WATER REUSE

RECOVER, RECLAIM, REUSE: INNOVATION MEETS FUTURE VISION.
VISIONARY WATER REUSE: EXPECT IT FROM BLACK & VEATCH.

Around the globe, water demand continues to rise as precious resources peak. The technology of water reuse is shifting from merely prudent to absolutely crucial if future needs are to be met. There’s simply no more room for waste, and adequate future water supply hinges on intelligent recovery and reuse.

Black & Veatch is a pioneer and leader in economical, intelligent water reclamation and reuse. We ensure that our municipal and industrial clients anticipate the future and prepare for it with vision, with intelligent water and wastewater reuse protecting tomorrow’s needed resources.

A CULTURE OF FORESIGHT AND INSIGHT
Black & Veatch has long been at the forefront of water and wastewater reclamation, well before regulations governing reuse began to develop. Our work on the San Diego Aqua I and II pilot projects beginning over three decades ago in the early 1980s provided basic data for the development of California reuse standards, and culminated in the development of the San Pasqual Water Reclamation Facility, which reclaims municipal wastewater for irrigation.

A SINGLE-SOURCE SOLUTION FOR TOTAL WATER MANAGEMENT
Black & Veatch offers maximum value to clients with single-source depth and expertise in the full spectrum of water and wastewater reuse, conservation and management. From preliminary studies to full-scale design and commissioning, the right professionals for the job can be found under one Black & Veatch banner. Our collective expertise creates more value for clients and enhances future infrastructure investment.

BROAD EXPERTISE DRIVES EXCEPTIONAL CLIENT SERVICE
Our large, multi-faceted organization offers superior knowledge, resources and expertise, ready for efficient deployment from project start to finish. More importantly, clients are a vital part of this process; Black & Veatch is known for actively involving all stakeholders in the process to achieve maximum success and satisfaction at project’s end. This collaborative approach has produced a long list of repeat clients and satisfied communities, as well as internationally-recognized, award-winning projects.

BUNDAMBA ADVANCED WATER TREATMENT PLANT.
in Queensland, Australia, and delivered by the joint venture of Theiss and Black & Veatch, is part of the largest recycled water scheme in the Southern Hemisphere. Its main treatment steps represent the gold standard for water reclamation.
SUSTAINABLE SYSTEM EXPANDS IN THIRSTY SOUTHERN CALIFORNIA

Orange County, California

The Groundwater Replenishment System (GWRS) is the world’s largest indirect potable reuse scheme, and the initial expansion project completed in 2015 presented opportunities to use operating data to not only expand the facility by 30 mgd but to optimize the performance of the entire system. Black & Veatch provided preliminary and final design as well as construction support for the GWRS expansion to 100 mgd. While also protecting groundwater supplies from seawater intrusion, the GWRS’ total production is now 103,000 acre-feet per year of reliable, locally-controlled and drought-proof recycled water supply – enough for approximately 850,000 people in arid, drought-strained Southern California. In addition to awards, the expansion project has drawn positive national and international media attention and interest from like-minded global water agencies.

UNIQUE FACILITY BRINGS RENEWABLE RESOURCE

Peoria, Arizona

In addition to meeting increased wastewater treatment capacity requirements, the rapidly growing community of Peoria, Arizona, opted to build the Butler Drive Water Reclamation Facility that not only treats wastewater but returns reclaimed water to the groundwater system. This process of recharging the aquifer earns the city water credits, which means Peoria can extract the equivalent amount of water from the aquifer to meet future potable water needs. The 10 mgd facility uses membrane bioreactor technology since it provides a high quality effluent and requires a much smaller footprint than other conventional technologies. The good neighbor facility has won numerous awards, including project of the year awards from both the WateReuse Association and American Public Works Association.

ENVISIONING A PROSPEROUS FUTURE WITH A PERCEPTIVE PLAN

Las Vegas, Nevada

Population growth combined with an arid climate and limited water resources promises a challenge in Southern Nevada. The increased use of reclaimed water will inevitably play a role, especially in golf course maintenance, industrial applications and general irrigation. This comprehensive Black & Veatch study for the Las Vegas area created a regional wastewater reclamation plan with phased implementation through the year 2020. To anticipate the resources needed for the decades ahead, Black & Veatch reviewed regulatory requirements and trends, investigated wastewater supply and reclaimed water demand, audited existing facilities and recommended systems and implementation plans for the future. Black & Veatch’s plan details the means to meet future demand with a combination of existing resources and new reclamation facilities, including satellite facilities.
Black & Veatch is an employee-owned, global leader in building critical human infrastructure in Energy, Water, Telecommunications and Government Services. Since 1915, we have helped our clients improve the lives of people in over 100 countries through consulting, engineering, construction, operations and program management. Our revenues in 2015 were US$3 billion. Follow us on www.bv.com and in social media.