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EBJ 2015 BUSINESS ACHIEVEMENT AWARDS

Environmental Business Journal presents its 18th annual EBJ Business Achievement Awards. Congratulations to the winners, thanks to all the companies that submitted nominations, and all are welcome to the official awards ceremony at Environmental Industry Summit XIV in San Diego on March 9-11, 2016, EBJ's annual threeday meeting.

New Practice Areas

MWH Global (Broomfield, CO) for the launching of a new platform to house its management consulting services called Hawksley Consulting, named after Thomas Hawksley, a 19th Century visionary in the area of public infrastructure. Hawksley Consulting will focus on the water asset management needs of utilities, government agencies, and private companies. Hawksley Consulting provides local solutions to global clients ranging from strategic planning, organizational assessment and financial planning services in the U.S., to predictive analytics solutions and stakeholder engagement services in Australia. Experts also provide guidance to the U.S. Conference of Mayors, the Planning Institute of Australia, the American Water Works Association, the Water Environment Federation and other industryleading organizations. Hawksley Consulting started off 2016 with the acquisition of Burton & Associates (St. Augustine, FL) a financial management services firm experienced in developing financial plans and cost recovery strategies for local governments, adding 17 utility and government financial consultants.

MWH GLOBAL LAUNCHES HAWKSLEY CONSULTING TO BRING GLOBAL FINANCIAL EXPERTISE TO LOCAL CLIENTS

MWH Global is dedicated to Building a Better World. As specialists in water and natural resources, MWH employees use innovative ideas and technology to help solve complex infrastructure and environmental challenges. This work is built on a nearly 200-year history during which MWH has delivered services from initial planning and design through construction, start-up and operations. Today, MWH employs approximately 7,000 experts including engineers, consultants and construction professionals in 35 countries on six continents. Each of these experts is committed to serving global communities through sustainable development and project delivery. MWH is a private, employee-owned company headquartered in Broomfield, Colorado.

Hawksley Consulting builds on a rich legacy of innovation and impactful solutions to provide answers for our clients' greatest challenges. Our 150 management consultants throughout the U.S., UK, Australia and the Middle East bring together global expertise in strategy, finance, risk management, asset management, organizational development, information technology, stakeholder engagement, and environmental and social sustainability. Hawksley Consulting implements practical solutions for public and private clients in the water, wastewater, energy, infrastructure, industrial and government sectors. Hawksley Consulting is a wholly-owned subsidiary of MWH Global.

EBJ's Q&A respondent is Dan McConville, president of business solutions at MWH Global. Based in Broomfield, Colo., Dan McConville is president of two MWH operations – Business Solutions and Middle East Government and Infrastructure. Additionally, he is the president of Hawksley Consulting, the new wholly-owned subsidiary of MWH Global. Mr. McConville brings industry expertise and a commitment to client service to his role that includes managing the day-to-day implementation of strategy for the group and ensuring internal processes are aligned to support and promote the success of our clients. Mr. McConville joined MWH in 1994 and has served in a variety of leadership and client service roles. Mr. McConville is a member of the American Water Works Association (AWWA), the Water Environment Federation (WEF), the American Council of Engineering Companies, the Water Design Build Council, the Project Management Institute and the American Bar Association.

EBJ: I presume MWH has been offering strategic services or management consulting for some time, so why the impetus to brand a new platform now?

Dan McConville: Utilities, transportation agencies, government clients and private industries are facing new and more complex challenges, such as aging infrastructure, budget concerns, workforce demographic changes, regulatory pressures and stakeholder engagement changes, that require more operational, financial, and strategic management expertise. Based on

these needs and the maturity of our business, it came time to establish a more distinctive company that offers a wider range of services across our industries. Hawksley Consulting is able to build on the established business and remain complementary to the well-established engineering and construction businesses with MWH Global.

Hawksley Consulting is also able to offer global expertise with local insights. With consultants around the world, we are able to bring expertise from the UK water

industry to the U.S. and Australia. Additionally, we are offering a broad range of services that can be easily integrated in order to provide holistic plans to our clients. Our strategy, finance, business transformation and stakeholder engagement teams come together to view challenges from a variety of perspectives. Increasingly, we are seeing complex, interdisciplinary problems that require the blend of expertise.

EBJ: How many FTEs in the practice and how do you expect the company to grow?

