

DEPARTMENT OF PUBLIC SERVICE REGULATION

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA

* * * * *

IN THE MATTER of the Application of)	REGULATORY DIVISION
AQUAFLO, LLC for Authority to Set Final)	
Rates for Water and Wastewater Services, and)	DOCKET NO. D2011.4.34
Request for Extension of Interim Rates while)	
Final Rates are Established)	

PREFILED DIRECT TESTIMONY OF PAUL R. SCHULZ

April 2012

TABLE OF CONTENTS

I.	QUALIFICATIONS	1
II.	RETURN ON EQUITY	2
III.	RATE CASE EXPENSE	6
IV.	INCOME TAXES.....	11
V.	OPERATING AND MAINTENANCE EXPENSES.....	15
VI.	VALUATION OF PLANT/RATE BASE	20
VII.	CAPITAL STRUCTURE	23

1

I. QUALIFICATIONS

2

3 **Q. PLEASE STATE YOUR NAME, OCCUPATION, AND ADDRESS.**

4 A. My name is Paul R. Schulz. I am employed as a Rate Analyst with the Montana
5 Consumer Counsel (MCC). Our offices are located at 111 N. Last Chance Gulch, Suite
6 1B, Helena, MT 59620-1703.

7 **Q. PLEASE DESCRIBE YOUR QUALIFICATIONS AND EXPERIENCE.**

8 A. I graduated magna cum laude with a B.A. degree in Economics from Colorado
9 State University and I hold a M.S. degree in Accounting from the University of Virginia.
10 I am the initial recipient of the Graduate Certificate in Public Utility Regulation and
11 Economics from New Mexico State University and I've attended the Regulatory Studies
12 Program, or Camp NARUC, at Michigan State University. Currently, I am a member of
13 the NASUCA Gas Committee and I am an Observer Member of the NARUC Staff
14 Subcommittee on Accounting and Finance. For six years I worked in different industries
15 in the private sector in internal auditing, accounting, and accounting analysis positions.
16 In addition, I was employed for over a year as a Budget Analyst with the Montana
17 Department of Labor and Industry prior to my employment at the Consumer Counsel
18 commencing in March, 2009. I am also licensed as a CPA by the State of Colorado.

19 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
20 **PROCEEDING?**

21 A. The purpose of my testimony is to present the results of my review of the
22 testimony and schedules submitted by AquaFlo, LLC in support of its request to
23 permanently increase rates and charges and amend Tariff Rules and Regulations for water
24 and wastewater service. The amount of the requested increase is \$34,554 which would
25 result in total revenues of \$170,726. The current rates were established in Montana
26 Public Service Commission (Commission) Interim Order No. 6985b. I have also
27 reviewed responses to data requests from the MCC and Commission Staff and have
28 discussed items from this docket with Company personnel to obtain additional
29 information and explanations. My testimony includes suggested modifications to some

1 of the figures as presented by the Company. My analysis indicates that AquaFlo, LLC
2 will have an opportunity to earn a fair and reasonable return with an overall revenue
3 requirement of \$133,462 as outlined in Exhibit PRS-1 and graphically represented on
4 Exhibit PRS-1A. Suggested adjustments follow by subject area and associated
5 supporting exhibits PRS-1 through PRS-15 are attached.

6

7

II. RETURN ON EQUITY

8

**Q. WHAT RETURN ON EQUITY PERCENTAGE IS THE COMPANY
9 REQUESTING IN THIS DOCKET?**

10

A. AquaFlo is requesting a return on equity (ROE) of 10.5% based on Mountain
11 Water Company's (MWC) request for an ROE of 11.0% in its last general rate case
12 (*Docket No. D2010.4.41*) and because water consumption by AquaFlo customers dropped
13 23% after AquaFlo went from a flat rate design to a combination flat plus volumetric rate
14 design (footnote 5 of Sandra Barrows pre-filed testimony). The change to a metered
15 charge was requested by AquaFlo itself in docket D2009.1.9. See ¶7 of PSC Interim
16 Order No. 6985b. With regard to Mountain Water, it should be noted that Mountain
17 Water *requested* an ROE of 11.0% and presented evidence supporting such, but evidence
18 was also presented in that docket by the Consumer Counsel witness supporting an ROE
19 range of 7.0% to 10.0% and that case was settled, as Ms. Barrows mentions in her
20 testimony, at an ROE of 10.0%.

21

**Q. DO YOU AGREE THAT A 10.5% ROE IS APPROPRIATE FOR
22 AQUAFLO GIVEN THE CURRENT INTEREST RATE ENVIRONMENT AND
23 REQUESTED ROEs OF OTHER SMALL MONTANA WATER COMPANIES?**

24

A. No, I do not agree. Since 2009, Ms. Barrows has herself advocated for an ROE of
25 10.0% for several small water companies based on the **actual**, not the requested ROE of
26 Mountain Water. Some of these utilities have flat rate structures and some have
27 combination rate structures (see Exhibit PRS-10). Given that Ms. Barrows is referencing
28 the 11.0% ROE Mountain *requested* in its most recent general rate filing it should be

1 noted that in MWC's previous general rate application (*Docket No. D2008.9.119*) MWC
2 **requested** an ROE of 10.0% and since the month that application was filed (Sept. 2008),
3 the cost of money has declined significantly. The Federal Funds Target Rate has dropped
4 from 2.00% to levels between 0% and .25% and those levels have been maintained since
5 the beginning of 2009 (See Exhibit PRS-12). The Prime Rate has fallen from the
6 beginning of September 2008 from 5.00% to 3.25% where it has essentially stayed since
7 the beginning of 2009 (See Exhibit PRS-13).

8 In the ensuing months since AquaFlo filed its application for increased rates, three
9 significant events have occurred related to interest rates and the near term prospects for
10 those rates to rise. On August 18, 2011, the annualized yield on the 10 year Treasury
11 note fell below 2.00% for the first time ever.¹ In the following seven months, that rate
12 has hovered around 2.00%; rising above that mark and falling below. Earlier in August
13 of 2011, another historic interest rate event occurred as the Federal Reserve Board said it
14 would keep its prominent interest rate near zero until the middle of 2013. "It's the first
15 time the Fed has pegged its 'exceptionally low' rates to a specific date."² Then, in late
16 January of 2012 the Federal Reserve indicated it was likely to keep the federal funds rate
17 low until late 2014.³ Despite Mountain Water's most recent *request* for an 11.0% ROE,
18 the interest rate climate has demonstrated a clear downward trend going back to the time
19 Mountain Water requested a 10.0% ROE. Since then, interest rates have fallen to and
20 stayed at historically low levels for an extended period of time. Statements by the
21 Federal Reserve Board and the movement of 10 year Treasury yields show that there is a
22 great deal of inertia for interest rates to remain low. It is simply inconsistent with current
23 money market realities to suggest that an increase in ROE for AquaFlo is warranted at
24 this time.

25 **Q. DOES AQUAFLO PROVIDE ANY ADDITIONAL CONTENTION AS TO**
26 **WHY IT FEELS IT SHOULD RECEIVE AN ROE OF 10.5%?**

¹ Petruno, Tom. "Historic day for interest rates: 10-year Treasury yield falls below 2%." *Los Angeles Times* 18 Aug. 2011: Web.

² Crutsinger, Martin. "Fed says it will hold rates fast until mid-2013." *msnbc.com* 9 Aug. 2011: Web.

³ Crutsinger, Martin. "U.S. Federal Reserve says interest rate hike unlikely until late 2014." *Moneyville.ca* 25 Jan. 2012: Web.

1 A. Yes, the other argument that AquaFlo makes with regard to a 10.5% ROE is
2 related to the reduction in water consumption they have observed since the
3 implementation of combination flat and volumetric rates.

4 **Q. DOES THIS REDUCTION IN CONSUMPTION SUPPORT ADDITIONAL**
5 **COMPENSATION WITHIN THE ROE?**

6 A. No. The actual drop in consumption after the implementation of combination
7 rates does not, in and of itself, recommend for an adder in ROE. As mentioned
8 previously, Ms. Barrows has advocated for a 10.0% ROE for other small water
9 companies, some of which had combination rates and others that had flat rates. In fact,
10 for those other water utilities that had volumetric rate structures, the proposed rate
11 designs allocated a much larger portion of revenues to be recovered in the volumetric
12 charge than is being proposed for AquaFlo. (See Exhibit PRS-10) For those companies,
13 it was an average of 67.9% of their rate recovered revenues designed to be collected in
14 the volumetric charge compared to the 39% that is proposed for AquaFlo. Consequently,
15 a 23% reduction in consumption translates to a 9% reduction in revenue (23% x
16 39%=8.97%).

17 Nonetheless, the clear implication is that the Company is essentially asking for
18 the reverse of a decoupling adjustment to ROE. In other words, since its revenues are
19 now subject to some variation because of a volumetric rate component, it feels it should
20 receive a higher ROE as compensation. Advocacy for an adjustment to ROE because of
21 either the adoption or abandonment of some form of decoupling is based on the premise
22 that one party (utility or ratepayer) has been relieved of some risk which has now become
23 the burden of the other party (ratepayer or utility). That reduction and concomitant
24 assumption of risk by the respective parties then requires an adjustment to ROE to
25 compensate one party and charge the other for the risk transfer. Each such case must be
26 examined in light of the form of decoupling and its associated features that were or are to
27 be employed because they will impact if and how risk is transferred. In the present case,
28 the decoupled rate design was a flat rate structure with absolutely no volumetric
29 component. This is significant because such a rate design eliminates risk transfer both
30 upon its adoption and abandonment. In moving away from flat rates the utility is giving

1 up almost complete revenue certainty but it is gaining the possibility of earning more than
2 its authorized rate of return if water use rises above test year levels. Consumers are
3 gaining the opportunity to lower their bills through reducing their consumption but they
4 are also giving up the opportunity to use water at a zero marginal cost, which
5 correspondingly lowers the average cost per unit of consumption as more and more water
6 is used. Now ratepayers will be faced with the decision of how much they are willing to
7 pay for water to protect their investment in landscaping. In other words, both parties
8 have gained a new financial opportunity and also assumed a new financial risk. If there
9 is a risk imbalance I would say the greater risk burden lies with consumers because of the
10 existence of the excess usage fee which acts as an inclining block rate thus accelerating
11 the cost to consumers as they reach higher levels of consumption. There is no
12 corresponding lower block to accelerate the negative impact on the Company if
13 consumers exhibit a pattern of low usage.

