

**PONDEROSA PINES WATER COMPANY**  
**MAINTENANCE PLAN**  
**RESERVE STUDY**  
**LEVEL I: FULL RESERVE STUDY FUNDING ANALYSIS**  
**2014**



# **PONDEROSA PINES WATER COMPANY**

## **Executive Summary**

### **Year of Report:**

January 1, 2014 to December 31, 2014

### **Number of Units:**

490 Units

### **Parameters:**

Beginning Balance: \$200,615

Year 2014 Suggested Contribution: \$235,000

Year 2014 Projected Interest Earned: \$283

Inflation: 2.50%

Annual Increase to Suggested Contribution: 2.50%

Lowest Cash Balance Over 30 Years (Threshold): \$200,615

Average Reserve Assessment per Unit: \$39.97

Prior Year's Actual Contribution: \$0.00

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**Ponderosa Pines Water Company  
Maintenance Plan  
Reserve Study – Onsite  
Disclosure Information  
2014**

We have conducted an onsite reserve study and maintenance plan for Ponderosa Pines Water Company for the year beginning January 1, 2014, in accordance with guidelines established by Community Associations Institute and the American Institute of Certified Public Accountants.

This reserve study and maintenance plan is in compliance with the legislative changes made in 2007 to ORS Chapters 94 and 100.

We have no other involvement with the Association other than providing the reserve study and maintenance plan.

Assumptions used for inflation, interest, and other factors are detailed in page 13. Income tax factors were not considered due to the uncertainty of factors affecting net taxable income and the election of tax form to be filed.

David T. Schwindt, the representative in charge of this report, is a designated Reserve Study Specialist, Professional Reserve Analyst, and Certified Public Accountant licensed in the states of Oregon, Washington, California, and Arizona.

An onsite visit was performed in 2013. All information regarding the useful life and cost of reserve components was derived from the Association, local vendors, similar associations and/or from various construction pricing and scheduling manuals.

**The Ponderosa Pines Water Company is responsible for the repair, maintenance, and replacement of the water piping system. In 2001 they engaged Century West Engineering to perform a Water Master Plan. According to the Master Plan the water system was installed in phases beginning in 1979 and the PVC pipes has a useful life of 30 years, however due to several factors, including low demand and low pressure, the pipes may last up 40-50 years. We recommend the Association have an inspection or update the water master plan to estimate the current condition of the water system.**

**Because we are relying on information based upon the master plan completed in 2001, we make no assurances as to the accuracy and completeness of component information. Once the master plan is updated, we recommend the reserve study be updated to include needed revisions.”**

The terms *RS Means*, *National Construction Estimator*, and *Fannie Mae Expected Useful Life Tables and Forms* refer to construction industry estimating databases that are used throughout the industry to establish cost estimates and useful life estimates for common building components and products. We suggest that the Association obtain firm bids for these services.

**According to the Bylaws, Article IX, Section 1: “Members shall have the right to receive water services from Corporation at rates substantially equal to Corporation’s cost for such service. Corporation will accumulate or retain funds only to the extent necessary to meet its current losses and operating expenses and other reasonable needs such as, but not limited to, retiring indebtedness, maintaining, improving and expanding its water distribution system, or maintaining reserves for necessary purposes.”**

**An earthquake insurance deductible is not included in the reserve study.**

We are not aware of any material issues which, if not disclosed, would cause a material distortion of this report.

Certain information, such as the beginning balance of reserve funds and other information as detailed on the component detail reports, was provided by Association representatives and is deemed to be reliable by us. This reserve study is a reflection of the information provided to us and cannot be used for the purpose of performing an audit, a quality/forensic analysis, or background checks of historical records.

Site visits should not be considered a project audit or quality inspection of the Association’s property. This site visit does not evaluate the condition of the property to determine the useful life or needed repairs.

Certain costs outlined in the reserve study are subjective and, as a result, are for planning purposes only. The Association should obtain firm bids at the time of work. Actual costs will depend upon the scope of work as defined at the time the repair, replacement, or restoration is performed. All estimates relating to future work are good faith estimates and projections are based on the estimated inflation rate, which may or may not prove accurate. All future costs and life expectancies should be reviewed and adjusted annually.

This reserve study, unless specifically stated in the report, assumes no fungi, mold, asbestos, lead paint, urea-formaldehyde foam insulation, termite control substances, other chemicals, toxic wastes, radon gas, electro-magnetic radiation or other potentially hazardous materials (on the surface or sub-surface), or termites on the property. The existence of any of these substances may adversely affect the accuracy of this reserve study. Schwindt & Company assumes no responsibility regarding such conditions, as we are not qualified to detect substances, determine the impact, or develop remediation plans/costs.

Since destructive testing was not performed, this reserve study does not attempt to address latent and/or patent defects. Neither does it address useful life expectancies that are abnormally short due either to improper design, installation, nor to subsequent improper maintenance. This reserve study assumes all components will be reasonably maintained for the remainder of their life expectancy.

Physical Analysis:

New projects generally include information provided by developers and/or refer to drawings.

Full onsite reserve studies generally include field measurements and do not include destructive testing. Drawings are usually not available for existing projects.

Onsite updates generally include observations of physical characteristics, but do not include field measurements.

This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require homeowners to pay on demand (as a special assessment) their share of common expenses for the cost of major maintenance, repair, or replacement of a reserve component.

**PONDEROSA PINES WATER COMPANY**  
**MAINTENANCE PLAN**  
**2014**

**Ponderosa Pines Water Company**  
**Executive Summary of Maintenance Plan**

Regular maintenance of common elements is necessary to insure the maximum useful life and optimum performance of components. Of particular concern are items that may present a safety hazard to residents or guests if they are not maintained in a timely manner.

This maintenance plan is a cyclical plan that calls for maintenance at regular intervals. The frequency of the maintenance activity and the cost of the activity at the first instance follow a short descriptive narrative. This maintenance plan should be reviewed on an annual basis when preparing the annual operating budget for the Association.

