



Water, Wastewater & Environmental Services

M&A Industry Update – Q3 2016, Q4 2016 and Q1 2017



Industry News And Highlighted M&A Activity

Acquisitions continue at a strong pace in 2017 with a few recent blockbuster deals announced including Parker-Hannifin acquiring Clarcor and Suez acquiring GE Water. Although some areas within the water segment (e.g. test, desalination) may achieve higher valuation premiums and receive more news in the press, there is still strong M&A activity (more than 75 since July 2016) across almost all water market segments including e-commerce, residential, commercial, industrial, chemicals, environmental engineering firms, test, and data analytics. (see Recent 2016/2017 M&A Summary Transaction Analysis, page 8). We tracked more than 200 water and environmental transactions throughout 2016.

- Hey Culligan Man! In a long line of various strategic and financial buyers over the past 20 years, global PE firm **Advent International** emerged as victor this past December 2016 with a \$915 million winning bid to acquire **Culligan**, the most visible water treatment company focused on residential and commercial markets. Culligan appears to have rejuvenated themselves under previous management Centerbridge.
- E-commerce wins big. **AOSmith** acquired **AquaSana** for \$87 million in August 2016 to establish a market leader position in the growing residential water treatment e-commerce. AOSmith is globally recognized for its leading residential and commercial water heaters along with its strong presence in China which has been cultivated for more than 20 years.
- **Emerson Electric Co.** agreed to acquire the valves & controls business from **Pentair plc.** for \$3.2 billion.
- **Brookfield Asset Management, Inc.** entered into a definitive agreement to acquire a 70% stake in **Odebrecht Ambiental** from **Odebrecht S.A.** for approximately \$880 million in October 2016.
- **EIH Capital Partners**, of **Empire Investment Holdings, LLC** acquired **AmeriWater, Inc.** from United Water Resources, Inc. in December 2016.
- **Xylem** acquired **Sensus**, a global leader in smart meters, network technologies, and advanced data analytics solutions for the water industry for \$1.7 billion in August 2016.
- **Hayward Industries Inc.** acquired **Krispol Group**, a Spanish manufacturer of swimming pool equipment, industrial filtration, pumps and fire suppression systems in July 2016.
- **Watts Regulator Company** acquired **PVI Industries, LLC** for approximately \$78 million on November 2016.
- **PSC Industrial Outsourcing, LP** acquired Seaport Environmental's West Coast recycling facility in February 2017.

Investment Focus

- Smart solutions (Xylem/Sensus)
- Data analytics and cybersecurity (Xylem/Sensus)
- Corporate bolt-on (Pentair, Watts)
- Portfolio diversification (XPV Capital)
- New technology (Nikkiso/Aquisense)

Transaction Activity

- Private Equity Group exits (Culligan, TestAmerica)
- Active/Pending corporate exits from the water industry (GE to Suez, Bilfinger to Chengdu Techcent Environment, and Schlumberger to WSP Global)
- Portfolio expansions (Xylem acquiring Sensus, Ecolab's equity investment in Aquatech, JWC Environmental acquiring FRC)
- Water IPOs (Forterra and AquaVenture)
- Family offices are making significant investments (SKion acquiring Ovivo)
- Chinese investors' buying spree (Anhui Guozhen, New Concept, SafBon, Chengdu Techcent)

Other M&A Trends:

- Strong investment interest by strategic firms and PEGs (Advent International/Culligan)
- Relatively high multiples. Averaging 10x EBITDA (reported Suez is 12.5x EBITDA for GE Water)

Select M&A Transactions

M&A



Acquired



Closed

August 2016

AO Smith Corp. acquired Aquasana, Inc. from L Catterton for \$87 million in cash. Aquasana, Inc. designs, manufactures, and markets water filtration products via ecommerce.



Acquired



Closed

September 2016

SKion Water International GmbH acquired Ovivo Inc. (TSX:OVI.A) for \$180 million CAD. Ovivo Inc. provides water and wastewater treatment equipment, technology, and systems for energy, municipal, and electronics markets.



Acquired



Closed

September 2016

Kinetico Incorporated acquired Selecto Incorporated. Selecto manufactures service industry machinery, specializing, among other things, in household water purification equipment.



Acquired



Closed

December 2016

Advent International completed a buyout of Culligan International Group for a reported \$915 million. Culligan is a leading global provider of water softening and purification equipment and services.



Acquired



Closed

January 2017

JWC Environmental, LLC acquired FRC Systems International, L.L.C. FRC Systems designs, manufactures and installs wastewater treatment equipment for various industries in the United States and internationally.



Acquired



Closed

January 2017

Ecolab Inc. acquired Abednego Environmental Services, LLC. Abednego will become part of Ecolab's Nalco Water business operations. Abednego operates and manages waste water treatment systems and purified water system.

