

80% is Totally 80's

Site	Flow rate	Conventional RO	Flow-Reversal RO	RR Increased by	WQ
Beverage company	264 gpm	65%	85%	20%	High Silica TDS 820 ppm
Brewery	264 gpm	75%	92%	27%	TDS 300 ppm
Fracking water	823 gpm	70%	89%	19%	TDS 9000 ppm
Cooling tower	88 gpm	71%	91%	20%	TDS 800 ppm
SWRO 2 nd pass	44 gpm	90%	98%	8%	Boron TDS 800ppm
Reuse	66 gpm	80%	90%	10%	TDS 1700 ppm High $Ca_3(PO_4)_2$, biofouling

Ultra High Recovery Flow-Reversal RO A conventional RO with a (patented) **twist** Innovative, but not new

"The Most Valuable Technology" Singapore International Water Week 2018







What can Flow-Reversal RO do? Increases permeate flow by 20%Decreases feed water use by 20% Decreases concentrate flow by 60% Concentrate \$ ZLD management

Other things to know about Flow-Reversal...



Continuous process that works just like conventional RO



<u>No proprietary</u> equipment, agnostic to membrane type, specs



No need for special <u>operator training</u>



Flexibility: suitable for New & existing RO applications



Low risk - 100% Fallback



Added value: decreases biofouling, reduces chemical use



Converting a conventional RO to FR-RO

Flow-Reversal RO

Conventional RO



How does Flow Reversal Work? 3 principles



The results: Scale prevention









Reduced Biofouling



Flow-Reversal Bonus?

- Sheering forces
- Changing water quality



Reuse

Whether it is a new RO system or an existing one, Flow-Reversal Technology will significantly improve Recovery Rate & OPEX



New Systems











Flow-Reversal Reverse Osmosis is a simple process, low risk & is already happening

Join the ROvolution



