



The Fountain

What is in store for the year ahead in water?

Last year was an active year for the water sector; and given the last three months of acquisitions including Pure Technologies (announced in December) and Layne Christensen (announced in February), activity may well continue through 2018. Despite recent volatility in the equity markets and threats of a global trade war, the water markets appear fairly healthy. Recent quarterly results (discussed herein) suggest nice tailwinds into 2018, offset by some inflation headwinds on margins. The municipal market appears to have firmed up nicely, with the industrial, commercial, and residential end markets relatively strong.

While the backdrop has remained healthy for the sector following the recovery, increasing adoption of technologies is fueling a number of innovative companies in the sector. In the early stages of innovation, technologies were focused around treatment and advanced metering. Today, innovation is focused around data management and predictive analytics. Given the explosion of emerging technology players in the water sector, companies are now evaluating the benefits of R&D vs. M&A as a “proxy” for R&D.

In this edition, we explore the concept of M&A to fuel R&D, review recent quarterly results, and provide insight into 2018. We also provide some perspective on corporate development activities in the sector. Lastly, we have included a Q&A with Uri Gutermann, CFO and Head of Business Development of Gutermann, a leading manufacturer of leak detection and intelligent water systems.



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Insights

- Results encouraging
- M&A remains healthy
- A leading intelligent water company



Corporate Outlook

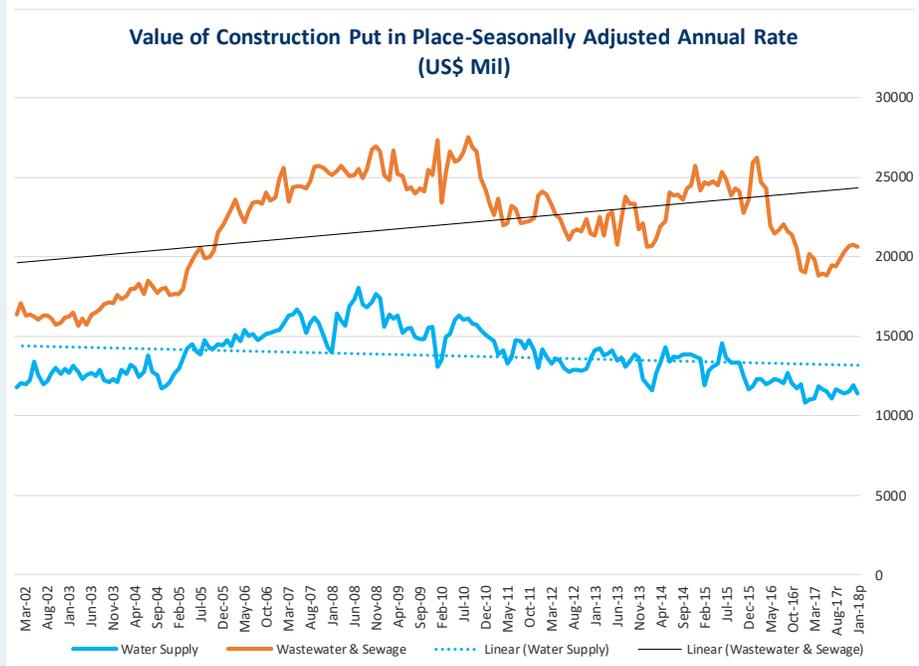
Fourth quarter results from the Xylem, Rexnord, AOS, and MWA. publicly traded companies were The municipal market appears favorable (see Table 1) with the quite healthy as does commercial. outlook largely encouraging for Inflation and taxes were the two 2018. Noteworthy is the cross section of positive results from muni conference calls. With steel and to industrial to commercial. Geographically, North America was higher YOY, several companies including AOS, MWA, and WTS noted several companies reported good growth out of headwinds with expectation of China as well. Most companies reported positive results across the cost inflation. While the new tax laws appear to have some positive impact, there was little indication that there would be any material changes in capex plans.

