

24 master plan, and pressure irrigation master plan, design of various waterline projects, new
25 development plan reviews, a water rate study, etc.

26 **Q. What is the purpose of your testimony?**

27 A. My testimony is intended to explain the water rate model (that was included in Appendix
28 H of the rate increase application filed with the Utah Public Services Commission on
29 March 31, 2021 (the Application)). That rate model was used as a basis for
30 determination of the needed rate increase requested by the Company.

31 **Q. Are impact fees addressed in this rate case application?**

32 A. No. This rate case application is based upon BC&A's review of the Company's culinary
33 water rates and proposed system improvements. That review was completed in order to
34 determine when rate increases are necessary to maintain the existing level of service in
35 the Company's culinary water system and ensure adequate funds are available to
36 complete system improvements necessary to continue providing service to the
37 Company's existing customers. That is distinct from the imposition of impact fees,
38 which are intended to apportion the cost of constructing facilities required by new
39 development. Impact fees are designed to prevent existing customers from subsidizing
40 the construction of new facilities or infrastructure needed to serve new development.

41 **Q. Can you briefly summarize Appendix H of the Application?**

42 A. Appendix H of the Application contains the rate model used to determine the necessary
43 rate increase. The first page is a summary of historic and projected expenses and income
44 determined by the rate model. The bottom of that page shows the total cash flow
45 comparisons of a scenario where the Company maintains its existing rates and a scenario
46 where the Company has its income increased by the requested 5%. As shown, the

47 Company is expected to have an approximately \$400,00 deficit in 2022 and an
48 approximately \$470,000 deficit in 2023 at the existing rates. The Company is projected
49 to have an approximately \$74,000 deficit in 2022 and a \$205,000 surplus in 2023 if the
50 5% rate increases are implemented as shown. However, if no rate increase is obtained
51 until 2023, there will be a deficit in 2023 of approximately \$140,000. The next three
52 pages of the rate model show the historic and projected non-rate income sources,
53 operational and maintenance expenses, debt service, and capital improvements. The last
54 page shows a figure summarizing the preceding 3 years and projected 3 years of revenue
55 and expenditures at both the existing and proposed rates.

56 **Q. Can you explain the source of the historic data included in the rate model?**

57 A. The PSC requires the Company to annually submit financial data to the PSC in a certain
58 format using certain budget item categories. The rate model was set up in a similar
59 format as those annual PSC financial submissions for continuity and ease of review. The
60 Company provided BC&A the last three years of data (2019-2021) that was submitted to
61 the PSC. The rate model includes that PSC historic financial data.

62 **Q. Can you explain the first page of the rate model (the model summary page)?**

63 A. The summary lists the historic number of accounts and their actual growth rates along
64 with the estimated number of future accounts from the Company's master plan. It should
65 be noted that starting in 2019, the future number of accounts was based on the 0.10%
66 growth rate estimated in the Company's Culinary and PI Water Master Plan. The
67 expenditures and income categories shown are copied from subsequent pages of the rate
68 model. To determine the projected 2022 value of the 'Sales – Existing Rates' category,
69 the 2021 sales amount was grown at the projected system growth rate of 0.10%. Later

70 years were increased in a similar fashion by growing the previous year by the projected
71 system growth rate of that year.

72 **Q. Can you explain the second page of the rate model (the non-rate revenue page)?**

73 A. The ‘Non-Utility Income’ category was also grown by increasing the previous year’s
74 revenue by the projected system growth rate with the exception of the 2022 revenue.

75 Based on discussions with the Company, the 2021 income was significantly higher than
76 usual. The 2019 and 2020 values were much more in-line with historic expectations. To
77 avoid overestimating income, the 2022 projection was determined by averaging the 2019
78 and 2020 values and then was grown at the system growth rate. The ‘Fire Protection
79 Customers’, ‘Miscellaneous Service Revenue’, and ‘Other Miscellaneous Water
80 Revenues’ categories were grown by increasing the previous year’s revenue by the
81 projected system growth rate and including an assumed inflation rate of 4.0%.

82 **Q. Can you explain the third page of the rate model (the operation and maintenance
83 expenditure page)?**

84 A. With the exception of six categories, each operations and maintenance category was
85 grown from the prior year’s cost at the assumed 4.0% inflation rate plus half of the
86 system growth rate. Since operational and maintenance costs do not generally directly
87 increase at the same rate as system growth, the system growth rate was halved for these
88 categories. The following six categories were treated differently (by how their base costs
89 were grown): ‘Chemicals’, ‘Materials and Supplies’, ‘Contractual Services – Legal’,
90 ‘Contractual Services – Water System Maintenance’, ‘Rental of Equipment’, and ‘Water
91 Resource Conservation Expense’. Upon discussion with WaterPro, these six categories
92 had abnormalities in the values from 2021 that, if used for projecting income, could lead