Checklists, developed by Reed Construction Data, Inc., can be photocopied or accessed from the RS Means website:

<http://www.rsmeans.com/supplement/67346.asp>

They can be used to assess and document the existing condition of an Association's common elements and to track the carrying out of planned maintenance activities.

**Ponderosa Pines Water Company  
Maintenance Plan  
2014**

**Pursuant to Oregon State Statutes Chapters 94 and 100, which require a maintenance plan as an integral part of the reserve study, the maintenance procedures are as follows:**

We understand on-site personnel conduct ongoing maintenance of the water system. We recommend the Association document ongoing procedures performed and include detailed maintenance procedures in the maintenance plan during the next reserve study update”

**The Board of Directors should refer to this maintenance plan each year when preparing the annual operating budget for the Association to ensure that annual maintenance costs are included in the budget for the years that they are scheduled.**

**Property Inspection**

Schwindt & Company recommends that a provision for the annual inspection of common area components be included in the maintenance plan for all associations. This valuable management tool will help to ensure that all components achieve a maximum useful life expectancy and that they function as intended throughout their lifespan.

The inspection should be performed by a qualified professional and should include a written summary of conclusions with specific recommendations for any needed repairs or maintenance.

We suggest that the Association obtain firm bids for this service.

This expense should be included in the annual operating budget for the Association.

Frequency: Annually

**Roof Inspection**

The frequency of this inspection will vary based on the age, condition, complexity, and remaining useful life of the roof system. As the roof components become older, the Association is well advised to consider increasing the frequency of this critical procedure.

The inspection should be performed by a qualified roofing professional and should include a written summary of conclusions with specific recommendations for any needed repairs or maintenance. Recommended maintenance should be performed promptly by a licensed roofing contractor.

We suggest that the Association obtain firm bids for this service.

This expense should be included in the annual operating budget for the Association.

Frequency: Refer to roof warranty for frequency



## **Lighting: Exterior & Common Area Interior – Inspection/Maintenance**

***Note: Replacement of flickering or burned-out bulbs or lamps should be immediate.***

Lighting is a crucial element in the provision of safety and security. All lighting systems should be inspected frequently and care must be taken to identify and correct deficiencies.

Various fixture and lamp types may be used according to area needs. Lighting systems should be designed to provide maximum, appropriate illumination at minimal energy expenditures. Lighting maintenance processes should include a general awareness of factors that cause malfunctions in lighting systems, such as dirt accumulation and lumen depreciation. It is important to fully wash, rather than dry-wipe, exterior surfaces to reclaim light and prevent further deterioration.

Deficiencies, required maintenance, and required repairs after completion of the review should be noted by the maintenance contractor and/or association representatives.

Repairs and inspections should be completed by a qualified professional.

This expense should be included in the annual operating budget for the Association as general property maintenance expense.

Frequency: Bi-Weekly

**This maintenance plan is designed to preserve and extend the useful life of assets and is dependent upon proper inspection and follow up procedures.**

**PONDEROSA PINES WATER COMPANY**  
**RESERVE STUDY**  
**LEVEL I: FULL RESERVE STUDY FUNDING ANALYSIS**  
**2014**

**Ponderosa Pines Water Company**  
**Category Detail Index**

Asset ID	Description	Replacement	Page
<b>Roofing</b>			
1004	Well 2 Building Roofing - Replacement	2029	22 of 38
<b>Siding</b>			
1003	Well 2 Building - Repairs	2015	23 of 38
<b>Painting</b>			
1002	Well 2 Building - Painting	2015	24 of 38
<b>Building Components</b>			
1016	Well 1 Building - Repairs	2020	25 of 38
1021	Well 1 Space Heaters - Replacement	2020	25 of 38
<b>Fencing/Security</b>			
1014	Well 2 Chain Link Fence - Replacement	2020	26 of 38
<b>Equipment</b>			
1015	Well 1 Pump - Replacement	2020	27 of 38
1010	Well 2 Back-up Generator - Replacement	2030	27 of 38
1007	Well 2 Booster Pump 1 - Replacement	2014	27 of 38
1008	Well 2 Booster Pump 2 - Replacement	2014	28 of 38
1009	Well 2 Booster Pump 3 - Replacement	2016	28 of 38
1013	Well 2 Electrical System	2020	29 of 38
1011	Well 2 Space Heaters - Replacement	2020	29 of 38
1006	Well 2 Water Pump 1 - Replacement	2020	30 of 38
1005	Well 2 Water Tank - Replacement	2057	30 of 38
<b>Grounds Components</b>			
1001	Water Piping System - Replacement	2020	31 of 38
<b>Inspections</b>			
1022	Water Testing	2019	33 of 38
<b>Contingency</b>			
1019	Insurance - Deductible	2014	34 of 38
1020	Master Plan - Update	2014	34 of 38
Total Funded Assets		19	
Total Unfunded Assets		<u>0</u>	
Total Assets		19	

## **Ponderosa Pines Water Company Property Description**

Ponderosa Pines Water Company consists of 2 outbuildings, one holding the water master's office, and pumps and related equipment; and the other housing pumps and related equipment, and is located near La Pine, Oregon. One building is wood with a metal roof; the other is a metal building. The Association shall maintain the buildings, equipment and piping of the water system.

This study uses information supplied by the Association, and various construction pricing and scheduling manuals to determine useful lives and replacement costs.

A site visit was performed by Schwindt & Company in 2013. Schwindt and Company did not investigate components as to condition and estimated useful life.

Funds are being accumulated in the replacement fund based on estimates of future need for repairs and replacement of common property components. Actual expenditures, investment income, and provisions for income taxes however, may vary from estimated amounts, and variations may be material. Therefore, amounts accumulated in the replacement fund may not be adequate to meet future funding needs.