14 **Q. ARE THERE ANY OTHER FACTORS THAT YOU BELIEVE SUGGEST**
15 **THAT CONSUMERS ARE ACTUALLY ASSUMING MORE RISK THAN THE**
16 **COMPANY DUE TO THE CHANGE IN CONSUMPTION THAT HAS**
17 **OCCURRED?**

18 A. Yes, the new rates established in this case will be calculated using test year
19 volumes. Therefore, the drop in consumption that already has occurred will be accounted
20 for in the new rates. Also, the utility's argument presumes that the drop in consumption
21 was solely the result of a move to volumetric rates. This is indeed a presumption. It is
22 likely that a more predominant reason for the reduction in consumption is that the test
23 year summer of 2010 saw cooler temperatures and especially high levels of precipitation
24 (see Exhibit PRS-14), and homeowners did not feel the need to water as much.
25 Therefore, the Company will be put in the rather advantageous position of having rates
26 set at a higher level because they are calculated based on lower volumes from a year with
27 good levels of precipitation and lower temperatures. In effect, the risk from varying
28 usage volumes due to weather conditions has been shifted disproportionately onto
29 ratepayers because of the particular test year in use. The Company will receive a rate
30 which remunerates it on the basis of lower consumption levels, so the Company already

1 has a built in hedge if consumption levels in any year are low and a bias toward a
2 premium if water usage is particularly high. I am not advocating for a large data
3 collection effort culminating in the application of weather normalization to this small
4 water company, but I am simply suggesting that the Commission be mindful of bias
5 contained in test year volumes when evaluating risk in setting the ROE. My
6 recommendation is that the return on equity be set at 10.0%.

7

8

III. RATE CASE EXPENSE

9 **Q. WHAT IS THE COMPANY REQUESTING RELATED TO RECOVERY**
10 **OF RATE CASE EXPENSE?**

11 A. The Company is asking for recovery of \$34,500 in rate case related professional
12 expenses amortized over two years for an annual recovery of \$17,250. The Utility is also
13 asking to place one year of unamortized rate case expense, or \$17,250, into rate base. At
14 the Utility's proposed ROR of 10.5% this amounts to an additional annual return of
15 \$1,811.25. Consequently, the request in the application is for a total of \$19,061.25
16 annual recovery *and* return on rate case expense.

17 **Q. UNDER THE COMPANY'S PROPOSAL WILL THIS EXPENSE**
18 **RECOVERY AND RETURN ON AN EXPENSE EXPIRE AFTER TWO YEARS?**

19 A. No. As included in the rate application the recovery and return on rate case
20 expense would remain in rates until such time as the Utility files an application and the
21 Montana Public Service Commission (MT PSC) issues an order for new rates.

22 **Q. AS INCLUDED IN THE UTILITY'S APPLICATION, WHAT IS THE**
23 **VALUE OF THE RECOVERY OF AND ON RATE CASE EXPENSE AFTER**
24 **TWO YEARS?**

25 A. After two years the Utility will have recovered their full rate case expense and
26 \$3,622.50 in return on rate case expense. At that point in time the \$17,250 will
27 essentially convert from expense recovery to a return on rate base in addition to the

1 \$1,811 that the company would already be receiving as a return on rate case expense.
2 Therefore, the full \$19,061.25 *in and of itself* would amount to a yearly return of 7.35%
3 (\$19,061.25/\$259,342.00). Again, using the numbers in the Company's rate application,
4 this would result in a total return of 17.85% (\$46,292/\$259,342) that would remain until
5 the Company filed for and received new rates.

6 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL OF A TWO**
7 **YEAR AMORTIZATION PERIOD?**

8 A. No, I do not. The ideal amortization period is one which matches with the typical
9 between rate case intervals of the Company. This is somewhat difficult to do with small
10 water companies that have little regulatory history behind them or that may even be filing
11 for initial rates. However, there is some Company history in this case and one can look at
12 experience with other small Montana water companies for guidance. This Utility
13 originally filed for rates in May of 2004 when it was owned by MT Associates. Its next
14 filing for rates (not the application for approval of the sale to AquaFlo) was submitted in
15 January of 2009. That is a time period of four years eight months. In calculating the
16 between rate case time interval for AquaFlo I did not consider this most recent filing.
17 The reason for that is that this current filing was not initiated solely by AquaFlo's free
18 choice. The stipulation from docket D2009.1.9 required them to file within two years of
19 the Commission's order and they have been operating under interim rates with an
20 expiration provision. A between rate case interval based on the Company's own volition
21 seems more relevant in the choice of an appropriate amortization period.

22 Further, in response to data request AQN-001 in docket No. D2009.12.156 I
23 showed the between rate case time intervals for five other small Montana water
24 companies. The average of those intervals is five years, one month. This data adds a
25 level of comfort that the between rate case period of four years eight months for AquaFlo
26 is not inconsistent with what other small Montana water companies have done. Overall,
27 this data suggests that a more appropriate amortization period for AquaFlo would be four
28 to five years.

1 **Q. DO YOU FEEL IT IS APPROPRIATE TO INCLUDE UNAMORTIZED**
2 **RATE CASE EXPENSE IN RATE BASE?**

3 A. On the contrary, I believe it would be inequitable to ratepayers and provide
4 perverse incentives to the Utility to allow unamortized rate case expense in rate base. I
5 appreciate that the Utility has to hire an attorney and a regulatory consultant in order to
6 apply for new rates with the Public Service Commission. It is a necessary expense for
7 doing business as a regulated Utility. However, those professionals are hired to
8 specifically represent the interests of the Utility, not any other party. By placing
9 unamortized professional fees into rate base the Utility is incented to spend more to
10 prosecute their case. The Utility will already receive compensation to promote their
11 viewpoint from those who may oppose it, and in addition, the Utility would earn a return
12 on those fees just like capital invested in pumps, generators, and water mains. Incentives
13 should align with desired behavior. Typically, utility regulators want to encourage cost
14 containment. The Commission should consider balancing the necessity of such expenses
15 in conjunction with establishing the proper incentive to control this cost while being
16 mindful of who actually benefits from this expense. Putting rate case expense into rate
17 base violates this balance and accordingly, rate case expense should not be allowed in
18 rate base.

19 **Q. HOW DOES THE TYPICAL HANDLING OF MONTANA SMALL**
20 **WATER COMPANY RATE CASE EXPENSES PROTECT CONSUMERS AND**
21 **PROVIDE PROPER INCENTIVES TO THE UTILITY FOR COST**
22 **CONTAINMENT?**

23 A. As was done in this case, the Utility has to estimate an amount for professional
24 expenses and place that amount in their application. If it overestimates, it may draw
25 unwanted scrutiny from the Commission and intervenors. On the other hand, if it
26 underestimates it will be asking for less than it actually expends. The Utility is not
27 guaranteed to receive recovery for each regulatory professional fee it incurs. The
28 incentive is to not spend beyond a reasonable estimate. Also, the Utility has to spend the
29 money upfront to pay the professionals it retains. In other words, the Utility is
30 responsible for initially financing this expense and then financing a declining portion of

1 this expense over the amortization period. Particularly for a small water utility, this may
2 be a significant cost constraint. The Utility will receive full recovery for those expenses
3 but not until the amortization period has run. This shifts some of the cost burden onto the
4 Utility because of the time value of money although it is not as strong of an incentive
5 when money costs are low.

6 **Q. WOULD IT BE PREFERABLE TO SPECIFICALLY TRACK THE**
7 **AMOUNT SPENT BY THE UTILITY ON RATE CASE EXPENSE AND THEN**
8 **INITIATE A SURCHARGE TO RECOVER THAT AMOUNT OVER A FIXED**
9 **TIME PERIOD THAT WOULD EVENTUALLY EXPIRE WHEN EXPENSE**
10 **RECOVERY IS COMPLETE?**

11 A. Such an idea does have appeal from the standpoint of eliminating ongoing
12 expense recovery past the amortization period. It also alleviates the issue of the Utility's
13 actual rate case expenses being more or less than the amount put forward in the rate
14 application. However, there are also a few concerns that I have with this approach.

15 One concern has to do with the incentive for cost containment. If a utility knows
16 that it will receive recovery for every rate case expense that it can document, there may
17 be less incentive to curb this expense and more to spend to promote its case. Practically
18 speaking, small water utilities are restricted by the availability of resources to pay for
19 professional expenses; nonetheless, it is important to be mindful of all the issues should
20 such a methodology be widely adopted and applied to the state's larger utilities that have
21 substantial available liquidity to finance regulatory professionals.

22 The second concern has to do with the additional administrative effort associated
23 with the application of a temporary surcharge. This is relevant for small water utilities
24 that are less apt to have the regulatory acumen to administer a tracking mechanism. That
25 is not to say that this is an impossible hurdle but it may require additional expense on the
26 part of the utility (and ultimately ratepayers) for more time from a regulatory consultant.
27 Also, there will be additional time required on the part of Commission staff to verify and
28 track actual rate case expenses and then to establish and monitor the surcharge.

1 A third concern relates to the simplicity of rates for consumers. The issue is
2 whether adding a rate case expense surcharge that will expire after a specified time period
3 will add unnecessary complexity and confuse consumer expectations of what rates shall
4 be. There are also attendant issues, such as what happens if the Utility files for new rates
5 prior to the expiration of the surcharge. Do any unrecovered amounts carry over or not,
6 and will this simply add more complexity to rates that must be explained to consumers?

7 These concerns are summarized by the ninth attribute of a sound rate structure as
8 presented in *Principles of Public Utility Rates* (Bonbright, Danielson, and Kamerschen,
9 1988: 384), which is, “The related, practical attributes of simplicity, certainty,
10 convenience of payment, economy in collection, understandability, public acceptability,
11 and feasibility of application.”

12 **Q. GIVEN THESE CONCERNS DO YOU THEN RECOMMEND AGAINST**
13 **THE ADOPTION OF A RATE CASE EXPENSE SURCHARGE IN THIS CASE?**

14 A. Yes, I’m inclined to recommend that the traditional approach to handling rate case
15 expense be maintained in this case. In order for that avenue to work best the selection of
16 a proper amortization period is particularly crucial. Nonetheless, I ultimately see this
17 matter as a choice between two options that both have legitimate merits and potential
18 hazards. Therefore, while I lean toward maintaining the current approach I do not have a
19 particularly strong opinion on the issue. I am mostly concerned that in its decision
20 process the Commission be aware that specific tracking and recovery of rate case expense
21 is not a panacea.

22 **Q. WHAT IS YOUR SPECIFIC RECOMMENDATION FOR RATE CASE**
23 **EXPENSE RECOVERY IN THIS DOCKET?**

24 A. My recommendation is that rate case expense be amortized over four and two-
25 thirds years. This aligns with the Company’s experience and it is close to the average
26 between rate case time interval of other small water companies in the state. As
27 mentioned earlier, I strongly advise against the inclusion of rate case expense in rate base.
28 Implementation of these recommendations would lead to annual rate case expense
29 recovery of \$7,388 ($\$34,500/4.67\text{yrs}$). This is a yearly reduction of \$9,862 compared to

1 the Utility's request of \$17,250. This reduction is actually greater when one takes into
2 account the elimination of rate case expense from rate base.