U.S. Construction Spending for Municipal Water Showed Some Improvement

Bottom appears to have been reached

Construction Spending in the US municipal water sector remained depressed, but has rebounded over the last three months. In January water supply and wastewater & sewage, increased 5.2% and 7.6%, respectively over the prior year period. For the most recent three months (November-January) spending increased 0.8% and 5.9% for water supply and wastewater & sewage, respectively. Meanwhile commentary from publicly traded companies remains favorable.

Figure 1: US Construction Spending on Water



Source: US Census Bureau

Select Fourth Quarter Public Commentary

Table 1: Quarterly Corporate Overview

Company	Commentary
Aegion	Infrastructure Solutions (IS) revenues +17%; backlog +16.1%; new orders +21%. Outlook IS revenues + low-mid single digits.
American	Revenue +2.4% organically; usage declining, but saw regulated rate recov-
AO Smith	Revenue + 10%, driven by ROW (+17%); NA increased 6% - Expect commercial water heater business to be down in '18; water treatment business strong. Expect 8.5%-9.5% total revenue growth in '18.
Evoqua	Pro forma revenue growth of 1.3%. Industrial pro forma revenue growth of 4.2%. Tough comps in municipal, seeing "great backlog" in municipal business. Outlook is for total rev. growth 7%-9% in '18.
Franklin Electric	Water Systems sales increased 1% organically. Growth outside of US. Surface and groundwater pumps weak- Outlook for 4%-5% growth.
Itron	Water revenues declined 1%, exc. FX, due to project delays in US and EMEA. Backlog up 34% - expect growth to resume in '18.
Mueller	Revenues +6.6% led by 9.4% increase in infrastructure. Technologies down
Pentair	Core water sales +2.7%. Flow and aquatic +4.0% and 4.8%, respectively.
Rexnord	Water: core growth +7%. Solid performance in Zurn and as expected in water infrastructure—both solid. Institutional market picking up
Tetra Tech	Strong muni water infrastructure: +56% driven by emergency planning and
Watts	Organic growth +3%, growth in all markets. Solid growth in plumbing. Growth in residential and commercial, particularly institutional. Outlook
Xylem	Organic growth of 7%: Water Infrastructure +6%, Applied Water +5%; Measurement and control +10%. Public Utility rev. +10% Or-

Table 2: Key Economic Indicators

<u>PMI</u>	Feb	Jan
US-ISM	60.8	59.1
New orders	64.2	65.4
Production	62.0	64.5
Europe-IHS-Markit	58.6	59.6
China-Caixin	51.6	51.5
<u>Residential Building Permits</u>		
Total		7.4%
Single Family		7.4%
ABI	Jan	Dec
	54.7	52.8

Source: Institute of Supply Management, IHS Markit, US Census Bureau, American Institute of Architects

Results Remain Generally Upbeat and Outlook Encouraging

On the heels of a relatively strong Q4 and 2017, most companies were generally optimistic on the outlook for 2018.

While construction spending has been relatively depressed, sales of water related equipment to the municipal sector have been consistently strong. The construction data, as one of our readers pointed out, includes a larger data set, including dams and reservoirs, and the much larger costs of engineering, design and construction. On the other hand, sales of OEM equipment includes a substantial amount of aftermarket and sales into brownfield projects such as plant upgrades. As a result, there may be some divergence in sales trajectories between these data sets.

Owing to increased demand for water, an increasing focus on resiliency, greater adoption of technology, and growing awareness of asset integrity management, many equipment manufacturers (e.g. Xylem) are experiencing strong growth. This is further aided by sales into the healthy commercial and residential sectors.

Technology Insights—Leak Detection-Sensors

Gutermann

When I first initiated coverage of the Smart Water companies I frequently came across one of the leaders in leak detection, Gutermann, and have recently had the pleasure of meeting up with Uri Gutermann, CFO and Head of Business Development. Uri has graciously provided some insights on the industry and his business, found on the columns to the right.

GUTERMANN is a global technology leader and innovator in intelligent water loss management products and solutions. The company offers a full range of conventional acoustic leak detection technology. Established in 1948, the company has been at the forefront of new technological developments in the leak detection industry. GUTERMANN is privately owned, with headquarters in Baar, Switzerland, and regional offices in Germany, France, UK, Canada, USA, Mexico, Peru, UAE, Malaysia and Australia. The company now has over 200 fixed-network installations worldwide. The company markets its fixed network under the flagship products Zonescan.