If additional funds are needed, the Association has the right, subject to Board approval, to increase regular assessments, levy special assessments, otherwise the Association may delay repairs or replacements until funds are available.

**Ponderosa Pines Water Company**  
La Pine, Oregon  
**Cash Flow Method - Threshold Funding Model Summary**

<i>Report Parameters</i>	
<b>Report Date</b>	<b>November 20, 2013</b>
<b>Account Number</b>	<b>2ppwat</b>
<b>Budget Year Beginning</b>	<b>January 01, 2014</b>
<b>Budget Year Ending</b>	<b>December 31, 2014</b>
<b>Total Units</b>	<b>490</b>
<b>Inflation</b>	<b>2.50%</b>
<b>Annual Assessment Increase</b>	<b>2.50%</b>
<b>Interest Rate on Reserve Deposit</b>	<b>0.10%</b>
<b>2014 Beginning Balance</b>	<b>\$200,615.00</b>

**Threshold Funding**  
**Fully Reserved Model Summary**

- This study utilizes the cash flow method and the threshold funding model, which establishes a reserve funding goal that keeps the reserve balance above a specified dollar or percent funded amount. The threshold method assumes that the threshold method is funded with a positive threshold balance, therefore, "fully reserved".
- The following items were not included in the analysis because they have useful lives greater than 30 years: grading/drainage; foundation/footings; storm drains; telephone, cable, and internet lines.
- This funding scenario begins with a contribution of **\$235,000** in **2014** and increases **2.50%** each year for the remaining years of the study. A minimum balance of **\$200,615** is maintained.
- The purpose of this study is to insure that adequate replacement funds are available when components reach the end of their useful life. Components will be replaced as required, not necessarily in their expected replacement year. This analysis should be updated annually.

<i>Cash Flow Method - Threshold Funding Model Summary of Calculations</i>	
<b>Required Month Contribution</b>	<b>\$19,583.33</b>
<i>\$39.97 per unit monthly</i>	
<b>Average Net Month Interest Earned</b>	<b>\$23.58</b>
<b>Total Month Allocation to Reserves</b>	<b>\$19,606.92</b>
<i>\$40.01 per unit monthly</i>	

**Ponderosa Pines Water Company**  
**Cash Flow Method - Threshold Funding Model Projection**

Beginning Balance: \$200,615

Year	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves
2014	235,000	283	45,000	390,898
2015	240,875	507	14,288	617,992
2016	246,897	736	15,759	849,866
2017	253,069	987		1,103,922
2018	259,396	1,245		1,364,563
2019	265,881	1,504	5,091	1,626,857
2020	272,528	1,311	463,707	1,436,989
2021	279,341	1,271	318,345	1,399,256
2022	286,325	1,227	328,375	1,358,431
2023	293,483	1,183	334,462	1,318,636
2024	300,820	1,133	348,584	1,272,006
2025	308,340	1,088	351,394	1,230,040
2026	316,049	1,042	360,179	1,186,952
2027	323,950	994	369,183	1,142,712
2028	332,049	945	378,413	1,097,293
2029	340,350	828	454,408	984,063
2030	348,859	672	501,485	832,108
2031	357,580	596	430,333	759,951
2032	366,520	541	417,697	709,315
2033	375,683	485	428,139	657,343
2034	385,075	420	446,217	596,621
2035	394,702	305	505,240	486,388
2036	404,569	242	463,986	427,213
2037	414,684	179	472,586	369,490
2038	425,051	115	484,400	310,256
2039	435,677	41	504,853	241,121
2040	446,569	331	152,023	535,998
2041	457,733	784		994,515
2042	469,176	1,249		1,464,940
2043	480,906	1,698	28,527	1,919,017

**Ponderosa Pines Water Company**  
**Component Summary By Category**

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
<b>Roofing</b>								
Well 2 Building Roofing - Replacement	1979	2029	50	0	15	3,500 SF	5.00	<u>17,500</u>
Roofing - Total								\$17,500
<b>Siding</b>								
Well 2 Building - Repairs	1993	2015	14	8	1	2,040 SF	6.00	<u>12,240</u>
Siding - Total								\$12,240
<b>Painting</b>								
Well 2 Building - Painting	2015	2015	7	0	1	1 Total	1,700.00	<u>1,700</u>
Painting - Total								\$1,700
<b>Building Components</b>								
Well 1 Building - Repairs	1970	2020	50	0	6	1 Total	5,000.00	<u>5,000</u>
Well 1 Space Heaters - Replacement	2005	2020	15	0	6	1 Total	1,000.00	<u>1,000</u>
Building Components - Total								\$6,000
<b>Fencing/Security</b>								
Well 2 Chain Link Fence - Replacement	1970	2020	50	0	6	540 LF	26.00	<u>14,040</u>
Fencing/Security - Total								\$14,040
<b>Equipment</b>								
Well 2 Booster Pump 1 - Replacement	1994	2014	15	0	0	1 Total	5,000.00	<u>5,000</u>
Well 2 Booster Pump 2 - Replacement	1994	2014	15	0	0	1 Total	5,000.00	<u>5,000</u>
Well 2 Booster Pump 3 - Replacement	2001	2016	15	0	2	1 Total	15,000.00	<u>15,000</u>
Well 1 Pump - Replacement	2005	2020	15	0	6	1 Total	15,000.00	<u>15,000</u>
Well 2 Electrical System	2000	2020	20	0	6	1 Total	80,000.00	<u>80,000</u>
Well 2 Space Heaters - Replacement	2005	2020	15	0	6	2 Each	1,000.00	<u>2,000</u>
Well 2 Water Pump 1 - Replacement	2005	2020	15	0	6	1 Total	15,000.00	<u>15,000</u>
Well 2 Back-up Generator - Replacement	2005	2030	25	0	16	1 Total	70,000.00	<u>70,000</u>
Well 2 Water Tank - Replacement	1997	2057	60	0	43	1 Total	190,000.00	<u>190,000</u>
Equipment - Total								\$397,000
<b>Grounds Components</b>								
Water Piping System - Replacement	1979	2020	1	40	6	1 Total	5,356,260.00	<u>267,813</u>
Grounds Components - Total								\$267,813
<b>Inspections</b>								
Water Testing	2013	2019	5	1	5	1 Total	4,500.00	<u>4,500</u>
Inspections - Total								\$4,500