3

4

IV. INCOME TAXES

5 **Q. WHAT HAS BEEN YOUR RECOMMENDATION IN OTHER MT PSC**
6 **DOCKETS FOR THE TREATMENT OF INCOME TAXES FOR WATER**
7 **UTILITIES THAT ARE ORGANIZED AS PASS-THROUGH OR**
8 **“DISREGARDED” ENTITIES FOR TAX PURPOSES?**

9 A. I have recommended disallowance of income taxes from the revenue requirement
10 because in those cases the Utility itself does not incur a tax liability that has to be paid.
11 Tax attributes (deductions, credits, income) of the Utility are disregarded or “passed-
12 through” to another ultimate taxpayer that may be the direct owner of the Utility; or the
13 tax attributes of the Utility may actually pass through multiple entities before reaching
14 the taxable person or entity that will use those attributes in determining if they have
15 taxable income, or a loss for tax purposes that may result in a tax refund.

16 **Q. WHAT WOULD YOUR RECOMMENDATION BE FOR UTILITIES LIKE**
17 **NORTHWESTERN ENERGY OR MONTANA-DAKOTA UTILITIES THAT**
18 **ARE ORGANIZED AS SUBCHAPTER C CORPORATIONS?**

19 A. I would recommend that they receive recovery for income taxes in the revenue
20 requirement. Subchapter C corporations as an entity pay taxes. Likewise, if a C
21 Corporation were to report a loss for tax purposes, that loss could be offset against
22 positive income in a prior and/or future tax year(s).

23 **Q. IS IT THE CASE THAT IMPLEMENTATION OF SUCH**
24 **RECOMMENDATIONS CREATE AN INEQUITABLE SITUATION BECAUSE**
25 **UTILITIES ORGANIZED AS C CORPORATIONS ARE MADE MORE**
26 **ATTRACTIVE TO INVESTORS THAN UTILITIES ORGANIZED AS PASS**
27 **THROUGH ENTITIES BECAUSE THEY RECEIVE COMPENSATION FOR**
28 **INCOME TAXES WHEREAS PASS-THROUGH ENTITIES DO NOT?**

1 A. No, that is not the case. Such recommendations actually maintain equity for
 2 utilities organized as different types of legal entities and for ratepayers as well. It is
 3 important to remember that when the Commission establishes an ROE it is establishing
 4 an **after-tax** return on the equity funded portion of a Utility's rate base. The after tax
 5 return available to pay debt costs and to compensate equity holders is the same for a C
 6 Corporation that has received recovery for income taxes and for a pass-through entity that
 7 has not. An oft-cited disadvantage of C Corporations is double taxation. C Corporations
 8 pay dividends that will be taxable to the recipients out of after tax profits. Thus, profits
 9 are in effect taxed twice. For a pass-through entity this is not the case. Profits will only
 10 be taxed as they reach the ultimate taxpayer unless one of the members of a pass-through
 11 entity happens to be a C Corporation that distributes dividends. *Figure A* serves to
 12 demonstrate this point, using the numbers included by AquaFlo in their application. It
 13 shows the revenue requirement for the Utility if it receives income tax expense recovery
 14 in rates like a C Corporation compared to the revenue requirement if it is treated as a
 15 pass-through entity and does not receive income tax recovery.

<i>Figure A - Comparison of Tax Treatments</i>			
	C Corporation	Pass-through Entity	
Operating Revenues	\$ 166,375	\$ 159,251	Difference of \$7,124
Other/Non-Utility/Excess use	4,351	4,351	
Total Revenues	\$ 170,726	\$ 163,602	
Operating Expenses	118,726	118,726	
Depreciation and Amort.	14,706	14,706	
Taxes Other Than Income	2,939	2,939	
Income Before Income Taxes	\$ 34,355	\$ 27,231	
Income Taxes	\$ 7,124	\$ -	
Net Operating Income	\$ 27,231	\$ 27,231	
Rate Base	\$ 259,342	\$ 259,342	
Return on Rate Base	10.50%	10.50%	

16
17

1 Regardless of the tax treatment applied, the amount of net operating income or
2 return on rate base is the same. The difference is that the revenue requirement is \$7,124
3 higher for a C Corporation to allow for the taxes that it must pay as an entity. (In the end
4 it would be even a little higher because of the adjustment to the MCC/PSC taxes for the
5 higher revenue number.) The members of a pass-through entity are not disadvantaged by
6 such a tax treatment. In fact, if a pass-through entity were allowed recovery for income
7 taxes that would simply result in an additional return on rate base and inequitable
8 treatment of ratepayers. Given the numbers in *Figure A*, members of a pass-through
9 entity would receive \$34,355 or a 13.25% return on rate base if income tax recovery were
10 included in the revenue requirement. This is because the revenue requirement would be
11 increased by \$7,124 for a non-existent tax liability. No money has to be remitted to the
12 taxing authorities by the Utility. In such a scenario, equity holders in the Utility are
13 granted a windfall at the expense of ratepayers.

14 **Q. SINCE AQUAFLO HAS MADE A FORM 8832 ELECTION TO BE**
15 **TREATED AS A C CORPORATION FOR TAX PURPOSES DO YOU**
16 **RECOMMEND THAT INCOME TAX EXPENSE RECOVERY BE ALLOWED**
17 **IN THIS PRESENT CASE?**

18 A. No. I recommend that AquaFlo be treated as a pass-through entity for tax
19 purposes and that no income tax expense recovery is included in the revenue requirement.

20 **Q. IS THAT NOT AN UNFAIR RECOMMENDATION CONSIDERING**
21 **THAT AQUAFLO DOES PAY INCOME TAXES AS AN ENTITY DUE TO THE**
22 **FORM 8832 ELECTION THAT IT HAS MADE AND THAT YOU HAVE**
23 **INDICATED YOU WOULD RECOMMEND INCOME TAX RECOVERY FOR A**
24 **UTILITY ORGANIZED AS A C CORPORATION SUCH AS NORTHWESTERN**
25 **ENERGY?**

26 A. No, I believe such a recommendation actually maintains equity in this case and is
27 not inconsistent with income tax recovery for a large Utility like NorthWestern.
28 Counterbalancing the drawback of double taxation for C Corporations are some positive
29 features that explain why it is the entity of choice for many large enterprises. There is no

1 limit on the number of shareholders in a C Corporation (Subchapter S Corporations are
2 limited to 100 shareholders) and a C Corporation can issue different classes of stock
3 which can be traded publicly. Also, a C Corporation is set up to exist in perpetuity.

4 The point is that a large publicly traded Utility like NorthWestern has but one
5 choice when it comes to their legal structure and that is to be organized as a C
6 Corporation. However, for a small water utility like AquaFlo there are a variety of entity
7 structures available to it. AquaFlo is actually organized as a single member Limited
8 Liability Company (LLC) but it has made an *affirmative election* to be treated like a C
9 Corporation solely for income tax purposes. The default tax treatment for a single
10 member LLC is to be treated as a disregarded entity. In fact, the response to PSC-022 in
11 docket D2009.1.9 indicates that for tax year 2007, AquaFlo was taxed as a pass-through
12 entity but then made the election to be taxed like a C Corporation starting in 2008. In the
13 preceding discussion it was demonstrated that there is no disadvantage to the members of
14 a pass-through entity that own a utility in not receiving income tax recovery in the
15 revenue requirement. On the other hand, there is an additional burden placed on
16 ratepayers when a utility is taxed as a separate entity. Large publicly traded utilities
17 cannot practically avoid such a situation, but AquaFlo created that situation.

18 **Q. IF THE FORM 8832 ELECTION, AS PART OF AN OVERALL TAX**
19 **PLANNING STRATEGY, LEADS TO AN OVERALL LOWER TAX LIABILITY**
20 **FOR MEMBERS OF AQUASIERRA, SHOULD INCOME TAX RECOVERY BE**
21 **ACCOMMODATED?**

22 A. Even if some members of AquaSierra are incurring a marginally smaller tax
23 liability because the Form 8832 election is part of an overall tax strategy, ratepayers
24 should not be required to finance that strategy. The Commission should not be asked to
25 accommodate individual tax planning scenarios. The response to PSC-028 shows that
26 impact on ratepayers was not part of the analysis in AquaFlo deciding to make the Form
27 8832 election. AquaFlo's ratepayers should not be required to pay for an elective tax
28 treatment that creates an additional tax liability at the entity level and which was chosen
29 solely at the discretion of the Utility.

1

2

V. OPERATING AND MAINTENANCE EXPENSES

3

**Q. DO YOU AGREE WITH THE COMPANY'S APPROACH OF
ADJUSTING NINE OUT OF ELEVEN CATEGORIES OF OPERATIONS AND
MAINTENANCE EXPENSE BY EITHER EMPLOYING A THREE YEAR
AVERAGE OR USING A PROJECTED NUMBER?**

7

A. I do in part. It is important when examining test year expenses to adjust for any expenses that are non-recurring or are at apparently aberrant levels. The point of using a test year is to establish a data set that is representative of "normal" utility operations and therefore leads to the establishment of a revenue requirement that is properly aligned or matched with that level of "normal" expenses. Also, there is recognition of the possibility that there may be events occurring subsequent to the test year that will change what a representative year looks like going forward. The Administrative Rules of Montana (ARM) in Rule 38.5.106 allow for adjustments to costs, "...which are known with certainty and measurable with reasonable accuracy at the time of the filing." A three year average provides a reasonable foundation for an expense that shows significant year to year variability. This is especially true for a Company like AquaFlo that maintains its accounting records on a cash basis.

19

**Q. WHY DOES THE USE OF CASH BASIS ACCOUNTING MAKE THE USE
OF AN AVERAGE FOR DETERMINING EXPENSES PARTICULARLY
LEGITIMATE?**

22

A. In cash basis accounting, revenues are recorded when cash is actually received, not necessarily earned, and expenses are recorded when they are paid, not necessarily incurred. The result is that large amounts of revenue or expense may be recorded at a point in time that has little to do with the timing of the activities that created the revenue or expense. Essentially, the matching principle has been violated. The matching principle seeks to match the revenues earned for a period of time with the expenses incurred to generate those revenues. Therefore, a single year of cash basis recorded financial activity may exhibit extreme cash inflows and/or outflows that are not

29

1 representative of a typical year of business activity for that enterprise. In the case of a
2 cash basis water utility that bills its customers monthly, the primary concern would be
3 with the timing of the recording of expenses. Use of a multiple year average comes
4 closer to representing the results that would be obtained by the use of accrual basis
5 accounting. As long as a Company is paying its bills, cash and accrual basis accounting
6 will yield more similar results over longer time frames.

7 **Q. DO YOU AGREE WITH THE USE OF A PROJECTED NUMBER FOR**
8 **SETTING A TEST YEAR EXPENSE TO BE USED IN DETERMINING RATES?**

9 A. Only in limited circumstances where it is known an expense will definitely be
10 incurred but there is little historical evidence as to what the amount of that expense will
11 be. Or there may be cases where there is a known change to an expense that will persist
12 in future years but is of course not reflected in past years. Montana does not use a future
13 test year but as indicated above allows for “known and measurable” changes to an
14 historic test year. Those changes are to be “known with certainty and measurable with
15 reasonable accuracy.” Projected figures should be evaluated against that standard.