For more information on GUTERMANN click: www.en.gutermann-water.com

Q. How would you describe the adoption rate of water sensor technologies over the last five years?

Uri: Generally, the adoption rate of sensor technologies in the water industry is still lagging that of other industries. It's an adoption rate that moves in generations rather than years. Having said this, the past five years have seen an acceleration of the adoption of new technologies, on one hand driven by the regulators and legislation (e.g. France, UK, parts of the USA), but on the other hand also by the utilities that are finding themselves under increased scrutiny by the public and the consumers. In our sub-sector, some utilities still put price considerations above product functionality, but this too is changing slowly. For instance, correlating noise loggers are now more and more considered the gold standard of permanently installed acoustic sensors, which is playing into Gutermann's hands having pioneered correlation in fixed networks.

Q. What lessons have you learned about selling into the water markets?

Uri: If provided with an effective tool and impeccable after-

sales service, water customers are very loyal and grateful. This allows us to build strong long-term relationships with our customers and benefit from word of mouth recommendation.

Q. What changes do you see ahead that will ultimately improve the adoption rates for smart water technology?

Uri: The main drivers for future smart water technology adoption are (1) IoT on one hand and (2) improved data analytics tools on the other. (1) When I say IoT I actually mean any effective way to automatically transmit sensor data to cloud applications. In our case of leak noise data that comes from underground and has to be synchronized to 1 millisecond, the challenge of IoT is an even larger one. (2) And when I talk about improved analytics tools I mean tools that allow users to take the most informed business decisions based on their specific KPIs. We do that by combining the big data now available to us with algorithms that contain specialist industry know-how and by making the basis for decision-making available in the most simple and actionable way possible.

Technology Insights Continued

**Q. Given the competitive landscape for sensors, how is Guter-
mann able to differentiate itself?**

Uri: Of all traditional manufacturers of leak detection technology we were the first to concentrate our R&D efforts on permanently installed and fully automatic systems rather than on single instruments. While most of our competitors have now released their own permanent systems we are still the only provider of an acoustic system with what we call “Full Correlation”, i.e. our system correlates data from all neighbouring sensors automatically and every day, which allows us to eliminate false alarms and maximise the leak “hit rate” in any given water distribution system.

Q. How important is product specification in winning awards?

Uri: Awards are often given to those who apply for them. Technical specifications don’t matter too much, a unique concept does. We have won about a dozen awards over the years and I believe we merit all of them. Unfortunately getting awards doesn’t bring more business. Nevertheless, it feels good to get a little more credit for all our hard R&D and project work.

Q. How do you see your business evolving over the next five years (e.g. transition to software and service vs. equipment sales)?

Uri: We already embarked a few years ago on a transition to a more solution oriented approach and we’ve been experimenting with different business models (Software-as-a-Service, leasing models etc.). We need to keep our edge also on the hardware side which is why we have (to my knowledge) the largest R&D team of all acoustic leak detection technology manufacturers. But our cloud solution Guter-
mann Cloud Services (still widely known as Zonescan Net) is one of the crown jewels of Guter-
mann being the best-in-class leak detection software. We will continue adding functionality to it.

Q. How does Xylem’s recently announced acquisition of Pure shape your thinking about partnerships and the competitive landscape?

Uri: The acquisition of Pure Technologies by Xylem is not a surprise (maybe the valuation is). Xylem has positioned itself as broad technology provider for the water industry not least since their acquisitions of Sensus and Visenti. Xylem is looking to gen-



Zonescan Products

erate synergies in the area of geographic reach, data generation, data acquisition and services. However, implementing those synergies in real life is a big challenge. We believe that if you have the best-in-class solution to a growing global problem you will generate a wealth of opportunities of your own. As a family business we have the luxury of being able to be very selective in whom we collaborate.

—Thank you, Uri.

M&A Watch

Acquisition Activity Remains Robust

On the table to the right, we provide a list of announced transactions since 2017, covering mostly US activity and excluding utilities. As we have noted, activity remains robust.