**Ponderosa Pines Water Company**  
**Component Summary By Category**

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
<b>Contingency</b>								
Insurance - Deductible	2014	2014	1	0	0	1 Total	25,000.00	25,000
Master Plan - Update	1999	2014	15	0	0	1 Total	10,000.00	<u>10,000</u>
Contingency - Total								<u>\$35,000</u>
Total Asset Summary								<u>\$755,793</u>



**Ponderosa Pines Water Company  
Component Summary By Group**

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
<b>Capital</b>								
Water Piping System - Replacement	1979	2020	1	40	6	1 Total	5,356,260.00	267,813
Well 1 Pump - Replacement	2005	2020	15	0	6	1 Total	15,000.00	15,000
Well 2 Back-up Generator - Replacement	2005	2030	25	0	16	1 Total	70,000.00	70,000
Well 2 Booster Pump 1 - Replacement	1994	2014	15	0	0	1 Total	5,000.00	5,000
Well 2 Booster Pump 2 - Replacement	1994	2014	15	0	0	1 Total	5,000.00	5,000
Well 2 Booster Pump 3 - Replacement	2001	2016	15	0	2	1 Total	15,000.00	15,000
Well 2 Building Roofing - Replacement	1979	2029	50	0	15	3,500 SF	5.00	17,500
Well 2 Chain Link Fence - Replacement	1970	2020	50	0	6	540 LF	26.00	14,040
Well 2 Electrical System	2000	2020	20	0	6	1 Total	80,000.00	80,000
Well 2 Space Heaters - Replacement	2005	2020	15	0	6	2 Each	1,000.00	2,000
Well 2 Water Pump 1 - Replacement	2005	2020	15	0	6	1 Total	15,000.00	15,000
Well 2 Water Tank - Replacement	1997	2057	60	0	43	1 Total	190,000.00	190,000
Capital - Total								\$696,353
<b>Non-Capital</b>								
Insurance - Deductible	2014	2014	1	0	0	1 Total	25,000.00	25,000
Master Plan - Update	1999	2014	15	0	0	1 Total	10,000.00	10,000
Water Testing	2013	2019	5	1	5	1 Total	4,500.00	4,500
Well 1 Building - Repairs	1970	2020	50	0	6	1 Total	5,000.00	5,000
Well 1 Space Heaters - Replacement	2005	2020	15	0	6	1 Total	1,000.00	1,000
Well 2 Building - Painting	2015	2015	7	0	1	1 Total	1,700.00	1,700
Well 2 Building - Repairs	1993	2015	14	8	1	2,040 SF	6.00	12,240
Non-Capital - Total								\$59,440
Total Asset Summary								\$755,793

**Ponderosa Pines Water Company  
Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2014</b>	
Insurance - Deductible - 1 of 1X	25,000
Master Plan - Update - 1 of 1X	10,000
Well 2 Booster Pump 1 - Replacement	5,000
Well 2 Booster Pump 2 - Replacement	5,000
<b>Total for 2014</b>	<b>\$45,000</b>
<b>Replacement Year 2015</b>	
Well 2 Building - Painting	1,742
Well 2 Building - Repairs	12,546
<b>Total for 2015</b>	<b>\$14,288</b>
<b>Replacement Year 2016</b>	
Well 2 Booster Pump 3 - Replacement	15,759
<b>Total for 2016</b>	<b>\$15,759</b>
<i>No Replacement in 2017</i>	
<i>No Replacement in 2018</i>	
<b>Replacement Year 2019</b>	
Water Testing	5,091
<b>Total for 2019</b>	<b>\$5,091</b>
<b>Replacement Year 2020</b>	
Water Piping System - Replacement - 1 of 20X	310,581
Well 1 Building - Repairs	5,798
Well 1 Pump - Replacement	17,395
Well 1 Space Heaters - Replacement	1,160
Well 2 Chain Link Fence - Replacement	16,282
Well 2 Electrical System	92,775
Well 2 Space Heaters - Replacement	2,319
Well 2 Water Pump 1 - Replacement	17,395
<b>Total for 2020</b>	<b>\$463,707</b>
<b>Replacement Year 2021</b>	
Water Piping System - Replacement - 2 of 20X	318,345
<b>Total for 2021</b>	<b>\$318,345</b>

**Ponderosa Pines Water Company**  
**Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2022</b>	
Water Piping System - Replacement - 3 of 20X	326,304
Well 2 Building - Painting	2,071
<b>Total for 2022</b>	<b>\$328,375</b>
<b>Replacement Year 2023</b>	
Water Piping System - Replacement - 4 of 20X	334,462
<b>Total for 2023</b>	<b>\$334,462</b>
<b>Replacement Year 2024</b>	
Water Piping System - Replacement - 5 of 20X	342,823
Water Testing	5,760
<b>Total for 2024</b>	<b>\$348,584</b>
<b>Replacement Year 2025</b>	
Water Piping System - Replacement - 6 of 20X	351,394
<b>Total for 2025</b>	<b>\$351,394</b>
<b>Replacement Year 2026</b>	
Water Piping System - Replacement - 7 of 20X	360,179
<b>Total for 2026</b>	<b>\$360,179</b>
<b>Replacement Year 2027</b>	
Water Piping System - Replacement - 8 of 20X	369,183
<b>Total for 2027</b>	<b>\$369,183</b>
<b>Replacement Year 2028</b>	
Water Piping System - Replacement - 9 of 20X	378,413
<b>Total for 2028</b>	<b>\$378,413</b>
<b>Replacement Year 2029</b>	
Water Piping System - Replacement - 10 of 20X	387,873
Water Testing	6,517
Well 2 Booster Pump 1 - Replacement	7,241
Well 2 Booster Pump 2 - Replacement	7,241
Well 2 Building - Painting	2,462