As of 03/09/2017

Source: Public Filings, Industry Newswires

The Market - Public Company Performance Indicators

M&A

	Company	Segment	Market Cap (MM)	EV (MM)	TTM EBITDA (MM)	EV/EBITDA	Operating Margin
	American Water Works	Water and Wastewater Services	\$13,416.01	\$20,521.01	\$1,618.00	12.7x	34.8%
	Aqua America	Water and Wastewater Services	\$5,403.23	\$7,294.28	\$458.59	15.9x	39.7%
	American States Water Company	Water and Wastewater Services	\$1,508.11	\$1,918.98	\$153.83	12.5x	26.3%
	California Water Service Group	Water and Wastewater Services	\$1,645.13	\$2,274.69	\$166.00	13.7x	16.5%
	Aegion Corporation	Equipment, Systems, Solutions	\$736.73	\$985.54	\$112.90	8.7x	5.4%
	Pentair	Equipment, Systems, Solutions	\$10,760.51	\$14,801.21	\$919.50	16.0x	15.1%
	Xylem	Equipment, Systems, Solutions	\$8,555.40	\$10,632.40	\$615.00	17.2x	12.3%
	A.O. Smith	Equipment, Systems, Solutions	\$7,731.32	\$7,300.32	\$525.50	13.9x	17.1%
	Calgon Carbon	Equipment, Systems, Solutions	\$666.05	\$853.06	\$78.29	10.9x	7.8%
	Flowserve	WWE Components	\$5,902.13	\$7,126.55	\$477.92	14.6x	9.0%
	Mueller Water Products	WWE Components	\$1,971.46	\$2,284.66	\$191.10	12.0x	12.2%
	Rexnord Corporation	WWE Components	\$2,315.73	\$3,526.33	\$291.60	12.1x	9.8%
	Watts Water Technologies	WWE Components	\$2,107.77	\$2,419.77	\$194.70	12.4x	10.3%
	Badger Meter	WWE Components	\$1,007.28	\$1,037.89	\$74.71	13.9x	13.3%
	Franklin Electric	WWE Components	\$1,859.94	\$1,955.16	\$145.83	13.4x	11.6%
	Energy Recovery Inc	WWE Components	\$424.05	\$323.65	\$3.64	80.2x	0.7%
	Tetra Tech	Environmental Services	\$2,312.74	\$2,574.71	\$210.55	12.2x	8.2%
	AECOM	Environmental Services	\$5,453.13	\$9,046.96	\$907.48	9.0x	3.2%
	Arcadis NV	Environmental Services	€ 1,123.50	\$1,625.29	\$198.29	8.3x	3.9%
	Clean Harbors	Environmental Services	\$3,184.60	\$4,510.87	\$391.88	11.5x	3.8%
	Average					16.1x	13%

