**The Nevada Nitrogen Removal Program**

The Nevada Division of Environmental Protection manages the surface water and ground water discharge programs. NPDES permits are issued by the Nevada Division of Environmental Protection.

Based on communication with the Nevada Division of Environmental Protection permitting and water quality planning staff there are three municipal or publicly owned (POTW) NPDES major dischargers, (over one million gallon per day average flow) that have total nitrogen or nitrate nitrogen limits. The limits range from 2 mg/l nitrate nitrogen to 10 mg/l total nitrogen based on monthly averages. At the present time the only facility in Nevada that is using methanol on a continuous basis is the Truckee Meadows Water Reclamation facility that serves the Reno/Sparks metro area. This is a large 50 million gallon per day advanced nitrogen removal facility that uses approximately 2,600 gallons per day of methanol in the denitrification filter process. All of the other NPDES major dischargers are meeting the nitrate nitrogen and total nitrogen limits without the need for a supplemental carbon source.

The Nevada Division of Environmental Protection in October 2015 published, “Water Quality Integrated Report”. The report outlines the water quality of the rivers, streams, lakes and reservoirs in Nevada and lists water quality impairments. Phosphorus is the nutrient of most concern in Nevada with 910 miles of streams and rivers and 73,000 acres of lakes in need of improvement. Nitrogen concerns are limited to primarily the Truckee River watershed. The nitrogen nutrient limits are in place for the Truckee River through a total maximum daily load (TMDL) and the major discharger the Truckee Meadows Water Reclamation facility has a limit of 500 pounds per day total nitrogen. At full design capacity the facility would need to achieve a total nitrogen discharge of less than 2 mg/l.

Given the rural and arid nature of the state a priority has been given to the protection of drinking water systems and supplies within Nevada. Wastewater facilities discharging to ground water or reuse have a total nitrogen limit of 10 mg/l.

There are no large poultry and meat processing facilities in Nevada that have NPDES discharge permits with nitrogen limits.