**Ponderosa Pines Water Company  
Annual Expenditure Detail**

Description	Expenditures
<b><i>Replacement Year 2029 continued...</i></b>	
Well 2 Building - Repairs	17,727
Well 2 Building Roofing - Replacement	25,345
<b>Total for 2029</b>	<b><u>\$454,408</u></b>
<b>Replacement Year 2030</b>	
Water Piping System - Replacement - 11 of 20X	397,570
Well 2 Back-up Generator - Replacement	103,915
<b>Total for 2030</b>	<b><u>\$501,485</u></b>
<b>Replacement Year 2031</b>	
Water Piping System - Replacement - 12 of 20X	407,509
Well 2 Booster Pump 3 - Replacement	22,824
<b>Total for 2031</b>	<b><u>\$430,333</u></b>
<b>Replacement Year 2032</b>	
Water Piping System - Replacement - 13 of 20X	417,697
<b>Total for 2032</b>	<b><u>\$417,697</u></b>
<b>Replacement Year 2033</b>	
Water Piping System - Replacement - 14 of 20X	428,139
<b>Total for 2033</b>	<b><u>\$428,139</u></b>
<b>Replacement Year 2034</b>	
Water Piping System - Replacement - 15 of 20X	438,843
Water Testing	7,374
<b>Total for 2034</b>	<b><u>\$446,217</u></b>
<b>Replacement Year 2035</b>	
Water Piping System - Replacement - 16 of 20X	449,814
Well 1 Pump - Replacement	25,194
Well 1 Space Heaters - Replacement	1,680
Well 2 Space Heaters - Replacement	3,359
Well 2 Water Pump 1 - Replacement	25,194
<b>Total for 2035</b>	<b><u>\$505,240</u></b>

**Ponderosa Pines Water Company**  
**Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2036</b>	
Water Piping System - Replacement - 17 of 20X	461,059
Well 2 Building - Painting	2,927
<b>Total for 2036</b>	<b>\$463,986</b>
<b>Replacement Year 2037</b>	
Water Piping System - Replacement - 18 of 20X	472,586
<b>Total for 2037</b>	<b>\$472,586</b>
<b>Replacement Year 2038</b>	
Water Piping System - Replacement - 19 of 20X	484,400
<b>Total for 2038</b>	<b>\$484,400</b>
<b>Replacement Year 2039</b>	
Water Piping System - Replacement - 20 of 20X	496,510
Water Testing	8,343
<b>Total for 2039</b>	<b>\$504,853</b>
<b>Replacement Year 2040</b>	
Well 2 Electrical System	152,023
<b>Total for 2040</b>	<b>\$152,023</b>
<i>No Replacement in 2041</i>	
<i>No Replacement in 2042</i>	
<b>Replacement Year 2043</b>	
Well 2 Building - Painting	3,479
Well 2 Building - Repairs	25,048
<b>Total for 2043</b>	<b>\$28,527</b>

**Ponderosa Pines Water Company**  
**Detail Report by Category**

<b>Well 2 Building Roofing - Replacement</b>		3,500 SF	@ \$5.00
Asset ID	1004	Asset Cost	\$17,500.00
	Capital	Percent Replacement	100%
	Roofing	Future Cost	\$25,345.22
Placed in Service	January 1979		
Useful Life	50		
Replacement Year	2029		
Remaining Life	15		

This component funds for the replacement of the metal roof on the Well 2 building.

Schwindt and Company estimated 3,500 square feet of roofing.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator.

The Association should obtain a bid to confirm this cost.

<b>Roofing - Total Current Cost</b>	<b>\$17,500</b>
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**Ponderosa Pines Water Company**  
**Detail Report by Category**

<b>Well 2 Building - Repairs</b>		2,040 SF	@ \$6.00
Asset ID	1003	Asset Cost	\$12,240.00
	Non-Capital	Percent Replacement	100%
	Siding	Future Cost	\$12,546.00
Placed in Service	January 1993		
Useful Life	14		
Adjustment	8		
Replacement Year	2015		
Remaining Life	1		

This component funds for repairs to the Well 2 building.

Schwindt and Company estimated 2,040 square feet of siding.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator.

The Association should obtain a bid to confirm this cost.

<b>Siding - Total Current Cost</b>	<b>\$12,240</b>
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**Ponderosa Pines Water Company**  
**Detail Report by Category**

Well 2 Building - Painting			
Asset ID	1002	1 Total	@ \$1,700.00
		Asset Cost	\$1,700.00
	Non-Capital	Percent Replacement	100%
	Painting	Future Cost	\$1,742.50
Placed in Service	January 2015		
Useful Life	7		
Replacement Year	2015		
Remaining Life	1		

This component funds for painting the Well 2 building.

Schwindt and Company estimated 2,040 square feet of siding.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator.

The Association should obtain a bid to confirm this cost.

<b>Painting - Total Current Cost</b>	<b>\$1,700</b>
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**Ponderosa Pines Water Company**  
**Detail Report by Category**

**Well 1 Building - Repairs**

Asset ID	1016	1 Total	@ \$5,000.00
	Non-Capital	Asset Cost	\$5,000.00
Building Components		Percent Replacement	100%
Placed in Service	January 1970	Future Cost	\$5,798.47
Useful Life	50		
Replacement Year	2020		
Remaining Life	6		

This component funds for repairs to the metal shed at Well 1.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator.

*This component is an estimate. If the actual cost of this component is determined to be different from this estimate, the reserve study should be updated to reflect the actual cost.*

**Well 1 Space Heaters - Replacement**

Asset ID	1021	1 Total	@ \$1,000.00
	Non-Capital	Asset Cost	\$1,000.00
Building Components		Percent Replacement	100%
Placed in Service	January 2005	Future Cost	\$1,159.69
Useful Life	15		
Replacement Year	2020		
Remaining Life	6		

This component funds for replacement of the space heaters at Well 1.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator.

