

MAKING THE SCENE CLEAN

Maintaining and improving the environment is an ever-evolving science.

Steve Nalefski, vice president and general manager of the Environmental Services Group at Burns & McDonnell, sees both the forest and the trees.

Q What trends or shifts are you seeing in the environmental industry?

A Lots of capital investments are being made in the oil and gas market throughout the supply chain. Many of these projects require a great deal of upfront planning and permitting before construction to achieve compliance with changing regulations and operational needs. We are also seeing a lot of renewable energy development projects in the Southeast, Midwest and Northwest. With that said, a rollback on regulations and overall reduction in enforcement of current regulations from the current administration has resulted in a lack of drivers for many projects.

Q How is stormwater management evolving?

A We're seeing impacts from an increase in frequency and intensity of weather events. The collection, conveyance and treatment of stormwater is critical. We have developed several interesting and innovative projects in which we have treated stormwater for E. coli, dissolved solids and metals. Some cities are finding long-lasting solutions in green stormwater infrastructure, a concept that focuses on using stormwater as a resource rather than a waste product that is rushed downstream. *(Read all about the evolution of stormwater management on page 14.)*

Q What do you believe are the growth prospects for mitigation banking in all its forms?

A Mitigation banking — which comprises both wetland and conservation banking — has gained greater acceptance as an important tool in protecting and preserving natural resources. Originally contemplated to address disturbances of wetlands for transportation projects, it has expanded to include other resources, including threatened and endangered animals, plants and critical habitat. Demand is increasing in the marketplace to expand and improve the use of mitigation banking to address impacts to our natural resources.

Q How do environmental health and safety (EH&S) considerations play into long-term planning?

A Many of our clients are not only focusing on current regulatory compliance, but looking into the future to incorporate EH&S compliance into their plans. The ISO 14001 environmental management system standard (first published in 2004, last updated in 2015) provides a great framework for companies to understand how their operations impact the environment by systematically evaluating processes or activities and cataloging the impacts. Proposed process changes can be quickly evaluated to focus on areas that can minimize or eliminate impacts to the environment.

Q Why are environmental factors so important to long-term planning?

A We're seeing natural disasters get bigger, more destructive, and costlier than ever to battle and recover from. We need to focus on better urban planning, improve building codes and incorporate climate change in our designs. The National Oceanic and Atmospheric Administration reported that the U.S. experienced 16 weather and climate disasters that surpassed \$300 billion in damage in 2017 — that includes hurricanes, flooding, tornadoes, wildfires and drought.

Q Do business interests trump environmental concerns?

A A balance must be struck. I've seen significant steps taken in protecting the environment over my 30-year career. In the 1960s, it was commonplace for untreated industrial wastewater to be discharged to our rivers and streams. Now public awareness and regulations have developed that would not allow that to occur. Businesses recognize that reducing their carbon footprint and being environmentally friendly can create an economic advantage. ●

Q What advice would you give aspiring environmental scientists?

A Be a lifelong learner. I had several managers along the way who believed in me and provided opportunities for personal and professional development. You need to keep learning and take advantage of every opportunity to learn a new skill, take a class, pitch a new idea.