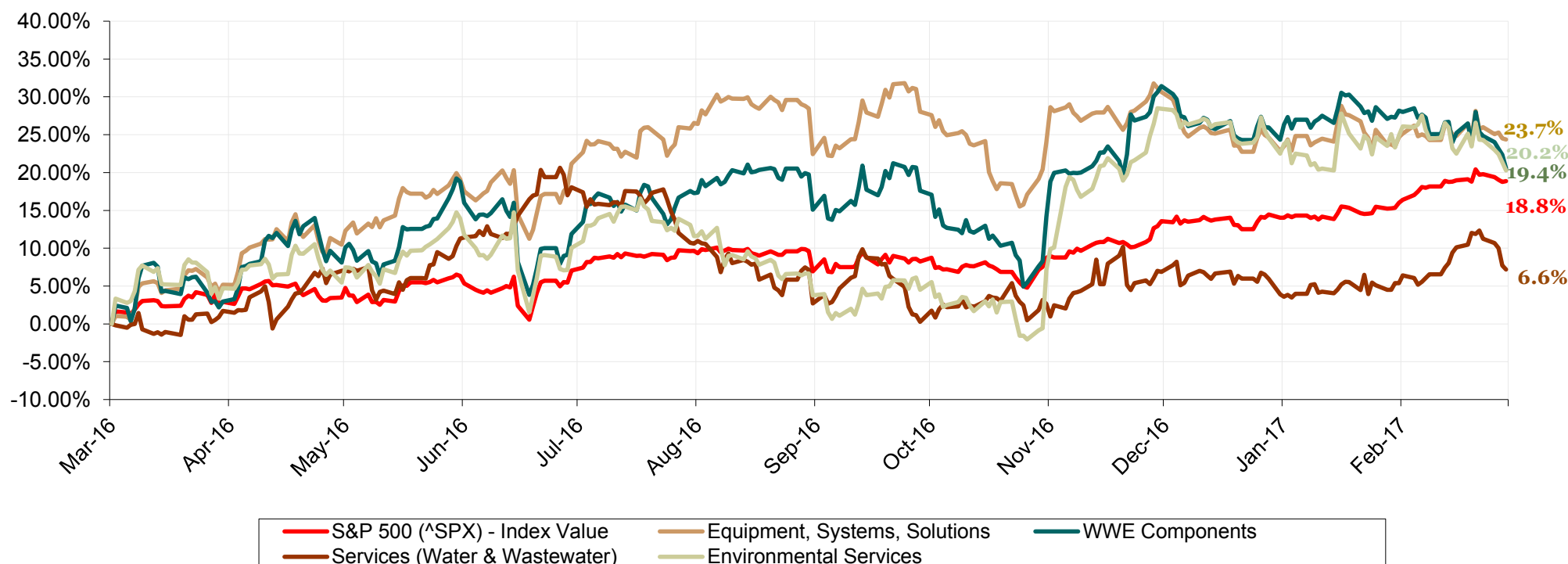
As of 03/09/2017

Source: S&P Capital IQ

The Market - Custom Index Performance

M&A

52 Week Public Market Index Performance



% Change				
The McLean Group Customer Indices		1-Year High	1-Year Low	1-Year Average
	Environmental Services	28.5%	-2.1%	12.5%
	Equipment, System, Solutions	31.1%	-0.5%	20.4%
	Water Services	20.0%	-2.0%	6.1%
	Components	30.2%	-0.9%	15.8%
	S&P 500	20.44%	0.0%	8.8%
				Current
	Environmental Services			20.2%
	Equipment, System, Solutions			23.7%
	Water Services			6.6%
	Components			19.4%
	S&P 500			18.8%

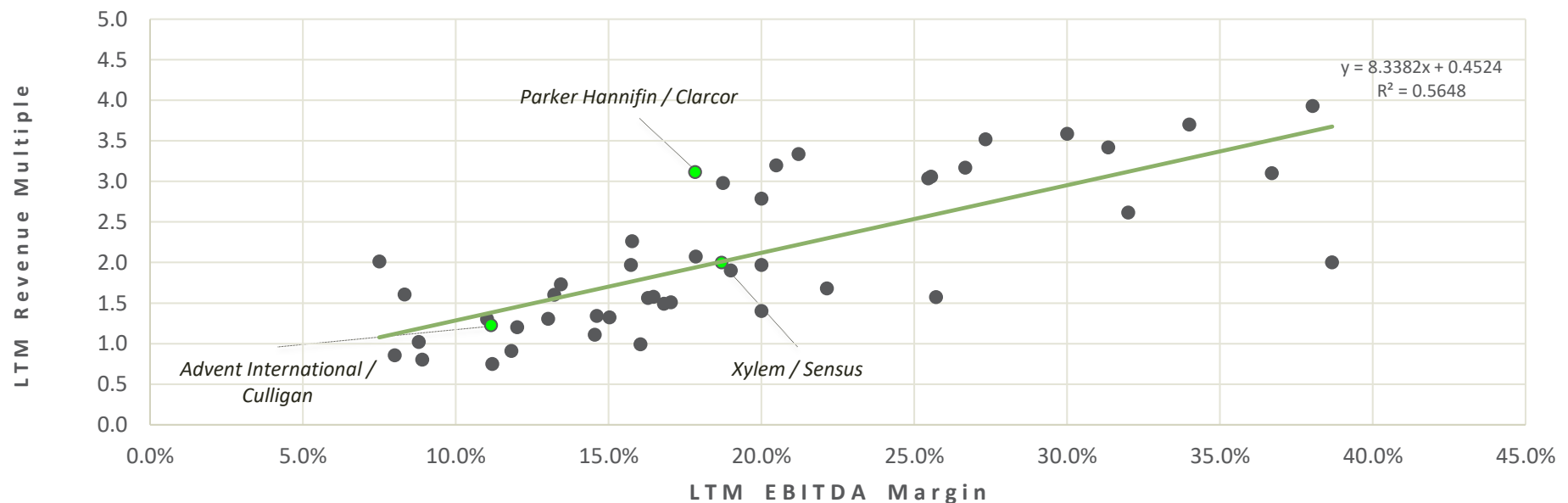
As of 03/09/2017

Source: S&P Capital IQ

Transaction Value

- The transactional value matrix is a starting point to determine relative transaction value, however, numerous factors impact value including embedded technology, competitive landscape, intellectual property, brand, company size, buyer type, industry need, etc.
- Transaction valuations are relatively consistent, ranging from 9 to 12x LTM EBITDA.
- Fairly consistent correlation between transaction valuation and LTM EBITDA margin.
 - For example, a target with \$50 million in revenue and a 20% EBITDA margin on average would be valued at 2.2 x revenue or \$110 million.