*This component is an estimate. If the actual cost of this component is determined to be different from this estimate, the reserve study should be updated to reflect the actual cost.*

**Building Components - Total Current Cost**

**\$6,000**

**Ponderosa Pines Water Company**  
**Detail Report by Category**

<b>Well 2 Chain Link Fence - Replacement</b>		540 LF	@ \$26.00
Asset ID	1014	Asset Cost	\$14,040.00
	Capital	Percent Replacement	100%
	Fencing/Security	Future Cost	\$16,282.10
Placed in Service	January 1970		
Useful Life	50		
Replacement Year	2020		
Remaining Life	6		

This component funds for the replacement of the chain link fence at Well 2.

Schwindt and Company estimated 540 linear feet of fencing.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator.

*Note: This is a provision for an anticipated expense. Should the association find that the cost of this item is greater than or less than the amount provided for herein, this study should be updated to reflect the actual component cost.*

<b>Fencing/Security - Total Current Cost</b>	<b>\$14,040</b>
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**Ponderosa Pines Water Company**  
**Detail Report by Category**

**Well 1 Pump - Replacement**

Asset ID	1015	1 Total	@ \$15,000.00
	Capital	Asset Cost	\$15,000.00
	Equipment	Percent Replacement	100%
Placed in Service	January 2005	Future Cost	\$17,395.40
Useful Life	15		
Replacement Year	2020		
Remaining Life	6		

This component funds for the replacement of the pump at Well 1.

The cost and useful life assumptions are based on a similar association.

The Association should obtain a bid to confirm this cost.

**Well 2 Back-up Generator - Replacement**

Asset ID	1010	1 Total	@ \$70,000.00
	Capital	Asset Cost	\$70,000.00
	Equipment	Percent Replacement	100%
Placed in Service	January 2005	Future Cost	\$103,915.39
Useful Life	25		
Replacement Year	2030		
Remaining Life	16		

This component funds for the replacement of the back-up generator at Well 2.

The cost and useful life assumptions are based on a similar association.

The Association should obtain a bid to confirm this cost.

**Well 2 Booster Pump 1 - Replacement**

Asset ID	1007	1 Total	@ \$5,000.00
	Capital	Asset Cost	\$5,000.00
	Equipment	Percent Replacement	100%
Placed in Service	January 1994	Future Cost	\$5,000.00
Useful Life	15		
Replacement Year	2014		
Remaining Life	0		

This component funds for the replacement of well 2 (15 hp) pump 1.

**Ponderosa Pines Water Company**  
**Detail Report by Category**

*Well 2 Booster Pump 1 - Replacement continued...*

The cost and useful life assumptions are based on information from the association.

The Association should obtain a bid to confirm this cost.

**Well 2 Booster Pump 2 - Replacement**

Asset ID	1008	1 Total	@ \$5,000.00
		Asset Cost	\$5,000.00
	Capital	Percent Replacement	100%
	Equipment	Future Cost	\$5,000.00
Placed in Service	January 1994		
Useful Life	15		
Replacement Year	2014		
Remaining Life	0		

This component funds for the replacement of well 2 (15 hp) pump 2.

The cost and useful life assumptions are based on information from the association.

The Association should obtain a bid to confirm this cost.

**Well 2 Booster Pump 3 - Replacement**

Asset ID	1009	1 Total	@ \$15,000.00
		Asset Cost	\$15,000.00
	Capital	Percent Replacement	100%
	Equipment	Future Cost	\$15,759.37
Placed in Service	January 2001		
Useful Life	15		
Replacement Year	2016		
Remaining Life	2		

This component funds for the replacement of booster pump 3 at Well 2.

The cost and useful life assumptions are based on a similar association.

The Association should obtain a bid to confirm this cost.

**Ponderosa Pines Water Company**  
**Detail Report by Category**

**Well 2 Electrical System**

Asset ID	1013	1 Total	@ \$80,000.00
	Capital	Asset Cost	\$80,000.00
	Equipment	Percent Replacement	100%
Placed in Service	January 2000	Future Cost	\$92,775.47
Useful Life	20		
Replacement Year	2020		
Remaining Life	6		

This component funds for the replacement of the electrical system at Well 2.

The cost and useful life assumptions are based on a similar association.

The Association should obtain a bid to confirm this cost.

*Note: This is a provision for an anticipated expense. Should the association find that the cost of this item is greater than or less than the amount provided for herein, this study should be updated to reflect the actual component cost.*

**Well 2 Space Heaters - Replacement**

Asset ID	1011	2 Each	@ \$1,000.00
	Capital	Asset Cost	\$2,000.00
	Equipment	Percent Replacement	100%
Placed in Service	January 2005	Future Cost	\$2,319.39
Useful Life	15		
Replacement Year	2020		
Remaining Life	6		

This component funds for the replacement of the space heaters in the Well 2 building.

Schwindt and Company estimated two space heaters.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator.

The Association should obtain a bid to confirm this cost.

**Ponderosa Pines Water Company**  
**Detail Report by Category**

Well 2 Water Pump 1 - Replacement		1 Total	@ \$15,000.00
Asset ID	1006	Asset Cost	\$15,000.00
	Capital	Percent Replacement	100%
	Equipment	Future Cost	\$17,395.40
Placed in Service	January 2005		
Useful Life	15		
Replacement Year	2020		
Remaining Life	6		

This component funds for the replacement of water pump 1 at Well 2.

The cost and useful life assumptions are based on a similar association.

The Association should obtain a bid to confirm this cost.