16 **Q. THEN, ARE YOU COMFORTABLE WITH THE EXPENSES THAT MS.**
17 **BARROWS ADJUSTED USING A THREE YEAR AVERAGE?**

18 A. Yes.

19 **Q. WOULD YOU CHANGE HOW THE “PROJECTED” EXPENSES ARE**
20 **CALCULATED AND WHAT NUMBERS WOULD YOU RECOMMEND FOR**
21 **THOSE EXPENSES?**

22 A. Yes, in some instances. I would generally use a three year average, with some
23 exceptions, for those figures. My specific recommendations for each of those expenses
24 are listed below.

25 *Operating & Maintenance*

26 My suggestion is to set this expense at \$14,418 which is the two year average for
27 2009 (\$9,243) and 2010 (\$19,593). I would normally use a three year average. However,

1 the provided information for 2011 does not cover the whole year simply because of the
2 timing of this docket. The information I have available for 2008 is from AquaFlo's
3 annual report to the Commission. Apparently, the Company changed the categories they
4 used for reporting O&M expenses in 2009, and 2008 does not report O&M expenses as a
5 separate expense.

6 The Company response to MCC-003 indicates that the *accrual* amount in 2010
7 for this expense is \$10,124. Nonetheless, further on that response indicates that there was
8 deferred maintenance until the rate increase of 2010 was implemented. Consequently,
9 the Company is using a "projected" figure to take that into account. However, those new
10 rates were authorized with eight months remaining in 2010. The accrual figure for 2010
11 of \$10,124 is substantially less than the cash basis figure of \$19,593. This suggests that
12 the Company paid about \$9,500 to settle O&M expenses from 2009 or earlier which was
13 during the supposed time of deferred maintenance. The \$10,124 accrual figure also
14 suggests that the Company did not suddenly increase its O&M spending when new rates
15 went into effect. This is further substantiated by the figure provided in the 2011 cash
16 basis General Ledger. The information provided goes through June 27, 2011. As of that
17 time, the Utility had only spent \$1,647 for Operations and Maintenance. Given the
18 \$19,593 spent in 2009, I think a two year average that is not inflated for a presumed catch
19 up on deferred maintenance is advised.

20 Management

21 The Company response to MCC-003 indicates that the \$18,000 included for
22 management is based on a contract. In fact, the copy of the contract provided in response
23 to PSC-016 does show monthly compensation of \$1,500 with the possibility of some
24 additional compensation for after hour calls and/or a bonus. I would be more apt to use a
25 projected number that is based on a contract if that contract was clearly an arm's length
26 contract. In addition to the compensation level, the contract also shows that it was signed
27 by John Maxness on behalf of AquaFlo and by John Maxness on behalf of himself. With
28 the signatory for both parties being one and the same individual, I am reluctant to rely
29 exclusively on the contract because of the apparent conflict of interest.

1 Consequently, I am also recommending using a three year average for this
2 expense category. The expenses for 2008, 2009, & 2010 are \$19,168, \$12,141, and
3 \$16,372 respectively. The resulting average is \$15,894. The difficulty with this expense
4 is that the contract for the predecessor manager, Commissioner Bill Gallagher, was also
5 signed on behalf of the Utility and the individual by one and the same person. For that
6 reason, my comfort level with those figures is not particularly high; nonetheless, that is
7 the record evidence available to me and accordingly I believe a three year average of
8 amounts actually paid is preferable to using an increased contract figure given the
9 apparent conflict of interest.

10 Professional Services and Fees

11 For this category, in response to MCC-003, the Company says it considered the
12 three year average of \$20,058 to be too high and instead chose to use an estimate of
13 \$12,955. While admitting that using the \$12,955 would be a departure from my
14 preference in this case for using historical based averages I think for this expense it is
15 warranted. Again, the issue of related party transactions is at hand. Many of the
16 expenses that a three year average would be based on are for legal services rendered by
17 Commissioner Gallagher when he was Manager of AquaFlo. Absent a history of arm's
18 length transactions to establish an average, I recommend acceptance of the Company's
19 effort to constrain this cost at what they believe is a more accurate annual estimate of
20 \$12,955, which is 35.4% lower than the three year average.

21 Testing and Monitoring

22 In this category, I am also recommending acceptance of the Company's projected
23 figure. In this case, it is because the Company indicated in the response to MCC-003 that
24 it arrived at its figure of \$5,905 due to increased compliance requirements in 2010.
25 Obviously, past years and a related average would not have the costs of new Department
26 of Environmental Quality (DEQ) requirements embedded in them.

27 Public Relations/Meetings

1 Montana Code Annotated (MCA) 2011 §69-3-307 prohibits the recovery of
2 advertising unless it “encourages the conservation of energy or product safety...or
3 recommends usage at times of lower rates or lower demand.” Recovery of institutional
4 advertising is not permitted. Essentially, the only advertising allowed is advertising
5 related to conservation or safety education. The Company’s response to MCC-015
6 indicates that conservation is discussed at these meetings. However, it appears that the
7 primary purpose of this expense was to provide food and promotional items to encourage
8 attendance at Home Owners Association (HOA) meetings. This purpose is also revealed
9 in the very title of this expense category. The Company is proposing a projected annual
10 expense level for this category of \$2,000. In 2009, \$138.72 was expensed in this
11 category, \$1008.32 in 2010, and nothing through the first half of 2011. Even if
12 institutional advertising were allowed, \$2,000 would be excessive given the 2009/2010
13 two year average of \$573.52. My recommendation is that \$100 be allowed in
14 acknowledgment of the Utility’s effort at some conservation education. Expenses for
15 HOA meetings should be handled through HOA dues and not water utility rates.

16 **Q. DO YOU HAVE ANY OTHER CONCERNS RELATED TO THE**
17 **EXPENSES DISCUSSED ABOVE THAT YOU WANT TO DISCUSS?**

18 A. Yes, there is one concern that I wish to address. In response to PSC-016, the
19 Company provided a copy of the contract with Accounting Beans, LLC which is the
20 company that provides bookkeeping services for AquaFlo. Exhibit-B to that contract sets
21 out how Accounting Beans is to be compensated. The services outlined in Exhibit-A of
22 that contract are compensated based on 10% of gross income from Utility customers and
23 all late fees paid by consumers. This arrangement seems to be aimed at incenting both
24 upfront and late payment collection of customer accounts. That objective is
25 understandable; however, it is also contradictory given that Accounting Beans is
26 responsible for recording and preparing financial information such as the annual report to
27 the MT PSC. Preparers of financial information should not be paid based on the results
28 of the information they present because it creates a conflict of interest. I am not
29 suggesting any wrongdoing and in this case the revenue figures are fairly straightforward.

1 Nonetheless, I encourage the Commission to urge the Utility to pay for these services on
2 an hourly basis to eliminate even the appearance of a conflict of interest.

3 The other issue with this manner of compensation is that, assuming the revenue
4 requirement increases over time, this expense will rise along with it. This expense should
5 be based on the effort required to perform the accounting duties necessary for
6 administering ongoing utility service, not a fixed percentage of revenues. That expense
7 may change at a different pace or perhaps even in a different direction than gross income.
8 This factor also recommends paying for accounting services on an hourly basis.

9

10

VI. VALUATION OF PLANT/RATE BASE

11

**Q. WHAT IS THE IDEAL MANNER IN WHICH TO DETERMINE A
12 VALUE FOR UTILITY PLANT?**

13

A. Ideally, the plant value included in rate base for a rate regulated utility would be
14 equal to the original cost of that plant less depreciation taken. Also, the only plant
15 included in rate base would be “used and useful” as required by Montana Code
16 Annotated (MCA) § 69-3-109 which states, “The commission may, in its discretion,
17 investigate and ascertain the value of the property of each public utility actually used and
18 useful for the convenience of the public.”

19

**Q. ARE THERE CIRCUMSTANCES THAT CAN RENDER THE USE OF
20 ORIGINAL COST LESS DEPRECIATION AN INEQUITABLE MEANS OF
21 DETERMINING UTILITY PLANT VALUE?**

22

A. Yes, there are. In Final Order 6834a of Docket No. D2007.5.49, the Commission
23 approved the sale of the water Utility from MT Associates to AquaFlo at the agreed upon
24 sales price of \$200,000, which was adjusted to account for imputed interest. In her
25 testimony, Ms. Barrows states that this purchase was at a discount and that she used the
26 actual price paid in her calculation of rate base as the Commission envisioned in its
27 Order. When a utility is purchased at a discount, the purchase price is the correct
28 starting point for determining the rate base value of plant. A discounted sales price that is

1 agreed upon at arm's length between two contracting parties may in fact result in a loss to
2 the seller. However, the purchase price then represents the level of investor contributed
3 capital at risk from the current owner. To use a higher valuation for utility plant would
4 simply result in ratepayers absorbing the loss sustained by the prior owner. In essence, a
5 higher valuation would lead to a "phantom" portion of rate base. In this case, the current
6 owner of AquaFlo would then be enjoying recompense in the forms of depreciation
7 recovery and return on equity for a loss it never bore. Under that scenario, the utility is
8 unjustly enriched at the expense of ratepayers. Just as ratepayers should not expect to
9 receive service for which they have not paid, the owners of a utility should not expect to
10 receive a return of and on capital that they have not contributed and placed at risk.

11 **Q. PLEASE DESCRIBE ANY ADJUSTMENTS YOU MADE TO THE**
12 **UTILITY PLANT ACCOUNTS AS CONTAINED IN MS. BARROW'S**
13 **TESTIMONY.**

14 A. The response to MCC-011 indicates that a debt owed to AquaSierra was paid off
15 with land, specifically Skyview Phase II Block 7 Lot 6a which was valued at the time of
16 the 2007 sale at \$5,473. Part c of that response says that the debt was paid on January 4,
17 2011 and that the reduction in the Land account should not be reflected at the end of
18 2010. In fact, Statement C 38.5.123 in the Utility's application does show a reduction in
19 *Account 303 Land & land rights* at the end of 2010. Given the timing of the pay-off, I
20 agree that for book purposes the Land account should not show a reduction at the end of
21 2010. However, for purposes of determining utility property to be included in rate base
22 that reduction should show up in the account balance for both 12/31/2010 and
23 12/31/2009. The response to MCC-011(e) as well as MCC-020 says the drain field on
24 that property was physically disconnected from the system and decommissioned in 2007.
25 In other words, the property was no longer "used and useful" in the provision of utility
26 service and should not be included in rate base. Therefore, the average value for land of
27 \$30,215 that is on Statement C should be reduced to \$27,478 to reflect the exclusion of
28 that land both at the end of 2010 and 2009.

