Case Study: Montana Department of Environmental Quality

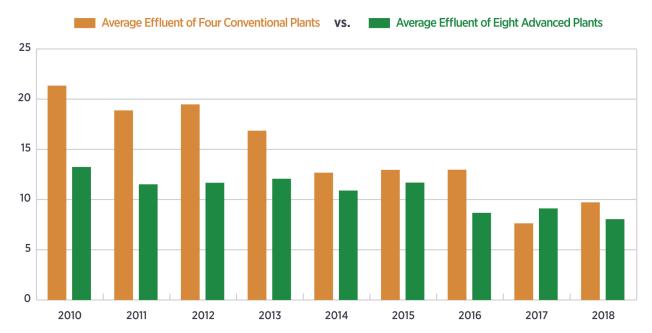
NITROGEN & PHOSPHORUS REMOVALWith Cost Savings

Municipal operators from nearly every mechanical wastewater treatment facility have attended one or more of Grant Tech's annual 2-day nutrient optimization classes. And nearly every treatment plant has been visited by Grant Weaver and a team of state specialists.

As documented on EPA's National Study of Nutrient Removal and Secondary Technologies, the free support provided by Montana DEQ has given municipalities the tools to reduce nitrogen and phosphorus. Both in treatment facilities designed for nutrient removal and in facilities not designed to remove either nitrogen or phosphorus. https://www.epa.gov/sites/default/files/2020-10/documents/mt01_national-nutrient-study_820f20001_june-2020.pdf

Effluent Total Nitrogen Levels at Conventional and Advanced Treatment POTWs

Average TN Concentration (mg/L)



Statewide, effluent total-nitrogen has improved to an average 10.5 mg/L versus 14.6 mg/L before the program was initiated.

The median effluent total-phosphorus concentration in 2019 was 1.2 mg/L, a 50% reduction from 2011.

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