Well 2 Water Tank - Replacement		1 Total	@ \$190,000.00
Asset ID	1005	Asset Cost	\$190,000.00
	Capital	Percent Replacement	100%
	Equipment	Future Cost	\$549,388.81
Placed in Service	January 1997		
Useful Life	60		
Replacement Year	2057		
Remaining Life	43		

This component funds for the replacement of the water tank for Well 2.

The cost and useful life estimates are based on a similar association.

The Association should obtain a bid to confirm this cost.

*Note: This is a provision for an anticipated expense. Should the association find that the cost of this item is greater than or less than the amount provided for herein, this study should be updated to reflect the actual component cost.*

<b>Equipment - Total Current Cost</b>	<b>\$397,000</b>
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**Ponderosa Pines Water Company**  
**Detail Report by Category**

**Water Piping System - Replacement**

		1 Total @	\$5,356,260.00
Asset ID	1001	Asset Cost	\$267,813.00
	Capital	Percent Replacement	5%
	Grounds Components	Future Cost	\$310,580.97
Placed in Service	January 1979		
Useful Life	1		
Adjustment	40		
Replacement Year	2020		
Remaining Life	6		

This component funds for phased replacement of the water piping system over a 20 year period.

There is an estimated 20 miles of water piping according to Century West Engineering.

According to Bill Beckett, the engineer from Century West Engineer who put the master plan together. The master plan is intended to be long term planning for how to maintain the system. While the estimated useful life of the PVC pipe in the master plan indicates 30 years, he did mention it may last longer (40-50 years) due to several factors included low demand and low pressure. We recommend the master plan be updated to obtain an estimate of the current condition of the piping system. This component should be updated when the results are known. If the piping system is working, there is no reason to replace it.

Bill Beckett did mention several items to check which could indicate leaks.

At night when demand for water is low, check to see if you are still pumping out a lot of water.

Also walk the property and check to see if there is water coming up from the ground.

The Association may want to consider laying the water pipes off the road so future work will not damage the road systems. This may also allow piping to be installed with minimal disruption of water service to units.

The cost and useful life estimates are per the Master Plan by Century West Engineering.

The Association should obtain a bid to confirm this cost.

*Note: This is a provision for an anticipated expense. Should the association find that the cost of this item is greater than or less than the amount provided for herein, this study should be updated to reflect the actual component cost*

**Ponderosa Pines Water Company  
Detail Report by Category**

<b>Grounds Components - Total Current Cost</b>	<b>\$267,813</b>
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**Ponderosa Pines Water Company**  
**Detail Report by Category**

Water Testing			
Asset ID	1022	1 Total Asset Cost	@ \$4,500.00
	Non-Capital	Percent Replacement	100%
	Inspections	Future Cost	\$5,091.34
Placed in Service	January 2013		
Useful Life	5		
Adjustment	1		
Replacement Year	2019		
Remaining Life	5		

This provision is for the water testing that is required every 5 years.

The cost and useful life are based on information from the Association.

**Inspections - Total Current Cost                      \$4,500**

**Ponderosa Pines Water Company**  
**Detail Report by Category**

**Insurance - Deductible**

Asset ID	1019	1 Total	@ \$25,000.00
	Non-Capital	Asset Cost	\$25,000.00
	Contingency	Percent Replacement	100%
Placed in Service	January 2014	Future Cost	\$25,000.00
Useful Life	1		
Replacement Year	2014		
Remaining Life	0		

This component is for the insurance deductible in the event a claim is made.

The cost is per the Association.

**Master Plan - Update**

Asset ID	1020	1 Total	@ \$10,000.00
	Non-Capital	Asset Cost	\$10,000.00
	Contingency	Percent Replacement	100%
Placed in Service	January 1999	Future Cost	\$10,000.00
Useful Life	15		
Replacement Year	2014		
Remaining Life	0		

This component funds for the updating of the Water Master Plan.

The cost is based on an estimate by Century West Engineering.

The cost is a one time occurrence.

**Contingency - Total Current Cost                      \$35,000**

# Additional Disclosures

## Levels of Service

The following three categories describe the various types of Reserve Studies from exhaustive to minimal.

**I. Full:** A Reserve Study in which the following five Reserve Study tasks are performed:

- Component Inventory
- Condition Assessment (based upon on-site visual observations)
- Life and Valuation Estimates
- Fund Status
- Funding Plan

**II. Update, With Site Visit/On-Site Review:** A Reserve Study update in which the following five Reserve Study tasks are performed:

- Component Inventory (verification only, not quantification)
- Condition Assessment (based on on-site visual observations)
- Life and Valuation Estimates
- Fund Status
- Funding Plan

**III. Update, No Site Visit/Off Site Review:** A Reserve Study update with no on-site visual observations in which the following three Reserve Study tasks are performed:

- Life and Valuation Estimates
- Fund Status
- Funding Plan

## Terms and Definitions

**CASH FLOW METHOD:** A method of developing a reserve *Funding Plan* where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different reserve *Funding Plans* are tested against the anticipated schedule of reserve expenses until the desired *Funding Goal* is achieved.

**COMPONENT:** The individual line items in the *Reserve Study* developed or updated in the *Physical Analysis*. These elements form the building blocks for the *Reserve Study*. *Components* typically are: 1) association responsibility; 2) with limited *Useful Life* expectancies; 3) predictable *Remaining Useful Life* expectancies; 4) above a minimum threshold cost; and 5) as required by local codes.

**COMPONENT INVENTORY:** The task of selecting and quantifying reserve *Components*. This task can be accomplished through on-site visual observations, review of association design and organizational documents, a review of established association precedents, and discussion with appropriate association representative(s) of the Association or cooperative.

**COMPONENT METHOD:** A method of developing a reserve *Funding Plan* where the total contribution is based on the sum of contributions for individual *Components*. See *Cash Flow Method*.

CONDITION ASSESSMENT: The task of evaluating the current condition of the *Component* based on observed or reported characteristics.

CURRENT REPLACEMENT COST: See *Replacement Cost*.