1 **Q. DO YOU HAVE ANY RECOMMENDED ADJUSTMENTS TO THE**
2 **WORKING CASH CALCULATION AS INCLUDED IN THE COMPANY'S**
3 **RATE APPLICATION?**

4 A. Yes. I've modified the calculation of Working Cash to reflect my Operating
5 Expenses figure and also to include an adjustment for property taxes and to reflect a
6 different approach toward handling the MCC/PSC taxes as part of the calculation. On
7 Statement E 38.5.141 of the Company's application, there is no line item to reflect the
8 impact of property taxes on working cash. Property taxes are due five months after the
9 end of the six month period they cover. Taxes for the period ending June 30 are due at
10 the end of November and taxes for the period ending December 31 are due the end of
11 May. The payment of property taxes does not create a need for working cash. In fact, it
12 creates a supply of working cash since payment can be deferred for up to five months
13 after the end of the billing period.

14 The average time, however, that the Company is in possession of that "created"
15 working cash extends beyond five months because the Company receives payment from
16 customers on a monthly basis as indicated in the response to MCC-004. For example, the
17 revenue to cover property taxes for the time period January 1st to January 20th will be
18 received on average on the 15th of February so the Company is in possession of those
19 funds nine and a half months prior to the required payment date of November 30th.
20 Exhibit PRS-11 shows the full calculation of the average amount of time that the
21 Company has the funds to pay first half property taxes prior to the required remittance
22 date of November 30. The result is 6.65 months, and a calculation for second half taxes
23 would basically render the same result. In essence, the Company is in possession of
24 interest free funds in the amount of the property tax payments for an average of 6.65
25 months out of the year. Consequently, these funds reduce the working capital addition to
26 rate base because they do not represent invested or borrowed capital for which the Utility
27 should receive a return. To calculate this supply of working cash, each half of property
28 taxes should be multiplied by 6.65/12 which represents the portion of that working cash
29 that is available on average to the Company on an annual basis. I used \$1232.51 as the
30 property tax figure which is the billed property taxes for 2010 after being reduced by the

1 taxes for Skyview Phase II block 7 Lot 6a (see Exhibit PRS-11) which, as discussed
2 previously, has long been decommissioned from Utility use. This number also agrees
3 with AquaFlo's figure stated in the response to MCC-006.

4 My final adjustment was to also reflect a reduction in the need for working cash
5 created by the MCC/PSC taxes. Like property taxes, MCC/PSC taxes are remitted by the
6 Utility *after* receipt of payment from customers. Again, this creates a supply of cost free
7 funds not a need for working cash. MCA 2011 §§69-1-223 and 69-1-402 require utilities
8 to report gross revenue by calendar quarter and pay the MCC/PSC taxes based on those
9 revenues "within 30 days after the close of each calendar quarter." For example, the
10 funds to cover MCC/PSC taxes for January 1st to January 20th are received on average by
11 AquaFlo on February 15th and are payable on April 30. The full calculation is shown on
12 Exhibit PRS-11 and the result is a "lead" time of 1.17 months. Therefore, the MCC/PSC
13 taxes are multiplied by 1.17/12 which is the portion of those taxes that are available
14 interest free on average to AquaFlo on an annual basis. In addition, I adjusted the
15 MCC/PSC taxes based on my recommended revenue requirement and the updated tax
16 percentages as shown in MT PSC Orders 7175 (MCC tax at 0.12%) and 7176 (PSC tax at
17 0.20%). These rates of course were not issued at the time AquaFlo filed its application.

18

19

VII. CAPITAL STRUCTURE

20 **Q. WHAT CAPITAL STRUCTURE IS THE COMPANY PROPOSING TO**
21 **USE FOR RATEMAKING PURPOSES IN ITS APPLICATION?**

22 A. The Utility is claiming to be 100% equity financed since February of 2011, and
23 that is the capital structure they are proposing to use for ratemaking purposes.

24 **Q. DO YOU AGREE THAT A 100% EQUITY CAPITAL STRUCTURE IS**
25 **THE APPROPRIATE CAPITAL STRUCTURE TO USE FOR RATEMAKING**
26 **PURPOSES IN THIS CASE?**

27 A. No, I do not.

1 **Q. WHY DO YOU NOT AGREE WITH THE USE OF A 100% EQUITY**
2 **CAPITAL STRUCTURE FOR AQUAFLO?**

3 A. I have concerns both on practical and conceptual grounds. A large practical
4 concern that I have is with the incomplete record provided by the
5 Company supporting the 100% equity capital structure that it says is in place. According
6 to the Company there was a complete payoff of all of AquaFlo's debts in February of
7 2011. However, there is no record of the payoff of those debts in AquaFlo's financial
8 records. In response to MCC-013 a), the Utility states that the payoff is not in the 2011
9 ledger. In response to MCC-012 a) and PSC-014 a) it is indicated that those debts were
10 paid off by AquaSierra, LLC which is the 100% owner of AquaFlo. There is scant
11 information available about AquaSierra. The Utility has been reluctant to provide any
12 information on AquaSierra. When its objections to discovery questions on AquaSierra
13 were overruled the responses that followed indicated a general lack of knowledge by
14 current management about AquaSierra prior to 2011. This suggests that there are no
15 members of AquaSierra with knowledge of AquaSierra prior to early 2011 and/or the
16 current members did very little research before choosing to purchase AquaSierra in early
17 2011.

18 **Q. GIVEN THAT AQUASIERRA RETIRED THOSE DEBTS WHY ARE YOU**
19 **NOT SATISFIED WITH THE RECORDS OFFERED BY AQUAFLO?**

20 A. Even though AquaFlo was the benefactor of the debt payoffs enacted by
21 AquaSierra I still would have expected to see some record in the books of AquaFlo, such
22 as an infusion of cash converted to a reduction in liabilities. It would seem that the
23 applicant desires to have AquaFlo viewed in isolation but the isolated records of AquaFlo
24 do not tell the whole story. That concern aside, the payoff of this debt and the 100%
25 ownership of AquaFlo by AquaSierra then leads to the question of how AquaSierra is
26 financed in order to determine the actual capital structure of AquaFlo.

27 **Q. WHY IS THE CAPITAL STRUCTURE OF AQUASIERRA PERTINENT**
28 **TO AQUAFLO'S CAPITAL STRUCTURE?**

1 A. As 100% owner of AquaFlo, AquaSierra's capital structure is highly relevant
2 because of the possibility of double leverage.

3 **Q. PLEASE ELABORATE ON DOUBLE LEVERAGE AND WHY IT IS**
4 **IMPORTANT IN THE ESTABLISHMENT OF AQUAFLO'S CAPITAL**
5 **STRUCTURE FOR RATEMAKING PURPOSES?**

6 A. Double leverage occurs when a parent company (AquaSierra) invests in a
7 subsidiary company (AquaFlo) with money that the parent has borrowed. On the books
8 of the subsidiary the investment of the parent shows up as 100% equity. The subsidiary
9 did not borrow the money from the parent, rather the parent invested directly into the
10 subsidiary. The parent may have also invested some money that was originally sourced
11 as equity capital, but on the books of the subsidiary both the original equity and the funds
12 borrowed by the parent show up as equity. This arrangement is significant for two
13 reasons. First, the borrowed funds of the parent have been transformed into equity. If the
14 subsidiary is awarded an equity return on those funds, the ultimate effect is to give the
15 parent an equity return on capital that is actually borrowed, not contributed. With debt
16 rates typically lower than returns on equity, consumers are forced to pay the parent a
17 profit on those borrowed funds based on the differential between the equity return and the
18 return on debt. In addition, rates will be set based on higher income tax expense than
19 really exists. This is because interest expense deductions that the parent receives that
20 should be applied pro rata to the investment in the subsidiary are unaccounted for because
21 equity is presumed instead of the actual debt.

22 The second reason this is significant is that if one only looks at the capital
23 structure of the subsidiary, it can lead to erroneous conclusions about the risk profile of
24 that particular utility. An extreme situation will serve to illustrate; a 100% debt financed
25 parent could have a wholly owned subsidiary. It would appear that the subsidiary is
26 100% equity financed and not subject to any default risk but the reality is that the parent,
27 and hence the subsidiary, are completely leveraged. If the parent were to experience
28 financial difficulties, it may not take long before it would default on a loan payment and
29 be forced into bankruptcy taking the subsidiary with it.

1 **Q. HOW CAN THE ISSUE OF DOUBLE LEVERAGE BE ADDRESSED**
2 **WHEN SETTING A CAPITAL STRUCTURE USED FOR RATE MAKING**
3 **PURPOSES?**

4 A. There is a “NARUC Adjustment” that imputes part of the interest paid by the
5 parent to the subsidiary, thereby reducing the subsidiary’s income tax expense; however,
6 in this case of pass-through entities, that adjustment is unnecessary. The Commission can
7 apply a double leverage adjustment to determine the true capital structure at the
8 subsidiary level. Such an adjustment accounts for “transformations” of debt to equity and
9 calculates capital structure based on the original nature (debt or equity) of the funds used
10 to finance a utility. Figure B below contains an example of the application of a double
11 leverage adjustment.

Figure B - Example of Double Leverage Adjustment

Parent Company P owns 100% of Subsidiary Utility Company S. Company S has itself borrowed the funds comprising 20% of its capital structure. The remaining 80% of S Co.'s capital structure was financed by the investment from P.

Company P's capital structure is shown below:

	Capital Structure	
	Equity	Debt
Parent Company P	50%	50%

The books of Company S indicate the following capital structure:

	"Apparent" Capital Structure	
	Equity	Debt
Utility Sub Company "	80%	20%

However, the reality of the situation is that the 80% equity from Co. P is actually supported by 50% equity and 50% debt.

	"Actual Source of Funds" Capital Structure	
	Equity	Debt
Utility Sub Company "	50% of 80% = 40%	(50% of 80%) + (20%) = 60%

The effect of the double leverage adjustment on the Rate of Return to Company S can now be demonstrated. Assuming a return on equity of 10%, debt cost of 6% for P and 7% for S:

Using the "apparent" capital structure-Equity (80% x 10%) + Debt (20% x 7%) = 9.4% ROR

Using the double leverage adjustment-Equity (40% x 10%) + Debt (40% x 6%)+(20% x 7%) = 7.8% ROR

1 Without the adjustment for double leverage a premium in ROR of **1.6%** is created.

2

3 **Q. IS IT APPROPRIATE TO APPLY A DOUBLE LEVERAGE**
 4 **ADJUSTMENT TO A SMALL UTILITY LIKE AQUAFLO BUT NOT TO A**
 5 **PUBLICLY TRADED UTILITY THAT HAS INDIVIDUAL SHAREHOLDERS**
 6 **THAT MAY HAVE BORROWED MONEY TO PURCHASE SHARES?**

7 A. Yes, because double leverage is an issue where there is a parent company that can
 8 exert significant control over a subsidiary utility and accordingly has a substantial
 9 financial stake in that utility. An individual shareholder in a large public utility with a
 10 diversified shareholder base will not possess that level of control or financial interest.
 11 The financial demise of one or even dozens of shareholders in a publicly traded utility

1 would not endanger the financial health of that company in the least. Some shareholders
2 may even have to pay higher rates of interest to borrow money than the utility receives in
3 ROE. Applying such an adjustment would be virtually impossible and meaningless in the
4 case of a large publicly traded utility having thousands of shareholders and no parent
5 company or other controlling stockholder.

