36,773.36	86,855.25		19,050.17	24,337.44
345.50 Power Operated Equipment	81,574.03	107,080.66		45,696.60	58,379.44
Total General Depreciated					
<b>General Plant Amortized</b>					
340.50 AM / FM System		(1,181,978.42)			
340.50 Software- Lighthouse	5,225,078.90	4,263,647.10		4,263,647.10	4,441,317.07
340.50 Computer Hardware	1,135,037.48	1,154,123.87		1,077,563.84	1,088,855.13
340.50 Computer Software	3,626,486.63	3,542,087.03		3,079,599.31	3,278,758.44
340.50 Office Furniture and Fixtures	1,409,124.00	681,549.80		458,695.64	536,697.16
342.50 Stores Equipment	19,634.76	19,634.76		18,250.54	19,103.93
343.50 Tools, Shop and Garage Equipment	1,335,301.85	862,955.91		573,962.65	654,455.04
344.50 Laboratory Equipment	314,250.47	272,380.04		268,605.23	279,787.74
346.50 Communication Equipment	4,641,664.54	2,148,945.09		1,866,762.79	2,179,704.67
347.50 Miscellaneous Equipment	122,183.90	118,275.77		42,956.81	54,121.46
348.50 Master Plan	2,523,932.53	1,084,886.52		1,464,660.59	1,669,401.80
348.50 Other Tangible Plant	0.00	19,007.88		0.00	0.00
Total General	20,471,042.45	13,179,451.26		13,179,451.26	14,284,919.31
Total Plant	473,664,814.18	171,379,013.05		171,421,421.00	165,552,507.74
GL	473,664,814.18	171,379,013.05			
Difference	0.00	0.00			

(1) Reserves for 301-303 written off.