Transactional Value Matrix – Revenue Multiple to EBITDA Margin



Recent 2016/2017 M&A Transactions

M&A

Target	Buyer	Category	Date	Transaction Comments
Seaport Refining & Environmental, LLC	PSC Industrial Outsourcing, Inc.	Services	3/21/2017	A non-hazardous water recycling facility. The McLean Group, LLC acted as financial advisor for Seaport Refining & Environmental.
CLARCOR Inc.	Parker-Hannifin Corporation	Components	2/28/2017	Provides filtration products, and filtration systems and services worldwide. The company operates through two segments, Engine/Mobile Filtration and Industrial/Environmental Filtration.
Wastewater Collection Assets of West York Borough in York County	The York Water Company	Services	2/28/2017	Offers wastewater collection and treatment services and is located in the United States.
The Heritage Village Water Company	Connecticut Water Service, Inc.	Services	2/27/2017	Provides water supply and water treatment services.
Max Environmental Technologies, Inc.	Altus Capital Partners	Services	2/7/2017	An environmental services company, owns and operates hazardous and non-hazardous industrial waste treatment, storage, and disposal facilities
Buckman Laboratories International, Inc., Portion of Water Treatment Business	Klenzoid Canada Inc.	Services	1/31/2017	Provides water treatment services and is located in the United States.
BIOREM Inc. (TSXV:BRM)	Tus-Holdings Co., Ltd.	Components	1/19/2017	Designs, manufactures, and sells air pollution control systems that are used to eliminate odorous and harmful contaminants in Canada, the United States, China, and internationally.
Hydration Company of PA, LLC	Converde Energy USA Inc.	Services	1/13/2017	Provides water treatment, exploration, and augmentation services.
Abednego Environmental Services, LLC	Ecolab Inc.	Solutions	1/11/2017	Operates and manages waste water treatment systems and purified water system.
Compass Pointe Engineering, PA	Mcgill Associates, P.A.	Services	1/10/2017	Offers civil and environmental consulting engineering services.
Water Truck Services, Inc.	National Response Corporation	Services	1/9/2017	Provides waste management and environmental services in the Pacific Northwest.
Natural Resource Technology, Inc.	O'brien & Gere Limited	Services	1/9/2017	Provides water resource management services, such as groundwater supply and surface/groundwater interactions.
Greystone Environmental Management, LLC	Partners Environmental Consulting, Inc.	Services	1/9/2017	Provides environmental, health, and safety (EHS), and engineering services to clients in food and beverage, general contracting and construction, chemical manufacturing and distribution, forest products, private equity, and pharmaceuticals and health care market sectors.
KBA EnviroScience, Ltd.	Groundwater & Environmental Services, Inc.	Services	1/9/2017	Provides environmental consulting services to clients in the United States.
FRC Systems International, L.L.C.	JWC Environmental, LLC	Solutions	1/6/2017	Designs, manufactures, and installs wastewater treatment equipment for food processing, general manufacturing, and oil and gas industries in the United States and internationally.
IW Financial Inc.	ISS-Ethix	Services	1/5/2017	Provides environmental, social and governance research, and consulting services
Horizon Well Testing, LLC	Alpine 4 Technologies Ltd.	Services	1/1/2017	Provides flow back and well testing services to customers in Oklahoma.

As of 03/09/2017

Source: S&P Capital IQ

Recent 2016/2017 M&A Transactions

Target	Buyer	Category	Date	Transaction Comments
SaniTech Inc. and Two Municipal Water Systems in Emlenton Area and East Cameron Township	Aqua Pennsylvania, Inc.; Aqua Indiana, Inc.	Services	12/31/2016	Provides commercial and industrial janitorial services and water systems which supplies water to households.
AmeriWater, LLC	Empire Investment Holdings, LLC	Components	12/30/2016	Designs, manufactures, installs, and supplies water treatment equipment for dialysis, health care, hospital, and industrial applications.
CRE Design Engineering, Inc.	Geostruct Engineers, Inc.	Services	12/28/2016	Provides structural, geotechnical, and environmental engineering services.
Droplet Measurement Technologies, Inc.	Benford Capital Partners, LLC	Components	12/15/2016	Manufactures instruments for measuring water droplets, ice crystals, CCN, ozone, black carbon, bioaerosols, and other aerosols.
Water Midstream Partners, LLC	Solaris Water Midstream, LLC	Solutions	12/12/2016	Operates commercial saltwater pipeline and disposal systems.
Glacier Water Services, Inc.	Primo Water Corporation	Services	12/12/2016	Owns and operates self-service water vending machines that dispense filtered drinking water to the consumers in the United States and Canada.
CHJ Consultants, Inc.	Terracon Consultants, Inc.	Services	12/6/2016	Provided geotechnical engineering, environmental consulting, construction inspection, and materials testing services.
MCL Waste Systems & Environmental Inc.	GFL Environmental Inc.	Solutions	12/1/2016	Operates and manages landfill waste management facilities and waste management systems in Central Alberta.
Culligan International Group	Advent International	Services	12/1/2016	A leading global provider of water softening and purification equipment and services.
Morrison Pump Company, Inc.	Patterson Pump Company	Components	11/30/2016	Designs, engineers and manufactures water pumps.
RMC Water and Environment, Inc.	Woodard & Curran Inc.	Solutions	11/21/2016	Provides solutions for managing water resources.
Water & Energy Systems Technology, Inc.	U.S. Water Services, Inc.	Components	11/18/2016	Manufactures, markets and supplies water treatment products.
PurLucid Treatment Solution (Canada) Inc.	MGX Minerals Inc. (DB:1MG)	Solutions	11/14/2016	Removes heavy metals and hydrocarbons from oil industry waste streams producing clean water as a final product.
PVI Industries, LLC	Watts Regulator Company	Components	11/2/2016	Manufactures and supplies commercial domestic and process water heaters.
EMS Management, Inc.	Arrow Material Services, LLC	Solutions	11/1/2016	Provides environmental cleaning solutions to the rail, marine, barge, and terminal assets of America.
Fortiline LLC	MORSCO Inc.	Solutions	10/31/2016	Distributes underground water, sewer, and storm utility products for installation in public and private sectors in the United States.
Raging Bull Oilfield Services LLC	Fluid Delivery Solutions, LLC	Services	10/27/2016	Offers oilfield water transfer and equipment rental services.
Gordon Environmental, Inc.	Parkhill, Smith & Cooper, Inc.	Services	10/26/2016	Provides landfill engineering and compliance services.
Jim Clary and Associates, Inc.	Trinity Consultants, Inc.	Services	10/12/2016	An environmental consulting company that specializes in air quality services to clients in various industries in the United States.

