

Municipalities You Need BIM Drone, 3D Printer to Overcome **Carbon Foot Print**

Do you think Water and Waste Water and technologies like BIM, SCADA, PLC, and Drone can merge for a better future, integrating with the latest technology for the most significant advantages? Municipalities like D.C. Water, one of the nation's leading water and wastewater innovators, adopted innovative technologies to advance operations into optimizing infrastructure for their customers and

community. Still, you can advance and optimize better with Tech Merger (BIM, Drone, 3D Printer, VR,etc.). Don't lag behind.



What's the Industry Experts Has to Say in this regard?

As per 2017 Business Wire, DC Water and Xylem highlighted the urgent need for investing in smart water infrastructure to make the best use of operational productivity and benefit customers. According to a report, the American iociety of Civil Engineers projected the U.S. needs to invest \$123 billion each year in water infrastructure over the next ten years for attaining a good renovation. Soc eds

The former CEO & General Manager of D.C. Water, George Hawkins (2009 – 2017) stated that D.C. Water is looking down the road for the next innovation that helps to do the job at a reduced cost.

Biju George, Executive Vice President, Operations & Engineering of D.C. Water, mentioned that D.C. Water is working on several innovations. He added that D.C. Water also emphasizes on leveraging digital technologies for maximizing operation and maintenance





Don't You Think We Should Combine Waste Water Treatment with Technologies?

If we combine wastewater treatments with the latest technologies like BIM, SCADA, PLC, & Drone, we will be able to make efficient asset management. Proper water treatment is essential for the environment and human health. Before delving deep into the technologies that we can integrate for treating wastewater, let's take a guick look at why it's necessary to treat wastewater

What are the dangers that we are not aware?

Danger on Aquatic Life -

Human Life & Groundwater at Risk -Danger to Food & Crops -

Human Life & oundwater Risk

Wastewater also contains pathogens, which may cause infections to human beings. If sewage is not maintained correctly, the sewer and its contaminant ultimately penetrate to groundwater sources, which is dangerous as groundwater contamination is hard to restore.

Danger to Food & Crops Inteled wastewater from industrial sources gets contaminations with various metals. The metals may not be harmful in smail amounts. However, if heavily concentrated in the soil and consumed by plants. Over time, the concentrations of metals, ultimately contaminating the food supply. contermes, the contamination is also challenging to detect

 \forall

BIM (Building Information Modeling)

Advanced technologies like Building Information Modeling (BIM) are fast gaining power on infrastructure projects across the globe. The SmartMarket Report on the Business Value of BIM for Water Projects reveals that the industry is speeding up BIM implementation. Research by Dodge Data & Analytics in association with Autodesk & Black & Veatch demonstrates that BIM is improving water projects with a bigh level of cligant association with Autodesk & Black & Veatch demonstrates that BIM is improving water projects with a high level of client satisfaction. Dodge Data research reveals that Multi-party collaboration is one of the significant benefits of BIM in the water sector, which results in reduced errors and conflicts and better communication from 3D visualization. According to Mike Orth, Executive Vice President Managing Director of Black & Veatch's water business in the Americas BIM echoes the significance of leveraging data in the water and wastewater industry. The owners will see improved stakeholder engagement through the visualization capabilities offered by the technology. Seeking the digital processes and gaining streamlined access to complex data, owners reap long-term BIM benefits in asset management, operation, and maintenance as

benefits in asset management, operation, ar well as project integration , and maintenance as

Multi-party Collaboration	Reduced Errors & Conflict
Better Communication from 3D Visualization	
Increased & Better Facilities	Improved Stakeholder Engagement
Improved Operation & Asset Management	

PLC (Programmable Logic Controllers) Using HMI

a Human f the PLC

nical and Engineering Decisions for Optimizing Treatment

m Down Time, Im Production

Backward Compatibility

Automated Reporting and Recordkeeping

DRONES

Drones provide robust insights for reducing costs, increasing operational efficiency, and boosting the delivery of clean water. Energy consumption, overhead cost, and infrastructure failures are some of the issues that water treatment facilities contend with for ensuring accessibility of freshwater to their municipalities. Using drones, plant managers can collect visual information that helps to spot opportunities for energy reduction, like areas losing water or amending spots with storm water infiltration. The wastewater treatment sector has benefited from drones, where analysts make projections about various useful ways of using drones for managing wastewater treatment requirements. Wastewater treatment plants can use drones for inspecting problems such as cracks and other issues in an

Wastewater treatment plants can use brokes for inspecting problems such as cracks and other issues in an isolated area of the wastewater treatment plant. Drones can take high-quality footage in short times. A maintenance manager can detect severe problems and can decide where to allot resources and take necessary actions before disasters like a gas leak, infrastructure breakdown. Using drones, water plant managers can gather previously unknown, in-depth data through aerial photos and videos. The information helps efficient and inexpensive site inspections, leveraging technologies like 3D mapping and photogrammetry.

Drone Benefits for Water Waste Treatment Plants

Boosting Delivery of Clean Water, Improving Water Testing Process

Increasing Safety of Workers, Inspecting Problems, Making Better Decisions

Who can offer you the solution?

Tejjy Inc, a woman DBE/MBE Certified Company associates with all AEC project stakeholders to provide formation that you need to strengthen the success of the water treatment plant. Contact us at 202-465-4830 or (240) 899-7711 or email us at info@tejjy.com to learn more about our technology implementation. You can hire our experts for your wastewater treatment project. We can be the one-stop olution for all your Engineering, BIM & Construction Management needs. Visit our website

https://www.tejjy.com/ for more details.





info@tejjy.com 17761 Diamondback Drive College Park, MD 20742