6 **Q. WHY DO YOU THINK THAT DOUBLE LEVERAGE IS AN**
7 **IMPORTANT ISSUE IN THIS CASE WHEN WE DON'T KNOW WHAT**
8 **AQUASIERRA'S CAPITAL STRUCTURE IS AND HAVE LIMITED EVIDENCE**
9 **AS TO THE ISOLATED CAPITAL STRUCTURE OF AQUAFLO?**

10 A. It is important because a 100% owned subsidiary utility is exactly the context in
11 which double leverage applies. It would be presumptive to ascribe a 100% equity capital
12 structure to AquaFlo without knowing anything about the capital structure of AquaSierra.
13 This would reward the Utility for a capital structure that it has not provided sufficient
14 evidence to support.

15 **Q. WOULD YOU SUPPORT A 100% EQUITY CAPITAL STRUCTURE FOR**
16 **AQUAFLO IF EVIDENCE WAS PRODUCED THAT SHOWED AQUASIERRA**
17 **HAD A 100% EQUITY CAPITAL STRUCTURE, THUS ELIMINATING ANY**
18 **ISSUE OF DOUBLE LEVERAGE?**

19 A. No. As mentioned earlier, I also oppose the use of a 100% equity capital structure
20 on conceptual grounds. As stated by Charles F. Phillips, "In short, regulation is a
21 substitute for competition and should attempt to put the utility sector under the same
22 restraints competition places on the industrial sector."⁴ The reason regulation should
23 attempt to mimic the restraints of competition is because, "... regulated utilities exist
24 within and are important to the overall economy, regulation of public utilities cannot be
25 divorced from the operating logic of competition in the rest of the economy."⁵ In a
26 competitive market firms are induced to pursue both operational and capital structure

⁴ Charles F. Phillips, *The Regulation of Public Utilities: Theory and Practice*, (Arlington, VA: Public Utilities Reports, Inc., 1984), p. 154

⁵ National Regulatory Research Institute, *A Primer on Public Utility Regulation for New State Regulatory Commissioners*, April 2003, p. 2

1 efficiencies. Eugene F. Brigham, in his book *Fundamentals of Financial Management*
2 states, “The optimal capital structure is the one that strikes a balance between risk and
3 return and thereby maximizes the price of the stock and simultaneously minimizes the
4 cost of capital.” This definition of an optimal capital structure makes it clear that there
5 are tradeoffs between risk and return in choosing the optimal capital structure. Equity
6 financing tends to require a higher return and therefore does not help to minimize the cost
7 of capital for the firm; however, it does not pose default risk. Debt financing is typically
8 less costly, helping to maximize profit and lower the cost of capital. Debt financing also
9 offers the advantage of the deductibility of interest expense therefore sheltering some
10 income from taxation. On the other hand, debt carries default risk associated with
11 required payments, which can accelerate a financial downward spiral when a company is
12 struggling. Different policy goals may lead to different conclusions regarding the
13 optimal balance between risk and return.

14 The goal of a firm is to maximize its value, which is achieved through operating
15 efficiencies and through minimizing the firm’s cost of capital. This can be seen in a net
16 present value (NPV) calculation. Operational efficiencies will increase the difference
17 between cash outflows and inflows. Desirable products, proper pricing, and good
18 customer service teamed with good collection policies will help maximize cash inflows.
19 Efficient management of all resources (expenses) used to achieve organizational goals
20 will help to minimize cash outflows. Capital structure efficiency lowers the cost of
21 capital used in the NPV calculation. A lower cost of capital results in a higher NPV.
22 Therefore, in a competitive marketplace the firm would need to consider its cost of
23 capital, along with operational efficiencies, as a matter of survival and could not casually
24 select an inefficient 100% equity capital structure. They may choose such a structure for
25 qualitative or philosophical reasons but they must bear the cost of that choice. Should
26 they include the cost of that choice in the price of their product(s), consumers may vote
27 with their dollars and choose to go to an alternative supplier of the product(s).
28 Consumers are not likely to want to pay a higher price for a product because of a higher
29 cost of capital as opposed to paying more for a superior product which cost more to
30 develop and produce. Also, a Company may be able to produce a superior product at a
31 price equivalent to that of competitors if it can save money through capital structure

1 efficiencies and alternatively spend that money on product development and/or customer
2 service.

3 **Q. GIVEN THE PARADIGM YOU HAVE OUTLINED, IS IT NOT**
4 **INCONSISTENT THAT IN THE PAST YOU RECOMMENDED USING A 100%**
5 **DEBT CAPITAL STRUCTURE FOR RATEMAKING PURPOSES WHEN THAT**
6 **IS WHAT THE RECORD EVIDENCE SHOWED THE CAPITAL STRUCTURE**
7 **TO BE?**

8 A. Not when one considers that emulating market competition is an objective of
9 regulation but that to achieve that objective regulators need to employ some type of
10 incentive mechanism. That mechanism may be regulatory edict or the application of
11 economic incentive(s). As Scott Hempling, the former Executive Director of the
12 National Regulatory Research Institute, has put it, regulation's mission is "...aligning
13 private behavior with the public interest." It would be difficult for a commission to
14 simply declare that a utility have a certain capital structure and see it come to pass. It is
15 more practicable to apply incentives for a utility to move toward a desired capital
16 structure. If there is no intention to modify utility financial behavior and a particular
17 capital structure is intended merely as a component in the calculation to arrive at a certain
18 ROR, it would be more candid and transparent to simply adjust the ROE.

19 There are financial incentives for a company to move from a 100% equity capital
20 structure to more debt if a mixed hypothetical capital structure is used to set revenues. In
21 this case, the *allowed* rate of return (ROR) would be lower than the company's applied
22 for ROR based on an equity rich capital structure. This assumes the cost of debt is less
23 than the cost of equity, which is likely true for a firm starting at 100% equity.
24 Accordingly, the firm could lower its cost of capital to more closely match the allowed
25 ROR by issuing debt. In addition, it would receive the benefit of the tax deductibility of
26 the interest which would enhance the positive impact on return on equity (ROE). Money
27 that does not have to be paid to taxing authorities is available to equity holders. The
28 Company will be incented further to add debt because the revenue requirement would be
29 set using interest synchronization, which would lower expense recovery for income taxes
30 even though the Company does not have actual interest expense to claim on its tax return

1 unless it issues debt. Regulation is then encouraging efforts to lower capital costs just as
2 the market does.

3 Conversely, there are no financial incentives for a company to change its capital
4 structure if a hypothetical capital structure is used that contains more equity than a
5 company actually has (assuming the cost of debt is less than the cost of equity). Such a
6 situation raises the effective ROE by allowing equity returns on a portion of the
7 company's capital that is actually financed through lower cost debt. The company is
8 incited further to maintain the status quo, or even to add more debt, because the revenue
9 requirement will be set using interest synchronization based on the hypothetical capital
10 structure which will impute a smaller deduction for interest expense than actually exists.
11 Consequently, the company will receive income tax expense recovery beyond the amount
12 it actually owes. These factors generate more income available for return to equity
13 holders thus increasing the effective ROE. The company is awarded recovery beyond its
14 actual costs and hence perverse incentives are put in place for that situation to persist.
15 Efforts by the company to increase the amount of equity in the capital structure will
16 simply reduce the effective ROE so the company is not incited to do so.

17 Regulation, like market competition, should encourage the pursuit of the lowest
18 cost capital at an acceptable level of risk. Regulatory endorsement of a 100% equity
19 capital structure is adverse to that goal. A hypothetical capital structure is a legitimate
20 tool in motivating an effort to lower capital costs. However, a hypothetical capital
21 structure does not work "both ways", in that it is not efficacious in motivating an effort
22 by a highly leveraged utility to lower risk through the addition of equity. In that scenario,
23 a hypothetical capital structure merely serves to award the utility additional compensation
24 beyond its actual cost of capital without inspiring an effort to increase equity.

25 **Q. WHAT IS YOUR SPECIFIC RECOMMENDATION FOR THE CAPITAL**
26 **STRUCTURE OF AQUAFLO?**

27 A. Given the practical and conceptual concerns that I've outlined above, I
28 recommend the use of a 55% equity, 45% debt capital structure.

1 **Q. WHAT COST WOULD YOU PROPOSE TO APPLY TO THE DEBT**
2 **PORTION OF THE CAPITAL STRUCTURE THAT YOU RECOMMEND?**

3 A. I recommend the use of 6.5% as the cost of debt. Attachments A, B, and C
4 associated with the response to PSC-014 a) contain the debt agreements comprising the
5 debt obligations of AquaFlo prior to the payoffs by AquaSierra in February 2011. The
6 promissory note with Valley Bank of Helena shows an interest rate of 6.5%. The other
7 loans are with parties related to AquaFlo, and so I believe the best indicator of the cost of
8 debt for AquaFlo is the agreement that it was able to reach at arm's length with a local
9 lending institution. The agreement is dated in June, 2009 and interest rates have been
10 relatively stable since that time. An overall rate of return of 8.425% results when using
11 10% for the ROE and 6.50% for the cost of debt.

