

# Business Awards OF DISTINCTION

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# GD&F

GWIN  
DOBSON &  
FOREMAN

CONSULTING ENGINEER

## Technology Award

Created to recognize Blair County businesses for developing or implementing technology products or solutions, that have an impact on methods of doing business.

As a headwaters community in the Chesapeake Bay watershed, the Altoona Water Authority was faced with a stringent mandate to remove nutrient pollution from its wastewater discharges. It turned to Gwin, Dobson & Foreman to design an innovative solution.

Biological nutrient removal is an advanced treatment process sensitive to wide variations in flow and temperature. Both conditions exist in Altoona area because of extreme climatic conditions and high wet weather flow from a combined sewer-stormwater system. With the aid of computer modeling and testing, GD&F designed a unique hybrid biological treatment process.

Completed at a cost of \$65 million, the Altoona nutrient project has exceeded all goals and expectations. The plants now run

at lower operating costs, consume less energy, use no chemicals, generate fewer waste byproducts and produce revenue through the PA Nutrient Credit Market. Biological conditions in the streams have greatly improved by the large reduction of nitrogen and phosphorous levels.

GD&F received national recognition for the project from the American Academy of Environmental Engineers as recipient of its 2013 Superior Achievement Award. This honor continues a long GD&F tradition of technological innovation. A 2000 Blair County Business Hall of Fame inductee, GD&F is a leader in advanced water treatment systems including ozone oxidation, ultraviolet disinfection and membrane filtration.