As of 03/09/2017

Source: S&P Capital IQ

Recent 2016/2017 M&A Transactions

Target	Buyer	Category	Date	Transaction Comments
XP Solutions Inc.	EQT Partners AB	Solutions	10/10/2016	Provides drainage and flood hazard software for the civil engineering and environmental sectors.
Robix Environmental Technologies Group, Inc.	Robix Environmental Technologies, Inc. (DB:ROX)	Solutions	10/7/2016	Develops and operates industrial wastewater treatment facilities and commercial mobile systems for oil, gas, and industrial wastewater treatment requirements.
Alliance Maintenance & Services, Inc.	Cascade Environmental Holdings, LLC	Services	10/6/2016	Operates as an environmental remediation company. The company offers system installation, plan and specification development, alternative equipment evaluation, utility coordination, and start-up training services.
HGS, LLC	Resource Environmental Solutions, LLC	Services	10/3/2016	Provides environmental consulting services
Cliffside Park Associates, Inc.	Aqua New Jersey, Inc.	Services	10/3/2016	Cliffside Park Associates, Inc. owns and operates water systems for residents of Cliffside Park.
Pace Analytical Services, Inc.	Aurora Capital Group	Services	9/30/2016	Provides analytical testing and emergency disaster response services.
Avita Artesian Water, LLC	China Bilingual Technology & Education Group Inc.)	Services	9/28/2016	Operates as an alkaline water producer and a bottling company.
Creative Environment Solutions (CES) Corp.	The British Standards Institution	Services	9/22/2016	Creative Environment Solutions (CES) Corp. provides environmental and safety consultancy services in the Northeast United States.
RS Lining Systems LLC	HammerHead Trenchless Equipment	Components	9/20/2016	Designs and manufactures cured-in-place pipe equipment for the repair, rehabilitation, and structural renewal of gravity and pressure pipeline infrastructure for water, waste water, and industrial sectors.
Ovivo Inc.	SKion Water International GmbH	Solutions	9/16/2016	Provides water and wastewater treatment equipment, technology, and systems for energy, municipal, and electronics markets.
Mountain Water Systems, LLC	Viking M&A	Solutions	9/15/2016	Sells, services, maintains, and repairs residential and light commercial water treatment and filtration equipment in Western North Carolina and surrounding areas.
Enviro-Tank Clean, Inc.	QualaWash Holdings, LLC	Solutions	9/14/2016	Owns and operates non-hazardous waste treatment facilities.
Weir Environmental, LLC	NV5 Global, Inc.	Services	9/13/2016	Provides investigation and testing services related to buildings and construction.
Selecto Incorporated	Kinetico Incorporated (Axel Johnson)	Components	9/8/2016	Manufactures specialty filters including nano-carbon in residential and commercial water markets.
Blue Water Technologies, Inc.	Nexom Inc. (XPV portfolio)	Solutions	9/6/2016	Develops and manufactures water treatment technologies for primary wastewater treatment to advanced effluent polishing steps to environmental remediation processes.
Rocky Mountain Industrial Services, LLC	Envirosystems Incorporated	Services	9/1/2016	Provides chemical cleaning, consulting, and engineering and analytical services to customers.
Filtra-Systems Company, Inc.	CNI Commercial LLC	Components	8/31/2016	Designs, manufactures, and installs custom-engineered industrial filtration and separation systems for the metalworking, water and wastewater, chemical and industrial minerals, and steel industries worldwide.