12 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

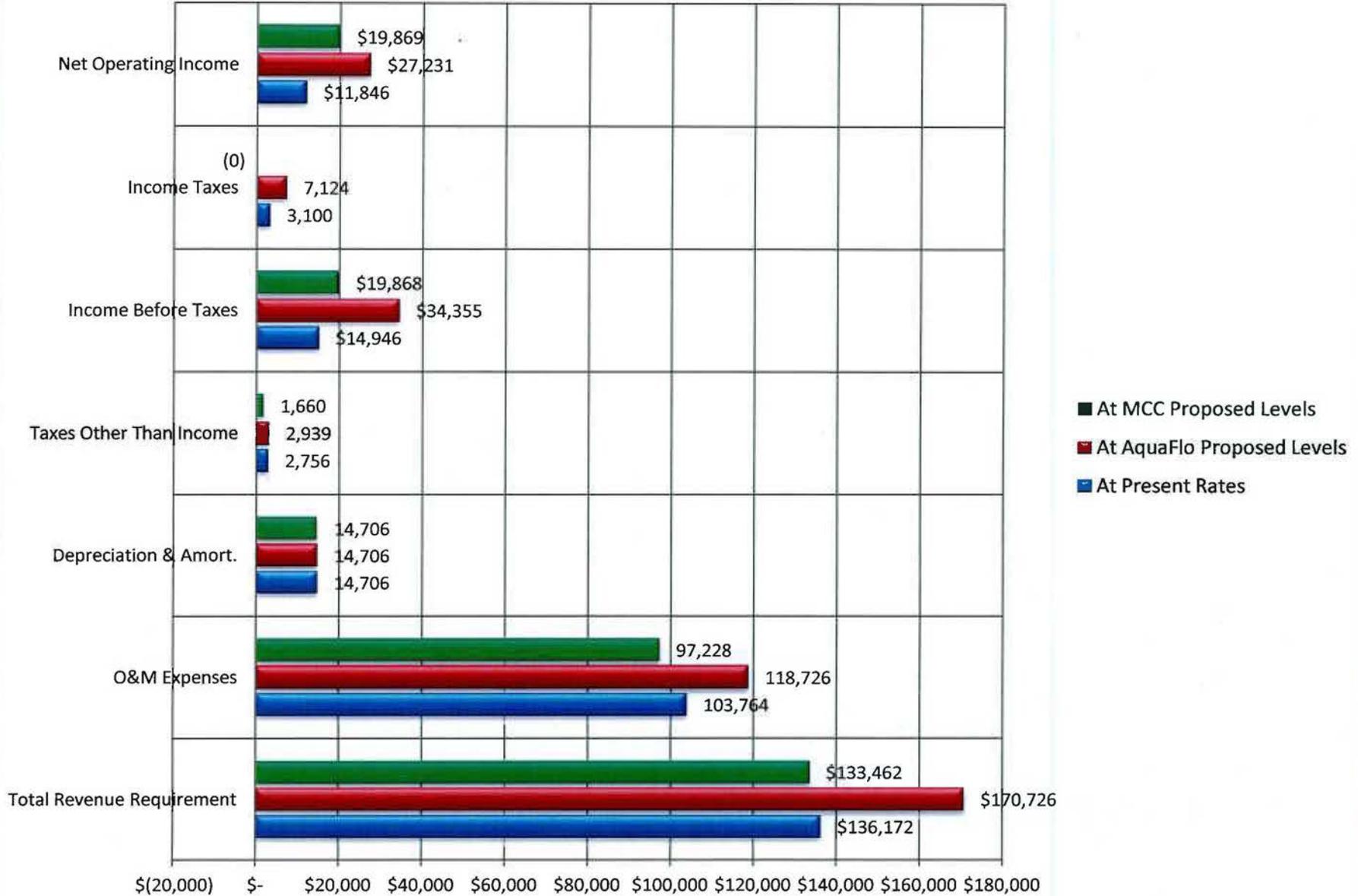
13 A. Yes.

DOCKET NO. D2011.4.34

DIRECT TESTIMONY OF PAUL R. SCHULZ

EXHIBITS

Exhibit PRS-1A Summary Income Statement, Docket No. D2011.4.34



	AquaFlo, LLC				Docket No. D2011.4.34
	Summary Income Statement				Exhibit PRS-1
	At Present Rates	At Proposed Rates	Proposed MCC Adj's	Proposed MCC Figures	
Operating Revenues	\$ 131,821	\$ 166,375	\$ (37,264)	\$ 129,111	
Other/Non-Utility/Excess use	4,351	4,351	-	4,351	
Total Revenue Requirement	\$ 136,172	\$ 170,726	\$ (37,264)	\$ 133,462	
O&M Expenses	103,764	118,726	(21,498)	97,228	
Depreciation & Amort.	14,706	14,706	-	14,706	
Taxes Other Than Income	2,756	2,939	(1,279)	1,660	
Income Before Taxes	\$ 14,946	\$ 34,355	\$ (14,487)	\$ 19,868	
Income Taxes	3,100	7,124	(7,124)	(0)	
Net Operating Income	\$ 11,846	\$ 27,231		\$ 19,869	
Rate Base	\$ 259,342	\$ 259,342	\$ (23,512)	\$ 235,830	
Return on Rate Base	4.568%	10.500%		8.425%	
<i>Operating Revenue Change</i>		\$ 34,554		\$ (2,710)	
Overall Percent Change in Rates		26.21%		-2.06%	

AquaFlo, LLC		Docket No. D2011.4.34
Operating & Maintenance Expenses		Exhibit PRS-2
Company Proposed O&M Exp's in Application		\$ 118,726
<u>MCC proposed adj's</u>		
Operations & Maintenance		(7,630)
Management		(2,106)
Public Relations/Meetings		(1,900)
Rate Case Expense		(9,862)
Adjusted Total		\$ 97,228

AquaFlo, LLC			Docket No. D2011.4.34			
Depreciation & Amortization			Exhibit PRS-3			
	Company's Proposed Balance	MCC Proposed Adj's	MCC Proposed Amts.			
Adjusted Average 2009/2010 Accumulated Depreciation	\$ 42,637.00					
			\$ 42,637.00			
Adjusted Straight Line Depreciation for FY2010	\$ 14,706.00					
			\$ 14,706.00			

AquaFlo, LLC			Docket No. D2011.4.34	
Taxes Other Than Income			Exhibit PRS-4	
	Tax at Current Rates	Tax at Utility Proposed Rates	MCC Adj's	MCC Proposed Amts
MCC Tax	\$ 149.79	\$ 187.80	\$ (27.64)	\$ 160.15
PSC Tax	\$ 571.92	\$ 717.05	(450.13)	266.92
Property Tax ¹	1,938.12	2,034.00	(801.49)	1,232.51
Totals	\$ 2,659.83	\$ 2,938.85	\$ (1,279.26)	\$ 1,659.59

¹ In the response to data request MCC-006 AquaFlo said this number should be adj. to \$1,232.

AquaFlo, LLC			Docket No. D2011.4.34	
Income Taxes			Exhibit PRS-5	
	At Present Rates	At Proposed Rates	Proposed net MCC Adj's	Proposed MCC Figures
Total Revenues	\$ 136,172.00	\$ 170,726.00	\$ (37,264.48)	\$ 133,461.52
O&M Expenses	103,764.00	118,726.00	(21,498.42)	97,227.58
Interest Synchronization			6,898.04	6,898.04
Depreciation & Amort.	14,706.00	14,706.00	-	14,706.00
Taxes Other Than Income	2,756.00	2,939.00	(1,279.26)	1,659.59
Net Taxable Income	\$ 14,946.00	\$ 34,355.00	\$ (14,486.65)	\$ 12,970.31
Taxable Income State	\$ 14,946.00	\$ 34,355.00	\$ (21,384.69)	\$ 12,970.31
State Tax @ 7.00%				
State Tax @ 6.75%	1,008.86	2,318.96	(1,443.47)	\$ 875.50
Reduction because LLC				(875.50)
State Tax (\$50 minimum)N/A		2,318.96	(2,318.96)	-
Taxable Income Federal	\$ 13,937.15	\$ 32,036.04	\$ (19,941.22)	\$ 12,094.81
Federal Tax @ 15%	2,090.57	4,805.41	(2,991.18)	\$ 1,814.22
Reduction because LLC				(1,814.22)
Federal Tax	2,090.57	4,805.41	(4,805.41)	-
TOTAL:	3,099.43	7,124.37	(7,124.37)	-

	AquaFlo, LLC			Docket No. D2011.4.34
	Rate Base			Exhibit PRS-6
		Company's Proposed Amt.	MCC Proposed Adj's	MCC Proposed Amts.
Utility Plant		\$ 269,776.00		
Adj. out SV Phase II Lot 7 Block 6a			(2,737.00)	
				\$ 267,039.00
Working Cash		14,954.00	(3,525.57)	11,428.43
Unamortized Rate Case Expense		17,250.00	(17,250.00)	-
Subtotal		\$ 301,980.00	\$ (23,512.57)	\$ 278,467.43
Less:				
Accumulated Depreciation		42,637.00	-	42,637.00
Net Rate Base		\$ 259,343.00	\$ (23,512.57)	\$ 235,830.43

AquaFlo, LLC		Docket No. D2011.4.34
Working Cash		Exhibit PRS-7
O&M Expenses	\$ 97,228	
Materials & Supplies	-	
Total	\$ 97,228	
45/360	12.5%	
Gross Working Cash	\$ 12,153	
Less: Prop. Tax Lead		
\$1,232.51 X 6.65/12	\$ 683	
Less: MCC/PSC Tax Lead		
\$427.07 X 1.17/12	42	
Net Working Cash	\$ 11,428	

AquaFlo, LLC			Docket No. D2011.4.34
Capital Structure & Rate of Return			Exhibit PRS-8
Description	Ratio	Cost	Weighted Cost
Equity	55.00%	10.00%	5.500%
Debt	45.00%	6.50%	2.925%
Overall ROR			8.425%
MCC Proposed Rate Base			\$ 235,830
Required return on RB			\$ 19,869

AquaFlo, LLC	Interest Synchronization		Docket No. D2011.4.34
			Exhibit PRS-9
	Company Proposal	MCC Proposed Adj's	MCC Proposed
Rate Base	\$ 259,343.00	\$ (23,512.57)	\$ 235,830.43
Weighted Cost of Debt	0.00%	2.925%	2.925%
Pro Forma Interest Expense	\$ -	\$ 6,898.04	\$ 6,898.04

Rate Structures and Requested ROEs of other small MT Water Companies¹

Docket No. D2011.4.34

Exhibit PRS-10

Utility Name	Docket No.	Rate Design	%RR ² in Fixed	%RR ² in Variable	ROE requested in App
Salish Shores	D2006.10.146	Combination ³	29.06%	68.51%	10.0%
Utility Solutions	D2005.11.163	Combination	32.62%	67.38%	10.0%
Big Mountain Water	D2010.1.9	Combination	32.17%	67.83%	10.0%
Treeline Springs	D2010.9.98	Modified Flat ⁴	100.00%		10.0%
AquaNet	D2009.12.156	Flat	100.00%		10.0%

Average for variable rate cost recovery

67.91%

¹Ms. Barrow's was the utility's retained witness in each of these cases.

²These are percentages of rate recovered revenues, i.e. not calculated including other revenues such as meter installations, etc.

³This is a weighted average accounting for all four tariffs, three of which have a quantity charge.

⁴Treeline Springs charges by SFEs (Single Family Equivalent) determined by items such as number of sinks, toilets etc.