McConville: The business has approximately 150 management consultants globally. As we continuously learn more about our clients' needs and challenges, we are evaluating the important areas for growth throughout the company. This growth will include both organic growth, through strategic new hires and project pursuits, and inorganic growth, such as our recent acquisition of Burton & Associates in the U.S. [In January 2016, Hawksley Consulting announced the acquisition of Burton & Associates, a St. Augustine, Fla.-based financial management services firm experienced in developing financial plans and cost recovery strategies for local governments and that 17 Burton & Associates consultants have joined Hawksley Consulting.]

EBJ: What is the intended client mix of the services? I presume it is largely municipal water entities or private water utilities but what other clients is Hawksley Consulting working for?

McConville: Our largest client set globally is public and private water entities; however, Hawksley Consulting also works with public and private energy and hydropower clients, national government entities, international financial institutions, private foundations, transportation entities, and private industry clients. These sectors face similar challenges and, as consultants, we can apply insights across sectors and regions. Interestingly, we are seeing increasing convergence between sectors' needs. For example, our international development clients are becoming more focused on capability building and governance. Hydropower clients are dealing with demographic turnover and management of risks. We see great opportunities for applying lessons learned in these domains with our core water sector clients.

EBJ: Charging a fair price for water is a big issue in the U.S. and elsewhere. How much of your work is or will be in supporting the client to get more revenue out of the user base?

McConville: Approximately 15% to 20% of our work involves water industry financial consulting. Much of this work relates to cost allocation studies and how utilities can distribute their cost recovery burden in the most equitable way while also addressing challenges in affordability with any particular user base.

We see a compelling need within the industry to help water and wastewater utilities recover their costs, including the true future costs of infrastructure replacement and maintenance. This will require ongoing evaluation of the proper pricing of water. Getting this right will open the door to future innovation for water conservation and predictive maintenance.

The UK's model developed over the last 25 years is being translated as a model of best practice to the U.S., Middle East, Asia and in Europe.

EBJ: At what rate do you expect water rates to increase on average over the next few years?

McConville: Since 2000, the cost of water and wastewater services to U.S. ratepayers has grown at over 4.8% per year, on average. While we often cite how "cheap" water still is, the issue remains that water costs have increased at a rate over 2.5 times that of inflation. At the same time, income distributions in many cities have become ever more skewed, posing a real affordability challenge for ratepayers. Given the tremendous need for investment, it's hard to imagine water rates not increasing at a similar rate for the foreseeable future. But we know the growing challenge will be determining how to allocate the rate burden with greater deference to affordability concerns, and this will challenge traditional cost-of-service principles.

EBJ: We expect more and more private capital is required to upgrade the U.S. water infrastructure. Is a lot of your work in developing or managing private-public partnerships? What are some examples of noteworthy projects?

McConville: Equity in the U.S. water sector has long been discussed in the industry yet we have seen very slow progress in the willingness of local government utilities to accept financing solutions at rates considerably higher than traditional tax-exempt municipal bonds. From our perspective, there is a supply of capital willing to participate in the water industry, but the demand for it has not materialized to the extent that many have predicted. As private equity continues to hone its value proposition in the market, we expect to see some increases in local government participation but the rate of growth remains a question mark.

EBJ: How much of the water infrastructure in the USA will be managed by the private sector in 2050 compared to today?

McConville: This is a difficult question to answer. While there have been more studies regarding public versus private ownership, the results have varied. One trend we are seeing in the industry is the increasing degree of consolidation with regional entities realizing scale of economies and sharing assets more efficiently. As with any solution, this may not work for all utilities and we work with our clients to evaluate their options and find the most cost effective plan for both the utility and ratepayers. Another trend we're seeing with investor-owned UK utilities is the increasing degree of transparency demanded by customers and governments regarding value for money and anticipate this becoming a bigger topic in the U.S.

EBJ: How about Australia or some of your other markets?

McConville: Many of our clients across Australia have key infrastructure, such as desalination plants, already managed by the private sector. Some clients are actively exploring further privatization. We expect that by 2050 most water utilities will be operated by the private sector in Australia.

EBJ: Have the private water industries in France and the UK provided an example of what or what should not be done in the US, Germany, Japan, China, India or other major economies?

McConville: Since the privatization of water companies in the England and Wales in 1989, economic regulation has driven improvements in investment, water and wastewater levels of service, environmental benefits and overall customer satisfaction.