DEFICIT: An actual or projected *Reserve Balance* that is less than the *Fully Funded Balance*. The opposite would be a *Surplus*.

EFFECTIVE AGE: The difference between *Useful Life* and *Remaining Useful Life*. Not always equivalent to chronological age since some *Components* age irregularly. Used primarily in computations.

FINANCIAL ANALYSIS: The portion of a *Reserve Study* where current status of the reserves (measured as cash or *Percent Funded*) and a recommended reserve contribution rate (reserve *Funding Plan*) are derived, and the projected reserve income and expense over time is presented. The *Financial Analysis* is one of the two parts of a *Reserve Study*.

FULLY FUNDED: 100% Funded. When the actual or projected *Reserve Balance* is equal to the *Fully Funded Balance*.

FULLY FUNDED BALANCE (FFB): Total accrued depreciation, an indicator against which actual or projected *Reserve Balance* can be compared. The *Reserve Balance* that is in direct proportion to the fraction of life “used up” of the current repair or *Replacement Cost*. This number is calculated for each *Component*, then added together for an association total. Two formulas can be utilized, depending on the provider’s sensitivity to interest and inflation effects. Note: Both yield identical results when interest and inflation are equivalent.

$$\text{FFB} = \text{Current Cost} \times \text{Effective Age} / \text{Useful Life}$$

or

$$\text{FFB} = (\text{Current Cost} \times \text{Effective Age} / \text{Useful Life}) + [(\text{Current Cost} \times \text{Effective Age} / \text{Useful Life}) / (1 + \text{Interest Rate})^{\text{Remaining Life}}] - [(\text{Current Cost} \times \text{Effective Age} / \text{Useful Life}) / (1 + \text{Inflation Rate})^{\text{Remaining Life}}]$$

FUND STATUS: The status of the reserve fund as compared to an established benchmark such as percent funding. The Association appears to be adequately funded as the threshold method.

FUNDING GOALS: Independent of methodology utilized, the following represent the basic categories of *Funding Plan* goals:

- Baseline Funding: Establishing a reserve funding goal of keeping the reserve cash balance above zero.
- Full Funding: Setting a reserve funding goal of attaining and maintaining reserves at or near 100% funded.
- Statutory Funding: Establishing a reserve funding goal of setting aside the specific minimum amount of reserves required by local statutes.

- **Threshold Funding:** Establishing a reserve funding goal of keeping the *Reserve Balance* above a specified dollar or *Percent Funded* amount. Depending on the threshold, this may be more or less conservative than fully funding.

**FUNDING PLAN:** An association's plan to provide income to a reserve fund to offset anticipated expenditures from that fund.

**FUNDING PRINCIPLES:**

- Sufficient Funds When Required
- Stable Contribution Rate over the Years
- Evenly Distributed Contributions over the Years
- Fiscally Responsible

**LIFE AND VALUATION ESTIMATES:** The task of estimating *Useful Life*, *Remaining Useful Life*, and repair or *Replacement Costs* for the reserve *Components*.

**PERCENT FUNDED:** The ratio at a particular point of time (typically the beginning of the Fiscal Year) of the actual or projected *Reserve Balance* to the *Fully Funded Balance*, expressed as a percentage.

**PHYSICAL ANALYSIS:** The portion of the *Reserve Study* where the *Component Inventory*, *Condition Assessment*, and *Life and Valuation Estimate* tasks are performed. This represents one of the two parts of the *Reserve Study*.

**REMAINING USEFUL LIFE (RUL):** Also referred to as "Remaining Life" (RL). The estimated time, in years, that a reserve *Component* can be expected to continue to serve its intended function. Projects anticipated to occur in the initial year have "zero" *Remaining Useful Life*.

**REPLACEMENT COST:** The cost of replacing, repairing, or restoring a reserve *Component* to its original functional condition. The *Current Replacement Cost* would be the cost to replace, repair, or restore the *Component* during that particular year.

**RESERVE BALANCE:** Actual or projected funds as of a particular point in time that the Association has identified for use to defray the future repair or replacement of those major *Components* which the Association is obligated to maintain. Also known as reserves, reserve accounts, or cash reserves. Based upon information provided and not audited.

**RESERVE PROVIDER:** An individual that prepares *Reserve Studies*.

**RESERVE STUDY:** A budget planning tool which identifies the current status of the reserve fund and a stable and equitable *Funding Plan* to offset the anticipated future major common area expenditures. The *Reserve Study* consists of two parts: the *Physical Analysis* and the *Financial Analysis*.

**RESPONSIBLE CHARGE:** A reserve specialist in *Responsible Charge* of a *Reserve Study* shall render regular and effective supervision to those individuals performing services which directly and materially affect the quality and competence rendered by the reserve specialist. A reserve specialist shall maintain such records as are

reasonably necessary to establish that the reserve specialist exercised regular and effective supervision of a *Reserve Study* of which he was in *Responsible Charge*. A reserve specialist engaged in any of the following acts or practices shall be deemed not to have rendered the regular and effective supervision required herein:

- The regular and continuous absence from principal office premises from which professional services are rendered, except for performance of field work or presence in a field office maintained exclusively for a specific project;
- The failure to personally inspect or review the work of subordinates where necessary and appropriate;
- The rendering of a limited, cursory, or perfunctory review of plans or projects in lieu of an appropriate detailed review;
- The failure to personally be available on a reasonable basis or with adequate advance notice for consultation and inspection where circumstances require personal availability.

**SPECIAL ASSESSMENT:** An assessment levied on the members of an association in addition to regular assessments. *Special Assessments* are often regulated by governing documents or local statutes.

**SURPLUS:** An actual or projected *Reserve Balance* greater than the *Fully Funded Balance*. The opposite would be a *Deficit*.

**USEFUL LIFE (UL):** Total *Useful Life* or depreciable life. The estimated time, in years, that a *Reserve Component* can be expected to serve its intended function if properly constructed in its present application or installation.