

# AquaMate® Cleans Lines & Filters In Irrigation System Saving Thousands Of Dollars Per Year in Maintenance Costs



**"I was very sceptical this product would do anything, but I was proven completley wrong."**  
***Irrigation Manager***

## CASE STUDY

Grower	Corporate
Agronomist	
Location	NSW
Crop	Blueberries

### Demonstration Purpose

The blueberry farms water quality was quite poor from the local river system and then sitting stagnant in 2 large dams. There filter system was modern but did struggle to handle the poor quality water. They had continual blocked drippers and in-line filters from bio-film, scale and algae that required cleaning daily which was a large maintenance cost and added to plant stress through lack of water. The farm had tried acids with poor results and for the past 2 years using high rates Hydrogen Peroxide, which was a concern due to its dangerous nature for staff, the plants and soils and while it improved the system a little, they still had major blockage issues.

### Demonstration Set Up

It was difficult to set up to only treat a section of the blueberries, so the irrigation manager and head grower decided to undertake a one month trial of AquaMate® over the entire farm. The AquaMate® was injected into one of 6 fertigation lines at 40ppm for 1 month in each irrigation set. Photos were taken up the main line prior to application of AquaMate®, one week and then two weeks of AquaMate® application. Drip lines were monitored and in lines filters were monitored and the time taken to clean were recorded in comparison to when Hydrogen Peroxide was being used.

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Application Date	Product Applied	Application Rate
First Month of 2019 Season	AquaMate®	40ppm
Remainder & continued application today	AquaMate®	10 -20ppm

### Demonstration Results

The results of the demonstration showed a very positive response to the application of **AquaMate®**.



Before application of AquaMate & after 2 years of Hydrogen Peroxide



After 1 week application of Aquamate @ 40ppm



After 2 weeks application of AquaMate @ 40ppm

The first photo showed only a narrow strip that was clean from the Hydrogen Peroxide use but left the remainder of the pipe untouched, highlighting the inability of Hydrogen Peroxide to distribute evenly through the water. This was a shock to the management team as they assumed from using Hydrogen Peroxide for such a long time the lines would be clean. The second picture showed, after only 1 week of AquaMate® application, its cleaning ability through its microbubble and distribution technology through every milliliter of water. Then after only 2 weeks AquaMate® had removed all scale in the pipe while filters after daily flushes were no staying clean and drippers were becoming more consistent in only 2 weeks. Note: No other farm practice was changed in this demonstration period. Only after 3 months use of AquaMate®, we added a solar aerator to one of the holding dams to assist in improving water quality.

### The Financial Return on Investment For The Grower

Prior to the AquaMate® trial and consequence continual use, the below were the costs incurred by the farm:

Flushing Labour:	3 men for 9 hrs for 52 weeks @\$23/Hr	= \$33,696
Vehicle fuel:	3 x 10Lt / day x \$1.56/Lt for 52 weeks	= \$2,433
Filter cleaning Labour:	1 man for 2 hrs @ \$24/Hr x 330days	= \$15,840
Pump fuel:	36Lt/day x \$1.65/Lt for 52 weeks	= \$3,088
	<b>Total Annual Cost</b>	<b>= \$55,330</b>

After 12 Months of AquaMate® Applications:

Flushing Labour:	3 men for 9 hrs for 13 weeks @\$23/Hr 3	= \$8,073
Vehicle fuel:	3 x 10Lt / week x \$1.56/Lt for 13 weeks	= \$608
Filter Cleaning Labour:	1 man, 6 hrs/week @ \$24/Hr x 52 weeks	= \$7,488
Pump fuel:	12Lt/week x \$1.65/Lt for 52 weeks	= \$1,209
	<b>Total Annual Cost</b>	<b>= \$17,198</b>
	<b>Annual Saving Using AquaMate</b>	<b>= \$38,131</b>

Crop production improvements were not yet been calculated in these financial returns.

The financial return in using AquaMate® has been calculated to be a saving of \$38,131 annually or \$733 weekly in labour and fuel costs due to a significant reduction in cleaning as a result of the cleaning and maintenance ability of AquaMate®.

### **Conclusion**

This demonstration has shown that AquaMate® can have a significant positive influence on the economic return of a farming business. This economic return has even been recorded prior to full analysis of the benefits to crop production from consistently clean irrigation lines for consistent, improved water distribution to each plant. The farm continues to use AquaMate on the farm with continued positive results in maintaining a clean irrigation system for better water distribution, improved WUE and a consistently healthier crop.

### **About Advanced Nutrients**

Advanced Nutrients is a leader in the development of innovative, environmentally benign fertilisers which cost less and deliver more. For the last 22 years, smart agricultural, horticultural and livestock producers throughout Australia, Africa, Asia and the Middle East have been using our products to cut input costs, boost returns and reduce farming costs.