Privatization has allowed economies of scale to be created where previously hundreds of local-authority-operated utilities existed.

Linked with comparative measures and performance-based incentives, regulated companies have been led to drive efficiencies through better asset management, leaner operations and technical innovations to balance returns to investors with keeping customers bill affordable.

Comparative benchmarks through privatization and regulation have been used by other, non-privatized water services (including Scotland and Northern Ireland), as yardsticks to drive similar scales of improvement in other regions.

Seen as success, the UK's regulatory model and approaches developed over the last 25 years are being translated to other international regions as a model of best practice including the U.S., Middle East, Asia and other states in Europe. Examples of these are investment driven by outcomes, not outputs; effects based permitting and catchment management, balancing onerous environmental targets with long-term affordability constraints; and best practice water and wastewater asset management and operational approaches.

EBJ: How much do you expect water reuse and desal to be utilized for drinking water in the American West and Australia in the next 10-20 years?

McConville: Our focus is less on the particular technologies being used and more about helping clients make defensible and transparent evaluations of their supply portfolios while considering economic, en-

vironmental and social factors. Overall, we do see more utilities in the U.S. evaluating the merits of reuse and desalination in the content of their potential supply options. These technologies' relative cost competitiveness is increasing as lower-cost sources are tapped.

In Australia, many of the large cities already have desalination facilities to supplement traditional drinking water supplies during dry periods. In most cases, these facilities are currently either in standby mode or operating at minimal capacity. As Australia's climate continues to dry, we expect to see these facilities operating at increasing capacity. Recycled water is in extensive use across Australia. While it is not currently typically used for drinking water, we can expect to see significantly larger amounts of recycled water used for drinking in the next 10 to 20 years.

EBJ: Tell me about your predictive analytics practice. Give some examples of how it works.

McConville: Despite utilities' significant investments in data systems, operational decision making is largely reliant on "after the fact" information, such as alarms, work history and customer contact. Information such as this supports reactive behavior, which means the business often misses opportunities to act quickly and proactively. Improving service today and making tomorrow more resilient requires access to much more information about the business and combining that information in a way that provides genuine insight into how the business is operating. Combining this insight with predictive modelling provides foresight that enables the business to act faster and plan ahead with a shared commercial awareness of the value of collective decisions.

It is our experience that technology alone cannot unlock this value. Utilities must continually re-think the way they operate and make decisions. Our predictive analytics practice is comprised of people with a deep knowledge of our clients' industry and the way they operate their business. This domain expertise is supplemented with business analysts, data scientists, technologists and organizational change specialists.

The entire team works with our clients to understand the issues and challenges that our clients are facing and identify real opportunities for business improvement. In some cases, we design systems and tools and supporting processes that our clients can implement. In other cases, we implement our Intelligent Water Platform, which has been designed with another global partner. Our solutions and supporting processes promote "new ways of working", cutting across artificial organizational silos, and driving true collaboration across the business to make the right decisions.

We are actively supporting clients across the globe with more than \$30 billion worth of assets under management that generates more than \$5 billion in revenue to our clients annually. The solutions we provide our clients have been proven to save millions of dollars in operating costs, while improving the accuracy and speed of decision making, enabling faster actions to be taken.

EBJ: What have been the biggest impacts on the water industry you have witnessed due to climate change so far? What do you expect in the next 10-20 years?

McConville: The biggest current impact is that traditional assumptions for the design of source water supply are no longer valid resulting in substantial water shortages.

Over the short term, this has been addressed by promoting water conservation through largely voluntary efforts.

Over the long term, this will need to be addressed by a combination of cultural change as to how we view water consumption and engineered solutions that reflect the new reality of precipitation patterns.

Cultural change will include a greater consideration of indirect and direct water re-use, reconsideration of water use policies in areas such as agricultural production, and grey water/black water separation at the source.

Changes in engineered solutions include identification of supplemental sources of supply, changes to promote water infiltration in traditionally non-pervious settings, and additional consideration of

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treated storm water and grey water as a source of supply.

In addition to the above challenge, water utilities have struggled forever with their fixed cost structures and variable revenue models. As weather variability increases, so too does the financial risk facing utilities. This poses a challenge in adjusting a utility's rate model to increase stability while maintaining conservation incentives. New solutions will be needed to balance long-term supply risks with near-term revenue variability risks.

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