Select recent activity:

- Valor Water**
 An early stage data analytics company gaining traction in optimizing water revenue and efficiency for utilities.
 Nature: Strategic bolt-on
 Builds on Xylem's recent acquisitions of EmNet, Pure Technologies, Sensus and Visenti.
- Layne Christensen**
 Price: \$565 million
 Multiple: 8.2x '18E EBITDA
 Nature: Strategic
 Expands Granite's infrastructure operations with vertically integrated offering. Extends diversification efforts into water market.
- Pure Technologies**
 Price: \$397 million
 Multiple: 23.8x EBITDA (4.0x sales)
 Following Sensus acquisition fills in product gap for non-revenue water with leading leak detection technology.
- Aclara**
 Price: \$1.1 billion
 Multiple: 12.2x EBITDA (2.2x sales)
 Nature: Strategic
 Strengthens Hubbell's Power business with complementary customers.

Table 3: Acquisitions since 2017

Date	Acquisition	Acquirer	Seller	Description
Feb-18	Valor Water	Xylem	Private (VC backed)	data analytics water revenue and efficiency optimization
Feb-18	Layne Christensen	Granite Construction	Layne Christensen	water management, infrastructure services, and drilling
Feb-18	TETRA Technologies	SwiftWater Energy Services	SwiftWater Energy Services	water management and solution services to O&G operators
Feb-18	Pure Water Solutions	Evoqua	Pure Water Solutions	High purity water - deionization
Jan-18	EmNet	Xylem	EmNet	Data analytics for management of water and stormwater systems
Jan-18	SEAMS	Arcadis	SEAMS	Predictive analytics for asset monitoring and resilience
Dec-17	Aclara	Hubbell	Sun Capital Partners	Metering
Dec-17	Pure Technologies	Xylem	Pure Technologies	leak detection and pipeline condition assessment
Oct-17	Corix	Deschenes Group	Corix Infrastructure/BC Investment	Waterworks distributor in Canada/Western US
Oct-17	World Dryer	Rexnord	World Dryer	electric hand dryers
Sep-17	Silver Spring Networks	Itron	Silver Spring Networks	smart water, connectivity platform
Sep-17	Calgon Carbon	Kuraray	Calgon Carbon	activated carbon manufacturer
Sep-17	Hague Quality Water	AO Smith	Hague Quality Water	water softener
Aug-17	CH2M	Jacobs Engineering	CH2M	E&C
Jul-17	WaterTrax Linko	Aquatic Informatics	Merger	Water data management and analytics software
Jun-17	ADI	Evoqua	ADI Group	water treatment
Jun-17	HD Supply Waterworks	Clayton Dubillionier & Rice	HD Supply	distributor
May-17	RWL	Emefcy	RWL/Merger	water treatment
May-17	Noble Water Technologies	Evoqua	Noble Water Technologies	water treatment - (high purity water)- deionization and resin regeneration
Apr-17	Western Hydro	Franklin Electric	Western Hydro Holding Corporation, 2m Company Inc, and Chester Engineers	distributor engineering
Mar-17	Chester Engineers	Hatch	Chester Engineers	engineering
Mar-17	Environmental Techniques	Aegion	Environmental Techniques	sewage repair
Mar-17	Innovyze	EQT	Stantec	software analytics
Mar-17	GE Water	SUEZ	GE	industrial water treatment business
Feb-17	Royal Enterprises America	Forterra	Royal Enterprises America	concrete pipe
Feb-17	Plastic Tubing Industries	Advanced Drainage Systems	Plastic Tubing Industries	pipe and tubing
Jan-17	PAX Water Technologies	UGSI	PAX Water Technologies	mixer/treatment
Jan-17	Hoffman Southwest Corp	ORIX Capital	Sterling Partners	municipal, commercial, and industrial pipeline inspection
Jan-17	Singer Valve	Mueller Water Products	Singer Valve	automatic control valves
Jan-17	Smart Grid Solutions	Aclara	Apex CoVantage	workforce management technology for smart grid deployment
Jan-17	Buckman water treatment business	Klenzoid Canada (Triwater Holdings)	Buckman	water treatment
Jan-17	JWC Environmental	FRC		water treatment

Source: Company documents/press releases

*Excludes water utilities

* For more complete details on M&A transactions, please contact www.h2oinsights.com/contact

R&D vs Acquisition

Given the continued pressure for revenue growth and the increasing adoption of technology in the water sector, a growing number of companies are opting to acquire technologies versus relying solely on R&D to fuel growth.