As of 03/09/2017

Source: S&P Capital IQ

Recent 2016/2017 M&A Transactions

Target	Buyer	Category	Date	Transaction Comments
Peoples Water Service Co., Water Operations in Donaldsonville	Ascension Parish Louisiana	Services	8/31/2016	Peoples Water Service Co., Water Operations comprises a business unit which supplies water and is located in the United States.
Vapex Environmental Technologies, Inc.	Guardian Manufacturing Inc.	Solutions	8/24/2016	Develops radical odor control technology that treats odors; remediates fats, oils, and grease; and controls corrosion in municipal wastewater applications.
Panther Technologies, Inc. and GeoSierra Environmental, Inc.	Cascade Environmental Holdings, LLC	Services	8/24/2016	Provides soil and groundwater remediation, and hazardous and non-hazardous waste management services.
HEPACO, LLC	Gryphon Investors	Services	8/23/2016	Provides emergency response, industrial, environmental remediation, abatement, maritime, and non-hazardous waste water treatment services in the United States.
XRI Blue	Morgan Stanley Private Equity	Services	8/23/2016	Provides water exploration, evaluation, and production services.
130 Pipeline Project	EPCOR Water (USA) Inc.	Components	8/22/2016	130 Pipeline Project comprises a wholesale water supply pipeline and is located in the United States.
Pentair plc, Valves & Controls	Emerson Electric Co.	Components	8/18/2016	Pentair plc, Valves & Controls Business comprises the industrial valves and controls manufacturing business of Pentair plc.
PureSafe Water Systems, Inc., Water Purification Unit	Phillips Mushroom Farms, Inc.	Components	8/16/2016	Manufactures water purification systems.
W. J. Maloney Plumbing Co., Inc.	Hayes Mechanical, Inc.	Services	8/16/2016	Provides plumbing services for commercial and residential customers.
AquiSense Technologies LLC	Nikkiso America, Inc.	Components	8/15/2016	AquiSense Technologies LLC manufactures UV-C LED systems to disinfect water, air, and surfaces without the use of chemicals or mercury.
Sensus Worldwide Limited	Xylem Inc.	Solutions	8/15/2016	Provider of smart meters, network technologies, and advanced data analytics services for the water, electric and gas industries.
Total Environmental Solutions, Inc., 220 Community Water and Sewer Systems	Utilities, Inc.	Solutions	8/15/2016	Comprises of water and sewer systems.
Aquasana, Inc.	A. O. Smith Corporation (NYSE:AOS)	Components	8/8/2016	Designs, manufactures and markets water filtration products.
Delta Ultraviolet Corporation	Neptune-Benson, Inc.	Solutions	8/8/2016	Manufactures ultraviolet (UV) systems that provide water treatment solutions for pool and spa, aquaculture and aquarium, drinking water, and commercial water applications.
Bio Clean Environmental Services, Inc. and Modular Wetland Systems, Inc.	Forterra Drainage Pipe & Products	Components	8/3/2016	Manufactures storm water biofiltration systems.
Hamer Environmental L.P.	Environmental Enginuity Group, LLC	Services	8/2/2016	Provides environmental consulting services to state and federal agencies, private industry, public utilities, and institutions.
Kripsol Gestion, S.L.	Hayward Industries, Inc.	Solutions	7/25/2016	Manufactures and markets water system products for domestic, agricultural and industrial uses, as well as in water treatment and large fire-suppression systems.

The McLean Group's Mark Bertler interviews Mike Reardon who served the last 25 years in executive leadership roles with some of the world's leading industrial, municipal, consumer and commercial brands including U.S. Filter, Culligan, and most recently Triwater Holdings, which he left last year. Mike has been one of the primary participants in the ebb and flow of the water industry's ongoing consolidation.



Q: What is your view generally, of the opportunity in the water and wastewater business today?

A: I think the growth opportunities in the water business, including wastewater, are as good or better today, than they have been in the last 15-20 years. It is and will continue to be, a huge market since water is the single most used substance on the planet and is essential to life. And despite all the attention the water story gets from MBAs in search of a new frontier, and all the investments that have been made in the sector, the business remains fragmented and ripe with growth prospects. The primary drivers - scarcity and quality issues - are getting worse, not better, and as populations grow, this continually becomes more critical. The major sectors (agriculture, industry, commercial, municipal and consumer) are all experiencing higher demand, while reliable supply is challenged or exacerbated by ever changing regional climate variations, inadequate water and wastewater infrastructure and the need for improved treatment, even without considering regulations. All of this sets the stage for tremendous opportunities for growth, both organic and otherwise. This is a wonderful time for water entrepreneurs.

Q: What are some of the important issues to consider when building scale in a water business?

A: Certainly, you need the right team. After that, among your team, you must have alignment on realistic expectations for your growth plans, including how long it will take. Everyone gets excited about the water business as “liquid gold” or the “new oil.” The fact is, in total, this is essentially a GDP growth business, and growing any particular company just takes time. But if you pick the right sectors, get your team aligned to your growth plans and expand distribution in the right way, you can do very well, and be positioned to take advantage of market pull.

Because the water business is quite different from other product and services businesses, I think one of the keys to building scale, is you must fundamentally make it easier for customers to access your solutions, AND you absolutely must make it easier for your salespeople to “tell their story” and work their magic. This industry has seen a number of companies, in their rush for “synergies” and rapid growth, all but wipe out, what they later would learn, was really their competitive advantage in the market. The real trick, or the challenge for management, is to preserve and nurture what is working (sales advantages or technical capabilities), while trying to make things easier to buy, for the customer, and easier to sell, by the sales channel. It sounds simple, but in practice this is where many struggle, even with good intentions and aggressive plans.

Q: How do you think the water business has evolved over the years?