AquaFlo Property Taxes

Docket #D2011.4.34

Exhibit PRS-11

Property	2009		2010		2011	
	1st half	2nd half	1st half	2nd half	1st half	2nd half
Skyview Phase II Blk 7 LT 6A	\$ 238.38	\$ 237.65	\$ 240.26	\$ 239.59	\$ 237.66	\$ 236.95
Utility Site 4	209.56	208.12	279.33	277.61	331.70	329.58
Skyview Phase II Blk 3 LT 9A	190.32	189.89	195.92	195.51	198.45	198.01
Skyview Blk 11 Lot 14	139.11	139.04	139.61	139.53	139.84	139.75
Utility Site 1	2.82	2.18	2.76	2.24	2.79	2.21
Totals	\$ 780.19	\$ 776.88	\$ 857.88	\$ 854.48	\$ 910.44	\$ 906.50
Yearly Totals	\$ 1,557.07		\$ 1,712.36		\$ 1,816.94	
Less: SV Phase II Blk 7 LT 6A				\$ 479.85		
Adjusted Total				\$ 1,232.51		

Calculation of Property Tax "Lead" Time

Based on Response to MCC-004 Expense	Days of	Mos. from receipt of rev. until payment	Weighted
Jan recvd 2/15 payable 11/30	20	9.5	190.0
Jan/Feb recvd 3/15 payable 11/30	31	8.5	263.5
Feb/March recvd 4/15 payable 11/30	28	7.5	210.0
March/April recvd 5/15 payable 11/30	31	6.5	201.5
April/May recvd 6/15 payable 11/30	30	5.5	165.0
May/June recvd 7/15 payable 11/30	31	4.5	139.5
June recvd 8/15 payable 11/30	10	3.5	35.0
	181		1,204.5

Avg. months time of possession of funds before payment of property tax is required

6.65

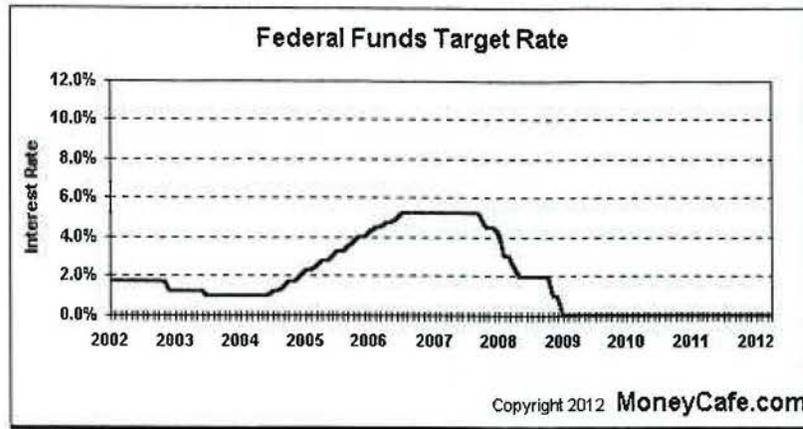
Calculation of MCC/PSC Tax "Lead" Time

Based on Response to MCC-004 Expense	Days of	Mos. from receipt of rev. until payment	Weighted
Jan recvd 2/15 payable 4/30	20	2.5	50.0
Jan/Feb recvd 3/15 payable 4/30	31	1.5	46.5
Feb/March recvd 4/15 payable 4/30	28	0.5	14.0
March recvd 5/15 payable 4/30	11	(0.5)	(5.5)
	90		105.0

Avg. months time of possession of funds before payment of MCC/PSC taxes is required

1.17

Click here for historical graph of the Fed Funds Rate from 1955 to 2011.



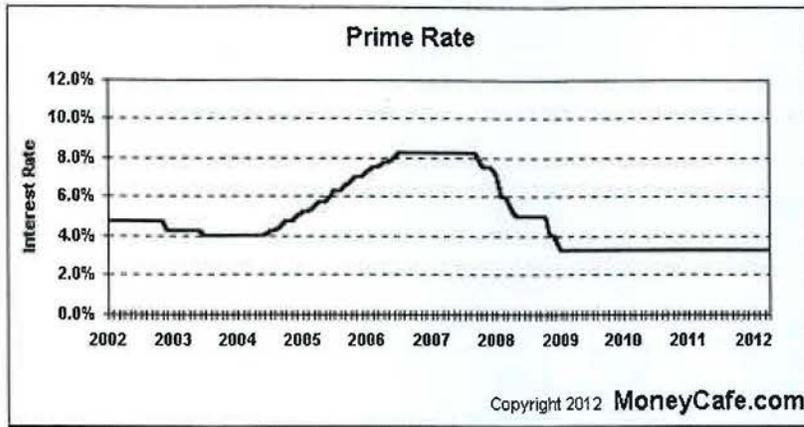
Historical Chart

Federal Funds Target Rate											
Month/Day	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Jan 1	1.75%	1.25%	1.00%	2.25%	4.25%	5.25%	4.25%	0%-0.25%	0%-0.25%	0%-0.25%	0%-0.25%
Feb 1	1.75%	1.26%	1.00%	2.25%	4.50%	5.25%	3.00%	0%-0.25%	0%-0.25%	0%-0.25%	0%-0.25%
Mar 1	1.75%	1.25%	1.00%	2.50%	4.50%	5.25%	3.00%	0%-0.25%	0%-0.25%	0%-0.25%	0%-0.25%
Apr 1	1.75%	1.25%	1.00%	2.75%	4.75%	5.25%	2.25%	0%-0.25%	0%-0.25%	0%-0.25%	0%-0.25%
May 1	1.75%	1.25%	1.00%	2.75%	4.75%	5.25%	2.00%	0%-0.25%	0%-0.25%	0%-0.25%	
Jun 1	1.75%	1.25%	1.00%	3.00%	5.00%	5.25%	2.00%	0%-0.25%	0%-0.25%	0%-0.25%	
Jul 1	1.75%	1.00%	1.25%	3.25%	5.25%	5.25%	2.00%	0%-0.25%	0%-0.25%	0%-0.25%	
Aug 1	1.75%	1.00%	1.25%	3.25%	5.25%	5.25%	2.00%	0%-0.25%	0%-0.25%	0%-0.25%	
Sep 1	1.75%	1.00%	1.50%	3.50%	5.25%	5.25%	2.00%	0%-0.25%	0%-0.25%	0%-0.25%	
Oct 1	1.75%	1.00%	1.75%	3.75%	5.25%	4.75%	2.00%	0%-0.25%	0%-0.25%	0%-0.25%	
Nov 1	1.75%	1.00%	1.75%	4.00%	5.25%	4.50%	1.00%	0%-0.25%	0%-0.25%	0%-0.25%	
Dec 1	1.25%	1.00%	2.00%	4.00%	5.25%	4.50%	1.00%	0%-0.25%	0%-0.25%	0%-0.25%	

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Source: Federal Reserve Board

Click here for the complete historical graph of the Prime Rate from 1930 to 2011.



Historical Chart

Prime Rate											
Month/Day	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Jan 1	4.75%	4.25%	4.00%	5.25%	7.25%	8.25%	7.25%	3.25%	3.25%	3.25%	3.25%
Feb 1	4.75%	4.25%	4.00%	5.25%	7.50%	8.25%	6.00%	3.25%	3.25%	3.25%	3.25%
Mar 1	4.75%	4.25%	4.00%	5.50%	7.50%	8.25%	6.00%	3.25%	3.25%	3.25%	3.25%
Apr 1	4.75%	4.25%	4.00%	5.75%	7.75%	8.25%	5.25%	3.25%	3.25%	3.25%	3.25%
May 1	4.75%	4.25%	4.00%	5.75%	7.75%	8.25%	5.00%	3.25%	3.25%	3.25%	
Jun 1	4.75%	4.25%	4.00%	6.00%	8.00%	8.25%	5.00%	3.25%	3.25%	3.25%	
Jul 1	4.75%	4.00%	4.25%	6.25%	8.25%	8.25%	5.00%	3.25%	3.25%	3.25%	
Aug 1	4.75%	4.00%	4.25%	6.25%	8.25%	8.25%	5.00%	3.25%	3.25%	3.25%	
Sep 1	4.75%	4.00%	4.50%	6.50%	8.25%	8.25%	5.00%	3.25%	3.25%	3.25%	
Oct 1	4.75%	4.00%	4.75%	6.75%	8.25%	7.75%	5.00%	3.25%	3.25%	3.25%	
Nov 1	4.75%	4.00%	4.75%	7.00%	8.25%	7.50%	4.00%	3.25%	3.25%	3.25%	
Dec 1	4.25%	4.00%	5.00%	7.00%	8.25%	7.50%	4.00%	3.25%	3.25%	3.25%	

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Source: Federal Reserve Board

Rainy summer erases drought

By EVE BYRON, Independent Record | Posted: Tuesday, September 21, 2010 12:33 am

The official start of the fall season on Thursday is leaving some folks wondering what happened to summer.

The year 2010 will be remembered as one of the wettest summers in more than a decade, with below-average temperatures. It's been so wet that officials announced Monday they're canceling Thursday's Drought Advisory Committee meeting in Helena.

"After a decade of drought and near-drought conditions across much of Montana, our water resources have finally recovered," said Lt. Gov. John Bohlinger, chairman of the drought committee. "We'll have our mandatory October meeting on the 20th to summarize the good news of this water year and look ahead to climate forecasts for fall and winter of 2010-2011."

Statewide, June and August 2010 produced the most precipitation since 1993, and for the water year that runs from October to August, this year will go down as the wettest since 1996-1997, according to the National Weather Service.

The heaviest precipitation fell in central and eastern Montana.

In the greater Helena area, that translated to 10 consecutive days of rain in May, between May 10 and 20. June gave us 19 days of measurable precipitation. The skies cleared for much of July, with only nine days of rain, but that jumped up to 13 days of clouds and rain in August — including six days between Aug. 9 and 14 where almost 2 inches of rain fell.

So far, it's rained nine out of 19 days in September, including over the Labor Day Weekend, and overall, rain fell during nine of the past 16 weekends, according to Nick Langlieb, a meteorologist with the NWS in Great Falls.

"And since Jan. 1, you're nine-tenths of an inch — about an inch — ahead of the average for precipitation," Langlieb said.

It's been cooler than normal, too, in the greater Helena area, with the average high temperature in June of 59 degrees about 6 degrees lower than usual. July wasn't much better, with the 70-degree high average this year down by 5 degrees. August's average high of 82 degrees was much closer to the typical 83-degree average. But so far for September, the mean temperature already is 2 degrees cooler than the normal 55 degrees, and it's not expected to warm up much for the rest of the month.

Maryann Axtman, who owns Kim's Marina at Canyon Ferry Reservoir along with her husband Greg, said they had a good year despite the rain and cool temperatures.

"The season started out slow, but as soon as the weather got nice people came out in force," Axtman said. "Everybody's been saying it was a quick summer. We still have quite a few people with boats in the docks, even though we'll close up at the end of the month."

According to the U.S. Geological Survey, monthly mean streamflows for August remained normal, and water levels were normal at all six major hydroelectric reservoirs in Montana — Canyon Ferry Lake, Fort Peck Lake, Lake Koocanusa, Bighorn Lake, Hungry Horse Reservoir and Flathead Lake.

The rains delayed some of the wheat harvest, as well as road construction, but overall it was appreciated after years of below-average precipitation and above average temperatures.

"Precipitation for the 2010 crop year, which runs from April 1 - Sept. 12, ranged from 100 percent to 135 percent at more than 80 monitoring sites across the state," Bohlinger said. "The rain showed up early and stayed late."

Langlieb added that forecasts are calling for the pattern to continue, with below normal temperatures and above normal precipitation — as in snow.

And if some folks thought the summer was fleeting, the fall may be just as short. The peaks of Great Divide already have had a few dustings, and owner Kevin Taylor hopes to have enough snow — both manmade and heaven sent — to open their terrain park by Halloween.

Reporter Eve Byron: 447-4076 or eve.byron@helenair.com

