

# **Monitoring surface runoff from Sugarcane fields, Pasture lands, and Rural Residential areas in Vermilion-Teche River Basin, Louisiana. (A05-poudel111918-Poster)**

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## **Abstract:**

Rural residential areas, pasture lands, and sugarcane fields with and without Best Management Practices (BMPs) were compared for several surface runoff water quality parameters including biological oxygen demand, total suspended solids, total combustible solids, dissolved oxygen, conductivity and turbidity. Results showed that surface runoff from sugarcane fields had a greater amount of total suspended solids and total combustible solids, and was more turbid than surface runoff from pasture and residential areas. Biological oxygen demand was generally higher for BMP pasture site compared to the rest. The surface runoff dissolved oxygen levels were very similar across the three landuse types with and without BMPs. Flow rates and nutrient concentrations are being measured to determine and compare the loading rates of oxygen-demanding substances from these three landuse types with and without BMPs.

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