A: It is interesting to watch how the industry has gotten the attention of some big companies (like Alcoa, GE and Siemens) who came into the business and now have essentially exited. Despite all the investment and efforts of a few large companies, the water business is still highly fragmented and has evolved into a “barbell” shaped industry: one end with several large players that have grown predominantly through acquisition (Suez, Ecolab, Danaher, Veolia), and at the other end, with literally thousands of successful small players (under \$50 million revenue), but very few middle market companies in the \$150-500 million range. This sets up the opportunity to bring together a few good companies in a sector, where a larger strategic player will eventually want to acquire it, once it becomes a disciplined business of reasonable size and focus.

Another observation, is that the fragmentation of the water business often seems to be misunderstood. You have this big industry, with multiple sectors and lots of small players - entrepreneurs and family owned businesses - and the assumption is that fragmentation has created extensive inefficiencies, which bigger, more disciplined companies can exploit and correct. While this is usually true in most industries, it hasn't always proven out that way in the water business. Many of the larger entrants have struggled with increasing their scale and achieving efficiency, particularly as they attempt to integrate smaller businesses, with a variety of solutions, across geographies and markets. My view is that the fragmentation of this industry is more a function of the diverse and unique local needs, multiple solution approaches, local experience, and reliance on time tested products and processes. This is part of the reason why so many have faced headwinds on integration and consolidation. It is complicated and very challenging to integrate acquisitions across geographies and markets. It can be achieved, but to do it right, requires a careful focus on customers' needs, and consistent sales and service, among other things.

Q: Where do you see the best opportunities for growth - in new or existing technologies?

A: Clearly, the water and wastewater industry is a broad market, with many diverse niches and subsectors. I personally like some areas, and prefer to stay away from others, where there has already been a lot of attention. I have seen a number of terrific opportunities to build scale with existing technologies and services, as opposed to looking for the next “new big thing.” Don't get me wrong, there are some interesting new technologies emerging, but it is always challenging for these to make money, particularly in the early years. The problem is, in water generally, that new technology takes a long time to gain adoption, and therefore create sufficient scale to justify an ROI that investors are seeking. This is exacerbated by the array of so many time-tested, alternative ways to solve a particular problem in water. For any given “new” product or process to gain sales traction, it just takes a long time, no matter how good it is. Just look at reverse osmosis (RO) for an example. Even though it was proven to be a terrific technology, it took years and years for the market to view it as reliable. Until then, companies utilized alternatives - old technology solutions, where they were comfortable - while they monitored the progress and development of RO. For new technology innovations, I think investors need to take a long term view and you don't necessarily want to be the first one in the market.

Q: How is technology evolution generally, impacting the industry?

A: This is an industry where a lot of “cave man” technologies are still in use. Consider basic media filtration – large sand filters, or simple commodity cartridges – they solve problems and they work well! As mentioned earlier, the new innovations generally take a long time to develop credibility and sales traction. But the industry is starting to see some developments in new technology that can assist or enhance existing treatment and supply processes. There are new sensors, new software and analytical tools that are providing data we did not have in the past. This will enable decision making and execution to accelerate and become more responsive and efficient to customer needs. In the end, it is about providing lower cost, higher quality solutions to someone with a problem. It is always amazing to see that end-user customers care little about the specific science of how you do something, as long as it is reliable. When they trust you, as the solution provider, they just want you to take care of their water problems, so they can get on with what they do best.

Q: Lastly, how do you see the recent problems in Flint, Michigan as affecting the water industry?

A: I think Flint will be the example municipal managers think of first, when they are presented with some new innovation or cost saving idea for how to improve their city’s water or wastewater system, different than what was done in the past. From a career standpoint, the safest action for a manager, will be to continue what his or her predecessor did previously. This will make it harder for innovations to gain traction in the municipal market. However, the bigger lesson of Flint should be a wake-up call for all of us. While America clearly has the best water and wastewater delivery systems of any country on the planet, we need to accelerate investment in every sector of water and wastewater; municipal, industrial, commercial and consumer. If we don’t start to address those needs right away, problems worse than Flint saw will become more prevalent, and pervasive.....and the global water quality and supply problems, that many of us do not presently experience, will start affecting us all closer to home.

Tradeshow & Exhibition Round-up

M&A

Meet With An Expert At Any Of These Shows or Events

Show		Date
	WWETT 2017	Feb 22 - 25, 2017
	WQA 2017	Mar 28 - 31, 2017
	ACE 2017	June 12 - 14, 2017
	WEFTEC 2017	Sep 30 - Oct 4, 17
	Aquatech Amsterdam	Oct 30 - Nov 3, 17
	American Water Summit	Nov 29 - 30, 2017
	NGWA	Dec 4 - 7, 2017

Schedule a Meeting Today!

To meet, please contact Mark Bertler, Managing Director at mbertler@mcleanllc.com

The McLean Group's Water, Wastewater & Environmental Services Practice

The McLean Group's Water, Wastewater and Environmental (WWE) group provides sell side and buy side M&A advisory and corporate finance services to lower middle market companies. The businesses that comprise the WWE group include those water, wastewater and environmental firms that provide solutions, components, and services to the residential, commercial, industrial and municipal markets.