One of the challenges larger companies have had with acquisitions of emerging companies/technologies is that the acquisitions generally have an inconsequential impact on revenues in the short term and generally come at a steep multiple. Moreover they often require a significant amount of resources, with little perceived value for shareholders. In many cases, the technologies are too early, or cannot be fully leveraged within the existing platform.

However, acquisitions of early stage technology companies can have many advantages, and if executed correctly, can provide meaningful value to companies and shareholders. An acquisition of a commercially tested product with reference sites can result in fewer R&D dollars spent while also providing the acquirer an opportunity to accelerate the growth of the candidate with its own distribution channel and credibility. In some cases, the technologies can be applied across many parts of the company, rather than one product.

Xylem has been one of the industry leaders that has expanded its technologic capabilities via acquisitions such as EmNet, Pure Technologies, Visenti, and more recently, Valor Water. In its 4th quarter conference call, Xylem stated that Pure Technologies and EmNet are “examples of M&A serving as a proxy for R&D” to accelerate growth.

Evoqua has also stated it is “agnostic” between R&D and M&A. It views acquisitions as complementary to R&D. Examples include Neptune Benson, Magneto, and ADI Systems among others.

Suez also embarked upon this strategy several years ago and has acquired emerging companies outright, such as Decerto while also making investments in early stage companies such as Omptimatics.

While the water sector generally moves slowly, there is increasing acceptance around certain technologies, particularly around smart water (e.g. metering, leak detection, data analytics and management, and predictive analytics). In an article we published in LinkedIn, we noted the benefits of Xylem’s acquisition of Pure Technologies ([see article](#)), providing both technology and distribution.

The growth of incubators and innovation hubs such as Imagine H2O, SWAN, Isle Utilities, and regional water alliances has provided increased visibility to upstarts while accelerating pilot studies with municipalities. As a result, many of these technologies can be vetted, while providing a running-start within an existing water technology platform.

While R&D should not be substituted for M&A, acquisitions can be a good complement for driving innovation. Success will ultimately depend on a thorough understanding of the technology, the ability to leverage distribution, potential to deploy the technology across the organization, and corporate cultures.

Regulatory Watch

Legionella: While long been a concern, legionella may ultimately come under increased scrutiny and possibly regulation. As reported in [Circle of Blue](#) in January, the National Academy of Sciences is undertaking a new project on the management of Legionella in water systems. The study is scheduled to be completed in the fall of 2019. New York already implemented regulation (2016) on inspection and monitoring of legionella in cooling towers. While other countries have regulations, the US is fairly limited, relying on standards, such as ASHRAE 2018, but that may ultimately change.

Water Infrastructure:

On January 23, 2018, “The Water Infrastructure Finance and Innovation Reauthorization Act of 2018” (S.2329) was introduced. This effectively extends funding of The Water Infrastructure and Finance and Innovation Act of 2014.

A similar bill was introduced in the House of Representatives in November 2017 (no updates on the bill).

H2O Insights

H2O Insights is a strategy and finance consultancy focused on the water industry. Our purpose is to provide insightful views and advice to companies, venture capital investors, and private equity firms looking to strengthen an existing business, or develop or acquire new businesses in the water sector.

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Our Services

H2O Insights is dedicated to helping companies develop a coherent business and finance strategy to serve the global water markets. By leveraging our experience and relationships along with independent research we provide companies valuable insight into market opportunities, product gaps, trends, and potential for synergies.

We provide strategic insight, market research, and financial analysis to assist the corporate development department. Additionally we provide financial planning & analysis to support the finance and investor relations departments.

For more information about how we can help you identify value in the water markets please contact:

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