93 to less accurate projections of future income. ‘Materials and Supplies’, ‘Contractual
94 Services – Legal’, ‘Contractual Services – Water System Maintenance’, and ‘Rental of
95 Equipment’ all had 2021 values that were either excessively low or high based on the
96 Company’s past experience. Those four categories were calculated based on averaging
97 the values of 2019, 2020, and 2021 before projecting the 2022 value with inflation and
98 half the system growth rate as previously discussed. The ‘Chemicals’ category only used
99 the average of 2019 and 2020 as the basis to project the 2022 value with inflation and
100 half the system growth rate. This was because equipment malfunctions in 2021 caused
101 the Company to have to purchase additional outside chemicals rather than generate their
102 own. Therefore, that whole year was excluded in the future projections. The ‘Water
103 Resource Conservation Expense’ category was grown based only on the 2019 value since
104 the COVID pandemic halted the Company’s usual activities in this category for 2020 and
105 2021.

106 **Q. Can you explain the fourth page of the rate model (the debt service and capital**
107 **improvement projections page)?**

108 A. The Company has an existing loan it obtained in 2013 to pay for pressure irrigation and
109 culinary projects. The total loan amount, as shown in Appendix L of the Application,
110 was \$8,552,878. The Company has indicated that \$4,000,000 of that loan amount was to
111 pay for projects relating to installation of a new culinary water well and a pipeline from
112 that well to the Water Treatment Plant. Therefore, 47% of the loan repayment schedule
113 should be paid by the culinary system. That 47% amount is reflected in the loan
114 payments that are projected into the culinary rate model. That page also shows the
115 system replacements and improvement projects that are projected to be required between

116 now and 2024. The replacements include mostly old and under capacity water pipelines
117 that will need to be replaced, well maintenance and replacement, and water meter
118 upgrades. The listed projects also include construction of the reuse water projects. These
119 improvements are needed to continue providing cost-effective and efficient service to the
120 Company's existing customers. Also included in Appendix L is documentation for a
121 future loan through the Utah Division of Water Resources to help pay for the reuse water
122 projects. The loan has not been issued, just authorized based on WaterPro's prior
123 application. The loan will not be issued until the projects are fully designed. The rate
124 model shows the anticipated loan payments for the loan. As the reuse projects will
125 benefit both the culinary and irrigation systems per the Company's 2018 Water Rights
126 Water Master Plan, the reuse loan payments and capital projects have been allocated
127 based on the same 80/20 split between the culinary and PI systems described in the
128 Application.

129 **Q. The capital improvement projects are shown to occur in particular years. Are those**
130 **expenses certain to occur in those years?**

131 A. All of those replacements and improvement projects are things the Company knows will
132 need to be done within this three-year time period, but there is typically some flexibility.
133 For many of the water pipe replacement projects, for instance, the Company will try to
134 time those replacements so that they are done in concurrence with other projects by the
135 city or state that require the road the pipelines occupy to be excavated for other reasons.
136 That allows the Company to do the work at a lower cost and minimizes the disruption to
137 traffic and the public. Also, if revenues are less than expected or operational costs are
138 higher than expected, the Company may have to postpone some projects.

139 **Q. Can you summarize the test period used in the rate model?**

140 A. Except for a few categories, all income and expense categories were grown based on the
141 2021 financial data provided to BC&A. The following is a list of categories with test
142 periods that instead averaged the historical amounts from some or all of 2019, 2020, and
143 2021 to use a basis for projecting future values (as previously described):

144 Non-Utility Income

145 Chemicals

146 Materials and Supplies

147 Contractual Services – Legal

148 Contractual Services – Water System Maintenance

149 Rental of Equipment

150 Water Resource Conservation Expense

151 Again, these modifications to the general 2021 test period were to account for some
152 fluctuation historical amounts that may not be as accurate in projecting future values.

153 **Q. What do these projections show would be the result of the 5% increase in rates?**

154 A. As shown in the summary page of the rate model, without any changes to existing rates
155 the Company would be expected to have a deficit of approximately \$400,000 in 2022 and
156 approximately \$470,000 in 2023. Assuming the proposed 5% rate increase is
157 implemented in 2022, there would be a deficit of approximately \$74,000 in 2022 and a
158 surplus of \$205,000 in 2023. However, if a rate increase isn't implemented until 2023,
159 then the Company would have a deficit of approximately \$140,000 in 2023. Although
160 the Company could ask for a larger rate increase to eliminate all deficit, at this time it has
161 been decided that the Company will slightly adjust the timing of some capital projects

162 and/or dip into its reserve fund to offset the deficit in an attempt to lessen the burden of a
163 larger rate increase on its customers.

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

165 A. Yes.