Global Water Ecosystem

| SOLUTIONS

- Water & Wastewater Treatment Equipment
- Filtration and Separation Technologies
- Membrane Treatment
- Membrane Bio-Reactor (MBR) Treatment
- Environmental Remediation Treatment
- Produced Water Treatment
- Recycle and Reuse
- Boiler Water Feeding
- Desalination
- Disinfection
- Biological Treatment
- Drinking Water Treatment
- Cooling Tower Treatment
- Specialty Chemicals
- Mobile Water Treatment
- Waterscaping

| COMPONENTS

- Analytical Instrumentation
- Pumps, Valves, and Fittings
- Media and Membranes
- Irrigation
- Filter Housings, Cartridges, Bags
- Piping
- Metering Equipment
- Monitoring & Control Automation
- Swimming Pool and Spa Supplies
- Chemical Feed Equipment

| SERVICES

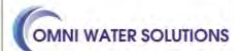
- Environmental Remediation
- Non-Hazardous Waste Handling & Disposal
- Contract Services
- Well Water Drilling
- Infrastructure
- Engineering Consulting
- Hydro-Excavating
- Analytical Testing
- Emergency Spill Response
- Pipeline Installation & Repair

*Representative
Buyers / Clients*



Representative Engagements

M&A

 acquired by 	 Purchase Price Allocation	 Litigation Support	 acquired by 	 Series B fundraised by 	 acquired by 
 acquired by 	 Business Valuation	 Strategic Advisory	 acquired by 	 growth recapitalization by 	 Purchase Price Allocation
 Business Valuation	 Business Valuation	 Goodwill Impairment Test	 acquired by  Purchase Price Allocation	 merged with  a company of 	 Business Valuation

As of 03/09/2017

The McLean Group Overview

The McLean Group is an independent, industry-focused investment bank with deep expertise in mergers and acquisitions and business valuation.

- Founded in 1997
- Headquartered in McLean, Virginia
- 65 dedicated professionals nationally
- Dedicated industry groups that bring extensive domain and transactional expertise to every client engagement
- Largest independent valuation practice in the Mid-Atlantic Region with more than 250 active valuation clients

Investment Banking

- Mergers & Acquisition (Private Company Sale, Public M&A Advisory, Buy-side Advisory, etc.)
- Corporate Divestitures
- Private Equity Investments
- Strategic Alternatives Analysis

Business Valuation

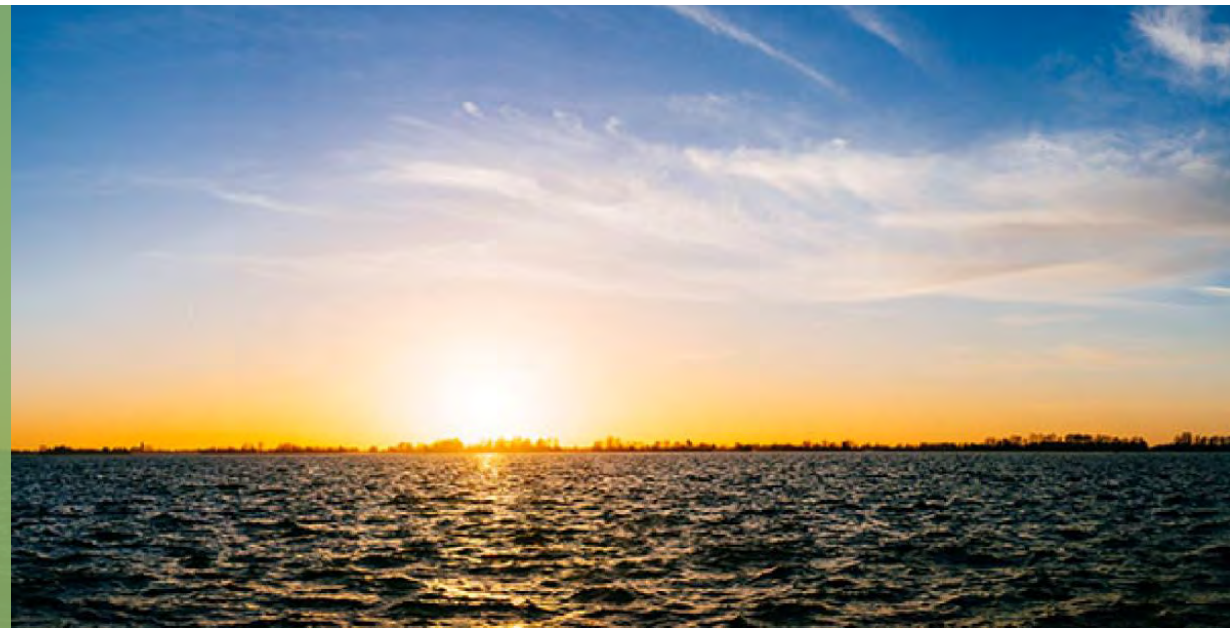
- Financial Reporting (Purchase price allocation, goodwill impairment, stock option expense)
- Equity Incentive Plans and Tax
- Litigation Support
- Transaction Advisory (Fairness Opinion, Due Diligence)



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