Reverse Osmosis Water Treatment Facility

The City of Hartley constructed an innovative and technically efficient 4,500 square foot building to house a new 308 gallon per minute (gpm) reverse osmosis (RO) water treatment facility, expandable to 462 gpm. RO systems use pressure to force water through a semi-permeable membrane, allowing only the water molecules to flow through resulting in pure water.

The city's water source is the Dakota Sandstone aquifer, which produces mineral-rich water. Historically, the water was treated by aeration and filtration for iron removal, but retained extremely high hardness, sulfate, and total dissolved solids levels earning a reputation as some of the poorest drinking water in the State of Iowa. With no other available fresh water resources, and the City's treatment facility showing signs of advanced age with equipment dating back to the 1940's and 1950's, the city built a new facility. The new facility started pumping the newly treated water to citizens in July 2010. The water quality changed nearly overnight. Residents now have some the highest quality drinking water!